

Land Transport Rule Traffic Control Devices Amendment [2010]

Rule 54002/4

Overview

Land Transport Rules are produced by the NZ Transport Agency for the Minister of Transport. Draft Rules go through an extensive consultation process and are refined in response to consultation.

*This overview accompanies, and sets in context, the public consultation (yellow) draft of **Land Transport Rule: Traffic Control Devices Amendment [2010]** (Rule 52002/4)). The draft Rule proposes changes to Land Transport Rule: Traffic Control Devices 2004, which sets out the requirements for the design, construction and use of traffic control devices.*

*If you wish to comment on this draft Rule, please see the page headed 'Making a submission'. The deadline for submissions is **19 May 2010**.*

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Introduction

What are Land Transport Rules?

The NZ Transport Agency (NZTA) is contracted to produce Land Transport Rules (Rules) for the Minister of Transport under an agreement for Rule development services with the Secretary for Transport. Rules are signed into law by the Minister of Transport under the *Land Transport Act 1998* (the Act).

Rules are made in relation to a wide range of matters covered by the New Zealand Transport Strategy and the Government Policy Statement. These include safeguarding and improving land transport safety and security, improving access and mobility, assisting economic development, protecting and promoting public health and helping to ensure environmental sustainability.

Land Transport Rules aim to:

- **clarify**
- **consolidate and**
- **create**

land transport law.

Rules are developed by means of extensive consultation and are drafted in plain language to be understood by a wide audience and to help ensure compliance with requirements.

Why is this amendment Rule being proposed?

The proposed amendment Rule makes changes to *Land Transport Rule: Traffic Control Devices 2004* ('the Traffic Control Devices Rule' or 'the Rule'), which sets out requirements for the design, construction, installation, trialling, operation, and maintenance of traffic control devices, and sets out the functions of road controlling authorities in providing traffic control devices to give effect to their decisions on the control of traffic.

The proposed changes in the amendment Rule will introduce new traffic control devices that will contribute to the safe and efficient operation of the road network, and will also reinforce or clarify existing provisions in the Rule. A number of issues are also raised for comment. The main changes proposed are:

- introducing a new regime for parking zones, and changes to the signing and marking of parking restrictions;
- replacing the existing descriptions of parking signs with a new format to provide more flexibility and support changes to the proposed new parking regime;
- replacing the existing provisions for managing traffic entering a roundabout with traffic signals;
- improving traffic signalling at multi-laned approaches to areas controlled by traffic signals; and
- allowing the installation of nearside, mid-block pedestrian traffic signal displays, countdown pedestrian signals and on-roadway warning lights at pedestrian crossings.

What is the consultation process for this proposed Rule?

Government is committed to ensuring that legislation is sound and robust and that the consultation process takes account of the views of, and the impact on, people affected by changes proposed in Rules.

This publication, for your comment, has two parts:

- (a) an overview, the main purpose of which is to set proposed Rule changes in context; and
- (b) the yellow draft of *Land Transport Rule: Traffic Control Devices Amendment [2010]* (Rule 54002/4) (the proposed amendment Rule) for public comment.

Please read the overview carefully and consider the effects of the proposed changes. In particular, consider the benefits and costs that would result from the implementation of those changes.

You will note that the yellow draft amendment Rule contains only the proposed changes to be made to the Rule. If you do not have a copy of the Rule, please read the information in *Publication and availability of Rule* about obtaining Land Transport Rules (see *page 47*). To assist in setting the proposed changes in context, the web versions of the Traffic Control Devices Rule and the amendment Rule are linked.

The issues that are raised in submissions on the yellow draft of the proposed amendment Rule will be analysed and taken into account in redrafting. The final draft of the amendment Rule will be submitted to Cabinet for noting the Minister's intention to sign the Rule, and the Rule will then go to the Minister for signing.

Making a submission

If you wish to make a submission on the proposed amendment Rule, please read the material headed *Making a submission* at the front of this document. The deadline for submissions is 19 May 2010.

Proposed timetable for implementation

Subject to government approval, it is proposed that the amendment Rule will come into force in late 2010.

What changes are proposed?

The NZTA welcomes your comments on the proposed changes to the Rule as discussed below, including the costs of compliance.

Zone parking and requirements for signing and marking parking restrictions

PROPOSAL 1. A new regime for defining parking zones and signing and marking parking restrictions is proposed.

Reason for proposed changes

Zone parking

There is considerable pressure to reduce the number of signs required to indicate parking restrictions. This is largely being driven by the issue of visual intrusion within the urban environment, and can arise as the pressure for parking in the Central Business District encroaches into residential areas. It is also becoming more noticeable that the multiple use of parking areas during the week is leading to a proliferation of signs because of the need for a wide range of parking restrictions.

The Rule currently requires signs to be installed at entry and exit points, at distances of not more than 100 m apart within a zone and at each end of any intervening parking restriction that differs from the zone restriction (eg, a bus stop within a residents' parking zone).

A Parking Working Group convened by the NZTA (representing the New Zealand Parking Association, road controlling authorities, the Automobile Association, the Ministry of Transport and the NZTA) considered this issue and has proposed a new regime for zone parking, which is set out in *Appendix 1*.

Your comments on the proposals would be welcome.

[Draft Amendment Rule reference: 2.19(7)]

General requirements for signing parking restrictions

Currently, the Rule requires signs at each end of a parking area that may provide space for only one vehicle or may extend as far as 100 m. When the parking area is longer than 100 m an additional sign is required at 100 m intervals.

The proposed zone parking regime would require road controlling authorities to mark the road surface, if practicable, to indicate parking areas that lie within a parking zone. Outside of a parking zone, marking of other parking areas would remain optional. If the area has been marked, there is less need for signs at both ends and at frequent intervals along the length of the parking area.

It is proposed that, if a parking area, other than zone parking, has been marked, signs will be required at only one end and at intervals of not more than 200 m. The existing requirement for signing at both ends, and at 100 m intervals, will be retained for areas that have not been marked. Marked parking areas will not cross intersections. This proposal means that, if a parking restriction applies across several blocks, and each block is marked, there will be at least one sign indicating the restriction on each block.

For the proposed changes to the zone parking sign regime to proceed, an amendment to the current requirements for traffic signs (*subclause 4.2(3)* of the Rule) will be needed to provide an exception for signing of a parking zone.

[Ref: 2.20 and 2.3]

Parking machines

Proposed definition of 'parking machine'

Since the *Traffic Control Devices Rule* came into force in 2005, most road controlling authorities have installed multiple-space machines, ticket machines, or pay-and-display or other technology. Very few still operate individual or dual parking meters. In addition, there are very few central business districts that do not now charge for parking, and most road users would anticipate a requirement to pay.

Each machine generally provides details of the levels of fees, any time restrictions, the period when fees apply and any other special requirements applying to the spaces governed by the machine. It is suggested that a definition of a 'parking machine' to include a 'parking meter' be inserted into the Rule to ensure that the machines provide these details.

It also appears to be common for machines to have a label affixed showing a white 'P' on a rectangular blue background. This allows users to distinguish the machine easily from other 'street furniture'. Your comments would be welcome, in particular, on whether this should be a mandatory requirement.

[Ref: 2.20 and 3.1]

Provision of signs in parking areas equipped with parking machines

Clause 12.5 of the Rule requires signs to be provided for parking areas, except where parking machines are placed adjacent to the parking space. It is proposed that this exception be removed.

Most road controlling authorities that use parking machines install signs to define the extent of the area controlled by the machines, and generally do so with similar numbers of signs to those used for other forms of parking control.

It is suggested that the proposals for a new definition of a parking machine, the zone parking regime and a new form of sign incorporating a 'P\$' (see **Proposal 2**) to indicate pay parking will simplify the form and number of signs required for paid parking, while still clearly indicating to motorists that they will be required to pay the appropriate fees and comply with the restrictions described on the parking machines.

[Ref: 2.20]

Marking of parking spaces

Reserved spaces

It is proposed that reserved spaces should be marked with symbols or words where a road controlling authority has installed a zone parking restriction and the reserved space falls within the zone. Currently, marking in this situation is optional.

[Ref: 2.19(4)]

Parking reserved for disabled persons

Many overseas jurisdictions make parking spaces for disabled persons more easily recognisable by marking the surface of the parking spaces in a contrasting colour to the surrounding areas. The most common colour used is blue. CSS Mobility Action, with support from a number of road controlling authorities and the NZTA, has conducted a field trial of blue marking.

The results indicated a marked improvement in driver compliance. As with road-marking colours other than white or yellow, the NZTA does not recommend compulsory colouring. The blue marking should, therefore, be permitted for, but restricted to, the marking of parking for disabled persons.

For the proposed change to proceed, a new *clause 5.4(8)* would need to be inserted into the Rule to allow blue surface marking to be used only for parking spaces reserved for disabled persons.

[Ref: 2.6(2), 2.19(5)]

Time-restricted parking

It is proposed that time-restricted parking spaces should be marked with symbols or words where a road controlling authority has installed a zone parking restriction and the time-restricted space falls within the parking zone.

These time-restricted spaces are most likely to be short-term, limited distance, parking spaces (for example, a P5 within a general P60 parking zone). It is proposed that marking would only be mandatory for time-restricted spaces that had a different, and a generally more time-restrictive, requirement than the underlying zone restriction and that lay entirely within the zone. A proposed marking (Diagram M3-4A) is shown in *Schedule 2* of the draft amendment Rule.

[Ref: 2.19(6)]

Loading zones

Currently, a specified pattern of marking for a loading zone is required, where this is practicable. The proposed new regime for zone parking emphasises this requirement. It is also proposed to allow loading zones that have been marked to have only one sign, with additional signs at intervals of not more than 200 m. The current requirement for signs at each end will still be required for a loading zone that cannot be marked.

Bus stops

Most road controlling authorities mark bus stops within their central business districts, and many also mark them in suburban areas as well. This is done to avoid confusion but also to allow the larger urban buses sufficient space at the stops to pull into the kerb. The proposal to require marking of bus stops, where they are within a parking zone, should, therefore, have little impact on current marking practice.

[Ref: 2.19(2)]

Marking of words and symbols on bus stops, taxi stands and other loading zones

The zone parking proposal also suggests that loading zones within parking zones should have appropriate words or symbols marked on the surface, in addition to the markings defining the extent of the loading zone. Bus stops and taxi stands are often marked with appropriate words. The proposal would make these marks a requirement, as well as extending the requirement to other forms of loading zone where these occur within a parking zone, and will permit these markings to be used elsewhere. (See the proposed markings, M3-1A, M3-2A and M3-3A, M8-1 and M8-2 in *Schedule 2* of the amendment Rule.)

[Ref: 2.19(3)]

Parking signs

PROPOSAL 2. It is proposed that the existing descriptions of parking signs be replaced by a new format to provide more flexibility and support changes to parking regimes proposed in this amendment Rule.

Reason for proposed changes

Description of parking signs

Parking signs cover a wide range of requirements. It is evident that it would not be possible, nor desirable, to specify every possible parking sign. However, it is important that road users are aware of the meaning of signs and, to assist them, it is necessary for signs to conform to a standard form utilising symbols or words that have a common meaning.

It is apparent that road controlling authorities are having difficulties in providing this uniformity, as the current structure for defining signs fails to adequately cater for the full range of signs needed. This leads to the development of non-conforming or unclear signs. This is particularly true in New Zealand's larger cities where the demands on kerbside parking can vary significantly within a day and throughout the week.

As indicated in **Proposal 1**, there is also additional pressure to reduce the number of signs because of their visual impact while ensuring that road users intending to park are able to quickly and accurately determine what parking restriction applies. Reducing the numbers of signs also provides the opportunity to reduce costs.

This proposal would see the replacement of that section of *Schedule 1* relating to Parking signs (that is, signs R6-10 to R6-79) (see *Schedule 1.4* in the draft Rule). It is important to note that the proposed sign descriptions incorporate all of the parking signs currently included in the Rule.

[Ref: 2.21(2), 4.1(e)]

Number of signs that may be installed on one pole or in the same location

It is proposed to increase the numbers of parking signs that may be installed on one pole or in the same location.

The proposed Schedule detailing R6 Parking signs describes a method by which parking sign formats may be developed and how parking signs may be combined so that, effectively, up to four parking signs may be installed on the same pole or at the same location. If this proposal proceeds, *subclause 12.6(4)* of the Rule will need to be amended.

[Ref: 2.5(1), 2.20 and 2.21(2)]

Supplementary signs

In determining the number of signs (particularly parking signs) that can be installed in one place, there can be uncertainty about the status of a supplementary sign, plate or notice (as described in *12.5(1)* of the Rule). For example, a supplementary sign to a parking sign could provide for an extension of time for a restriction to apply, such as 'Extended to 9pm/Friday'.

For other types of regulatory sign, this could be a plate with the words 'Except Buses' or 'Next 2 km'. In these cases, the supplementary sign would have no meaning without the sign it supplements and, therefore, should be considered to be part of the sign with which it is associated.

A parking sign that uses the words 'At Other Times' (eg, 'Residents Parking/At Other Times') may appear to be a supplementary sign because these words do not have meaning without the times specified on the associated sign or signs. However, it is not a supplementary sign because the parking restriction applying during these 'other times' differs from the restrictions on the sign or signs above. If the other signs were removed, it would be possible, and necessary, for the words 'At Other Times' to be replaced with the time period during which this different restriction applies.

It is proposed to insert a definition of a 'supplementary sign, plate or notice' into the Rule to clarify this term. The proposed change will also clarify that supplementary signs may be installed at the same place as the traffic signs to which they relate without exceeding the limit on the number of signs allowed at any one place.

[Ref. 2.5(2) and 3.1]

Definition of terms used on parking signs

'P\$' paid parking

A new symbol, 'P\$', has been proposed to indicate that payment is required in the area described by a sign. A sign-comprehension survey conducted by the NZTA in May 2009 demonstrated a very high level of understanding by the respondents of the meaning intended for this symbol. It is intended that the 'P\$' will apply during the same periods as the existing 'P', and it is proposed to amend *subclause 12.6(1)* to recognize this.

[Ref: 2.21(1) and 4.1(e). See also *Schedule 4.1*, R6-1D, and R6-1D.1]

If the proposal is accepted, a consequential change to *subclause 6.4(2)* of the *Land Transport (Road User) Rule 2004* (the Road User Rule) would be required.

Interpretation of parking signs

The proposed change to *Schedule 1 R6 Parking signs* sets out a way in which parking signs may be described. This includes a range of defined terms and formats. While it may be appropriate for some of the terms to appear within *clause 12.6*, the NZTA's view is that it would be more useful if these terms were retained in the tabular form used in the proposed *Schedule* (see *Schedule 1.4* in the draft amendment Rule). This would ensure the wide range of terms and formats that may appear on parking signs remain in the same place and the relationship of one term to another is clearer.

Your comments on the concept and on any of the specific definitions presented in this proposal are welcomed. If any existing parking signs appear not to be covered by the proposed *Schedule*, pictures of these would assist in finalising the concept.

[Ref: 2.21(2) and *Schedule 1.4*]

Orientation of parking signs

The proposed meaning of arrows on parking signs (described at R6-4 in *Schedule 1.4* of the amendment Rule) removes the need for the Rule to specify the orientation of parking signs. Road controlling authorities must comply with 3.1(d) of the Rule, which requires any sign to be visible and legible to road users and that road users have adequate time for the intended response. It is, therefore, proposed that *subclause 12.5(2)* of the Rule be revoked.

[Ref: 2.20]

Reverse-in angle parking

An increasing number of road controlling authorities have considered, or are considering, 'reverse-in' angle parking, where drivers are expected to reverse into the parking space rather than travel forward. The angle to the kerb frequently defines the expected entry direction (ie, a 'forward-in' parking direction, if the angle is less than 90°, and 'reverse-in', if the angle is more than 90°).

It can be very important that all road users apply the same rule in a specific angle parking area, particularly where this applies to kerbside parking spaces. The proposed Rule change will allow road controlling authorities to specify a direction of entry by notice on a sign. The descriptive words will need to relate to the direction of entry as the exit direction will already be defined, once a vehicle is in the parking space.

The suggested wording is 'Reverse In' or 'Forward In', and this is reflected in the words shown in *Schedule 1.4* for parking signs.

[Ref: 2.19(1)]

Carpool

The establishment of car pools can be encouraged if the carpooling vehicle is able to obtain preferential parking space at its destination. While most of that parking space is located in private, off-street areas (eg, employee or student parking), there are some systems in place that utilise public parking space, and those options may increase. A regulatory parking sign that limits the use of a space to carpool vehicles requires that the term 'carpool' be defined.

The *Land Transport (Driver Licensing) Rule 1999* effectively defines a carpool to ensure the driver is not involved in a passenger service operation that requires a special licence endorsement. That Rule describes a carpool as an activity being conducted in which people are carried to or from their place of employment, business or education under a cost-sharing arrangement between occupants of the vehicle.

The NZTA document *Carpooling guidelines*¹ includes the following description:

“A carpool is when two or more people share the ride to a similar or nearby destination. The number of passengers may vary, drivers and vehicles can rotate, and a carpool might operate every day or only when it is convenient. While petrol and parking expenses might be shared, the driver isn’t paid for their time. It is also legally possible to use a van as a carpool vehicle, as long as it carries less than 12 people.”

Because there are no legal implications in the *Traffic Control Devices Rule* in relation to payment of the driver or the number of passengers who may be carried in the vehicle, these aspects do not need to be covered in the proposed definition of ‘carpool’. The definition set out in the proposed amendment Rule is, therefore, the preferred one.

[Ref: 3.1]

Motor home

A regulatory traffic sign that bans or permits the parking of a motor home requires a definition of a motor home. An existing description of a motor home is included in *subclause 4.4(4)* of *Land Transport Rule: Work Time and Logbooks 2007* and, with minor changes due to context, is proposed for inclusion as a definition in the amendment Rule.

[Ref: 3.1]

Trials of traffic control devices

PROPOSAL 3. It is proposed to amend the Rule to clarify the NZTA’s power to extend a trial by the installation of additional traffic control devices.

Reason for proposed changes

The Rule (*subclause 3.4(10)*) provides that once a trial of a traffic control device has been completed and the NZTA is satisfied that a recommendation for a Rule change should be made, the device may continue to be used only at the trial site or sites until:

- the Rule is changed and the device may then be used elsewhere; or
- the Rule is not changed and the device must be removed from the trial site.

¹ Accessible at <http://www.nzta.govt.nz/resources/carpooling/docs/carpooling-guidelines-print.pdf>

Once information about a trial has been disseminated, many road controlling authorities have a keen interest in the outcome and some might want to install the device before the Rule is changed to allow it. Currently, the NZTA cannot approve the use of the trialled device at other sites pending a change to the Rule. It should also be noted that the NZTA does not have the power to permit a general extension to the use of the device under trial.

The purpose of the trial process is to establish the effectiveness of a device. It is proposed that the Rule be changed to enable the NZTA, following a successful initial trial of a device, to approve further installations where this is clearly to establish, with greater certainty, the effectiveness of the device and to assist in providing clearer guidance for its use. It should be noted that the device would have to be removed if the Rule was not changed to allow for the device following any extended trial. (*Paragraph 3.4(10)(b) of the Rule.*)

[Ref: 2.2]

School bus signs and operation

PROPOSAL 4. It is proposed to place a time limit on the use of manually-operated flashing school bus signs and to amend the definition of 'school bus'.

Reason for proposed changes

Flashing school bus signs

Schedule 1 of the Rule allows a school bus sign to incorporate flashing lights (W17-1.3 sign). The original design for these lights included an automatic control so that flashing lights could only be operated when the school bus had stopped and the door was open.

Many of the crashes that have involved school buses have occurred after the bus has just left the bus stop; others have occurred when drivers have claimed they did not have sufficient warning to slow down. A successful trial of manually-controlled flashing lights, by bus drivers in Timaru, suggests that these devices allow a driver greater flexibility as to whether, or when, the flashing lights should be used, and increase the awareness of other drivers, with resulting benefits for the safety of children using a school bus.

It is important, however, that the flashing lights are not used at times other than intended (as set out in the specification to W17-1.3). It has been suggested that an alarm that is audible to the driver be used whenever flashing lights are activated to discourage excessive or prolonged use. It is not proposed at this time that an alarm be

mandatory but it is proposed to amend the Rule to limit the use of flashing lights to the period from just prior to the bus stopping to pick up or drop off children until shortly after it has recommenced its journey. Your comments would be welcome.

It should be noted that the operator's obligation to comply will be subject to the same offence provisions applying to the existing use of school bus signs (ie, infringement fee of \$150 or maximum penalty on summary conviction of \$500).

This proposal, if accepted, may be more appropriately included in the *Road User Rule*, and consideration of that option will follow consultation.

[Ref: 2.4(4)]

Definition of 'school bus'

Currently, a bus that is being used to transport school children must display a 'school bus' sign and is limited to a maximum speed of 80 km/h. This would apply when a bus is being used to carry school children on a school trip (ie, outside the normal travel to and from school on a school day).

On long school trips, the speed limit of 80 km/h could lead to the driver exceeding the driving hours prescribed by *Land Transport Rule: Work Time and Logbooks 2007*, and would extend the trip time for the children. In addition, heavy motor vehicles that are legally entitled to travel up to 90 km/h will wish to overtake the bus, and may do so with heightened risk because of their limited opportunities to pass. While this situation occurs on an ordinary school day, it happens during anticipated time periods in the morning and afternoon. School trips, however, may take place at any time of the day.

Buses engaged on school trips are most likely to stop off the roadway – in a special bus park or on the side of the road that does not require the occupants to cross the road (eg, for refreshments).

It is proposed that the definition of school bus be amended to exclude a bus when it is being used on school trips (where the passengers board or alight at one or a limited number of stops and the single destination or departure is not the school normally attended by the passengers). It is also proposed that such a bus not be allowed to carry more children than are capable of being seated as described in the Certificate of Loading for the bus.

If this proposal proceeds, a consequential change to the definition of 'school bus' in the *Road User Rule* would be required.

[Ref. 3.1]

Traffic signals

Roundabout metering signals

PROPOSAL 5. It is proposed that the Rule be amended to replace the existing provisions for managing traffic entering a roundabout.

Reason for proposed changes

The Rule (*subclauses 6.4(13) to (15)*) describes a method for controlling one or more, but not all, roadways entering a roundabout. The intent is to manage an entering flow of traffic that gets a disproportionate level of priority, causing major delays on one or more other entering roads, or to assist the passage of a rail vehicle or emergency vehicle through the roundabout. While technically feasible (as demonstrated in Queensland, Australia) the method specified in the Rule is relatively expensive and cumbersome to install and maintain.

The state of Victoria has demonstrated an alternate form of control that has been used successfully at a number of locations within New Zealand. This involves installing a standard set of signals on the approach road requiring control about 30 m in advance of the roundabout. The signal display is normally green but, when queues are detected on a critical leg of the roundabout, the signal changes through yellow to red in the normal sequence.

When the signal is green, drivers proceed to the roundabout and apply the normal roundabout give-way rules. To reinforce this provision, the standard 'give way roundabout' sign has been mounted on a reflectorised, fluorescent yellow-green backing board that provides a border of at least 150 mm.

In the locations where this system has been installed, a sign has also been placed on the signal pole to advise drivers that the signals were operated by demand at the roundabout. In some cases, the signals have also been utilised as a mid-block pedestrian traffic signal. Consequently, the signals may change to red when pedestrians are not present. To avoid reduced compliance, the sign is considered essential where the signals are also used to control pedestrians, and is desirable elsewhere.

Where the signals are used to control pedestrians, it is considered essential that the pedestrian traffic signals operate independently, as a staged crossing (ie, a central pedestrian refuge is provided, and each half of the roadway is separately controlled). Where the vehicle display for traffic approaching the roundabout shows a yellow or red signal, the display for traffic leaving the roundabout remains green unless a pedestrian has been detected on that side of the road. In this

situation, traffic on the half of the road on the departure side of the roundabout is stopped only when a pedestrian is crossing. Evidence from a number of roundabout sites has shown a significant risk of rear-end collision when pedestrian crossings are located on the departure side of a roundabout.

It is important to note that the Rule does not prohibit the installation of roundabout signals. Roundabout signals differ from the roundabout metering signals described here as they control movement of traffic directly into the roundabout as well as controlling circulating traffic on the roundabout.

It is proposed that *subclauses 6.4(13), (14) and (15)* be revoked and replaced by new provisions describing the system, including:

- a standard set of signals installed on the approach road 30 m in advance of the roundabout [Ref: 2.10(3)];
- a backing board on give way roundabout signs [Ref: 2.14];
- a sign on the signal poles indicating signals may be activated by traffic at the roundabout; and
- where the signals operate as pedestrian signals, they be staged.

Consequential amendments would be required:

- (1) where the term ‘roundabout signals’ is currently referred to in 6.1(a)(ii) [Ref: 2.7];
- (2) to allow the installation of a sign on the signal pole, in 6.3(2) where the Rule restricts the installation of signs on signal poles [Ref: 2.9(b)];
- (3) to delete the current exception for roundabout signal displays to comply with *Schedule 3* [Ref: 2.10(1)].

[Ref: 2.7, 2.9(b), 2.10(1), 2.10(3) and 2.14]

Roundabout metering signals to control priority movements

Currently, roundabout metering signals may be used to control one or more of the approaches to a roundabout while one of the approaches is being cleared to allow a rail vehicle or an emergency vehicle to proceed safely. It is proposed this clause be extended to allow roundabout metering signals to be used to reduce delays to priority vehicles, for example, buses. Neither this proposal nor the provision for emergency vehicles is required solely for safety reasons. They are primarily intended to improve the efficiency of the traffic flow (see proposed 6.4(13) in 2.10(3) of the draft amendment Rule).

Nearside pedestrian signal displays

PROPOSAL 6. It is proposed that *clause 6.6* of the Rule be amended to allow nearside mid-block pedestrian traffic signal displays.

Reason for proposed changes

A trial was undertaken in Hutt City at a mid-block pedestrian crossing to assess the safety and effectiveness of pedestrian traffic signal displays installed on the same side of the road as the pedestrian intends crossing from (the 'nearside') rather than on the side of the road the pedestrian intends crossing toward (the 'far side'). Following the trial it is proposed to amend the Rule to enable use of these devices.

Two variations from the requirements of the Rule need to be made to allow these devices to operate:

- a smaller size of pedestrian symbol than the minimum described in *Schedule 3*; and
- a different pedestrian display sequence from that set out in *subclause 6.6(4)*.

In addition a definition of 'nearside pedestrian traffic signal' has been proposed [Ref. 3.1]. While the Rule does not specifically state that pedestrian displays must be on the far side of the roadway, this is the current standard New Zealand practice.

What are the advantages of the nearside display?

At a signal-controlled pedestrian crossing, the vehicle displays operate as for standard mid-block pedestrian traffic signals. In the case of the pedestrian displays, however, when the green human figure display has stopped, a steady red human figure is shown on the nearside pedestrian signal rather than a flashing red human figure. It has been suggested that road users are confused about the meaning of the flashing red display and that the steady red signal is unambiguous and clear.

The introduction of the nearside pedestrian signal display was found to result in a higher rate of pedestrian compliance with signals than with the standard crossing.

At mid-block signals, the pedestrian displays are not readily seen by approaching motorists who are facing a steady red traffic signal. This is generally not the case at intersections with parallel pedestrian

crossings. Pedestrians are allowed to continue crossing while the flashing red pedestrian signal is displayed, and the need for drivers who are facing a green traffic signal to give way to pedestrians in these circumstances must continue to be reinforced.

[Ref. 2.11(2) and 2.11(3)]

Countdown signal displays

PROPOSAL 7. It is proposed to amend *clause 6.6* of the Rule to allow road controlling authorities to install countdown pedestrian signals or 'clocks'.

Reason for proposed changes

Countdown pedestrian signals are widely used in the USA and Canada, and their use is approved by the US Federal Highway Administration in their *Manual on Uniform Traffic Control Devices*² (Section 4E.07). These countdown pedestrian displays are additional to the green and red human figure displays currently required by the Rule. The sequence of pedestrian displays is the same as the current displays but, during the clearance phase (when a flashing red human figure is displayed), an additional countdown clock showing the number of seconds remaining in the phase is also displayed.

A trial has been conducted to evaluate the effectiveness and safety of pedestrian countdown traffic signal displays (or 'clocks') situated at intersections without conflicting turning traffic movements. Details of the trial can be found in *Appendix 2*.

The trial demonstrated good pedestrian understanding. However, the results also indicated increases in the number of pedestrians starting to cross when the flashing red human symbol was displayed, which is consistent with findings in other countries. There are significant risks associated with this behaviour when 'parallel' pedestrian phases are permitted.

It is proposed that countdown displays be permitted only at mid-block pedestrian signals or at intersections where all motor traffic is stopped when pedestrian movements are permitted.

[Ref: 2.11(1)]

² *Manual of Uniform Traffic Control Devices* Federal Highway Administration, US Department of Transportation, 2009 (http://mutcd.fhwa.dot.gov/pdfs/2009/pdf_index.htm)

Define 'mid-block pedestrian traffic signal'

The description of roundabout metering signals (**Proposal 5**), near-side pedestrian displays (**Proposal 6**) and countdown signal displays (**Proposal 7**) use the term 'mid-block pedestrian traffic signal'. While the term is generally understood, it is considered desirable that it be defined. A mid-block crossing is located between, and separated from, intersections or areas controlled by traffic signals (eg, a level crossing). A suggested definition of this term specifies that this crossing point must be at least 20 m from an intersection or area controlled by traffic signals. (See the suggested definition in the proposed amendment Rule [Ref. 3.1].)

Comments about the adequacy of the proposed definition, particularly in relation to the specified distance, are welcome.

On-roadway warning lights at pedestrian crossings

PROPOSAL 8. It is proposed that a new provision, *subclause 8.2(12)*, be inserted in the Rule to allow on-roadway warning lights as an additional warning device at pedestrian crossings.

Reason for proposed changes

Trials to evaluate the effectiveness and safety of on-roadway flashing light warning systems activated by pedestrians about to enter a pedestrian crossing were carried out at two locations in Christchurch City and a location in Auckland City. On each roadway approaching the crossing, uni-directional (ie, facing toward vehicles approaching the pedestrian crossing), in-pavement lights were installed:

- at least five equally spaced lights immediately on the approach side of the striped marking defining the pedestrian crossing, across the full width of the pedestrian crossing; and
- on the centre-line or lane line, as appropriate, three lights installed at 5 m, 20 m and 35 m from the pedestrian crossing.

It is proposed that the layout of the devices will be detailed in *Schedule 2* (see **Proposal 29**).

Before each kerb defining the ends of the pedestrian crossing, an appropriate system automatically detects pedestrians wishing to use the crossing. When the system detects a pedestrian wishing to cross the road, the warning lights flash, advising drivers of the presence of the pedestrian. The warning lights stop flashing after a period determined for each location.

The results of the trial carried out over two years (from 1 March 2006 to 28 February 2008) have been positive, with the warning light system shown to be effective in heightening driver awareness when approaching a crossing. The cost to install and maintain the system means this system is unlikely to be installed at many locations but is a useful, additional option for managing road safety risks at pedestrian crossings. As a result, the NZTA has extended the operation at the trial sites and proposes a change to the Rule to allow for these devices.

[Ref: 2.12]

Roundabouts

PROPOSAL 9. It is proposed to amend *clause 10.4* of the Rule to change a number of aspects relating to roundabouts. This includes revoking the transitional *subclause 10.4(2)* and the reference to '30 June 2006' in *10.4(5)*, which are no longer required.

Reason for proposed changes

A number of roundabouts have had permanently operating traffic signals installed on all or most legs. Where an entry into the roundabout (generally a very low-flow entry point) is not controlled by signals (ie, there are no signals controlling the circulating or entering traffic) a 'give way roundabout' sign is installed and the normal roundabout give-way rules are meant to apply.

When the signals at a signal-controlled roundabout fail and the displays are blank or in flashing yellow mode, drivers should (and most will) apply the normal roundabout give way rules despite the entrances to the roundabout not having 'give way roundabout' signs.

Subclause 4.6 (1) of the *Road User Rule* applies even if there are no give-way signs, markings or signals on the driver's approach to the intersection. *Clauses 10.2, 10.3, 10.4* and *10.5* of the *Traffic Control Devices Rule*, however, indicate that an intersection is 'controlled' by a form of traffic control device – namely stop signs, give-way signs, roundabout and traffic signals, respectively.

The proposed amendment to *clause 10.4* is intended to ensure that a roundabout remains, legally, a roundabout regardless of how traffic using it is controlled.

[Ref: 2.14]

Special vehicle lanes

PROPOSAL 10. It is proposed to clarify the requirements for defining special vehicle lanes after each intersection along their length.

Reason for proposed changes

The wording of *subclause 11.2(1)* does not align with that in *subparagraph 4.2(3)(b)(ii)* of the Rule. Currently, *11.2(1)* indicates that a special vehicle lane ‘starts again after each intersection’. In general, a road controlling authority will define a special vehicle lane continuously from its commencement point, along the route it follows, to the end point. The purpose of providing a sign after each intersection that the special vehicle lane crosses is to ensure drivers entering from that intersection are fully informed about the nature of the lane and, therefore, of their duties in relation to it.

The current wording suggests the lane must be defined block-by-block. This is clearly not envisaged in *4.2(3)*, nor is it the way in which special vehicle lanes are generally described in bylaws. If the lane begins after each intersection, signs must be installed as close to the intersection as possible, and this may not enable them to fulfil their purpose for entering traffic.

It is, therefore, proposed to change *subclause 11.2(1)* by removing the words “at the point at which the lane starts again after each intersection” and replacing them with “after each intersection, along its length”.

[Ref: 2.15]

Paths shared by pedestrians and cycles

PROPOSAL 11. It is proposed to amend *clause 11.4* of the Rule to clarify aspects of defining paths and to recognise changes made in the Road User Rule in defining ‘shared paths’. It is also proposed to define a pedestrian symbol for use on shared paths to assist in defining usage of those paths.

Reason for proposed changes

Indication of shared paths

A similar argument to that described in **Proposal 10** can be applied to *11.4(1)(ii)* and *11.4(2)(ii)*, particularly where the path referred to is continuous across a roadway (a possibility based on *11.4(5)*) or other pathway. It should be noted that *11.4(1)(ii)* does not take into account an intersecting pathway. It is proposed that these paragraphs should read “after each roadway or any other pathway with which it intersects.”

Subclause 4.2(3) indicates that where a regulatory requirement, such as a shared path, ends, this should be indicated by means of a sign. For the sake of internal consistency, a paragraph should be added to both *11.4(1)* and *11.4(2)* to require the signing of the end of the shared or segregated paths defined respectively by these subclauses.

The *Road User Rule* (following amendment in 2009) describes shared paths between pedestrians, cycles, wheeled recreational devices and mobility devices and implies that road controlling authorities may define priorities and space for each or any of these types of user. It is proposed that *11.4* should apply to any or all of these users and be amended accordingly.

[Ref: 2.16]

Definition of ‘shared path’

The aim of adding a definition of ‘shared path’ is to aid the structure and meaning of *clause 11.4* of the Rule. It would also facilitate the use of the term when a footpath has been opened up to cycles. When a footpath has its use changed to a shared path, it ceases to be a footpath even though pedestrians and others entitled to use footpaths would continue to use the facility, unless specifically prohibited from doing so (eg, wheeled recreational devices). The use of the term ‘shared path’ would help to prevent confusion with its previous status.

[Ref: 3.1]

Clarification of rules and incorporating best practices

Use of a traffic control device after commencement of Rule

PROPOSAL 12: It is proposed that when amendments are made to the Rule, the savings effects of *subclause 3.2(1)* should apply to any traffic control device affected by the amendment and installed prior to the amendment coming into effect, unless specifically excluded by that amendment.

Reason for proposed changes

Currently, the Rule provides that, if a traffic control device was installed before the commencement of the Rule (ie, 27 February 2005), it may continue to be used, provided it remains in good repair and is safe and adequate for its intended use. This is provided for in *subclause 3.2(1)* (a general savings provision).

It has been assumed that this savings clause applies to a device installed after 27 February 2005 but before a subsequent amendment to the Rule that affects the status of the device.

When a new sign is a replacement for an existing sign, normally the old version may continue in use until replaced by the road controlling authority choosing to replace it, or otherwise as part of a normal maintenance programme. This could mean an old version of a sign remains in use for up to ten years. However, apart from devices installed before 27 February 2005, the current wording in the Rule does not allow this.

It has been suggested that the Rule should always specify a terminal date beyond which a device should not be used, but the NZTA's view is that this would rarely be necessary.

Although 3.2(1) clearly states “except as otherwise provided in this Rule”, it is apparent that some road controlling authorities are assuming that a traffic control device remains valid even though another provision may have specified a date by which it was intended that the traffic control device be replaced (eg, the ‘give way roundabout’ sign, which was required by 10.4(1) to be in place at all roundabouts by 31 December 2007). The proposed amendment would clarify that where the Rule specifies that a device must be changed on or by a particular date, this prevails over the general savings provision.

[Ref: 2.1]

Description of traffic signs

PROPOSAL 13. It is proposed to clarify the powers of the NZTA to authorise a traffic sign that does not comply with the Rule.

Reason for proposed changes

From time to time, the NZTA has authorised, by notice in the *Gazette*, traffic signs that do not comply with the signs described in *Schedule 1* of the Rule (under 4.4(4)). In general, the signs that have been authorised conform to the general design principles and properties of existing signs.

The established practice has been to include signs authorised in that way in the first amendment to the Rule after the publication in the *Gazette*. This ensures the signs are incorporated within the Rule but also provides an opportunity for comment as part of the consultation process. This practice has been followed with this proposed amendment Rule (see **Proposal 27**).

As the current wording of 4.4(1) and 4.4(4) may not clearly reflect the current practice, minor changes are proposed to clarify these provisions.

[Ref: 2.4(1)]

Perforation of signs

PROPOSAL 14. It is proposed to allow the practice of perforating owner marks on temporary traffic signs, and to amend the sign specification in *Schedule 1* of the Rule to allow for the perforating of school patrol signs.

Reason for proposed changes

Temporary warning signs

Road works signs are prone to theft. Owners have found it difficult to recover them because of lack of proof of ownership, but have subsequently discouraged theft by permanently marking the signs, most commonly by perforating the sign with a recognised company mark. However, this would be a breach of *subclause 4.4(6)*. Furthermore, this treatment would, in the case of permanently-installed signs, significantly reduce the life expectancy of the sign.

[Ref: 2.4(2) and 2.4(3)]

This proposed amendment would allow the practice of perforating owner marks for temporary signs only, provided that the message of the sign is not affected. This could be further controlled by prescribing a specification of maximum hole size and a total area of removed material. Comment on any appropriate specification would be welcome.

School patrol signs

School patrol signs often have a significant area of the sign perforated – purportedly to reduce wind resistance and weight although neither effect would be significant and is largely illusory. It is important that this practice does not nullify the legal effect of the sign. The NZTA believes that this would be best achieved by amending the sign specification in *Schedule 1* of the Rule, to explicitly provide for this.

The use of perforations on signs is limited to this sign and to the temporary warning signs described above (ie, only if the Rule expressly allows this).

[Ref: 4.1(a)]

Variable traffic signs on moving vehicles

PROPOSAL 15. It is proposed to amend the Rule to allow for the use of variable message signs on a vehicle that is moving.

Reason for proposed changes

Increasingly, road contractors are considering use of variable message signs on vehicles used in mobile operations. In most cases, the message, although displayed by means of a variable message sign, would remain the same while the vehicle is moving. Currently such signs may only be displayed on stationary vehicles. (*Subclause 4.4(19)* of the Rule refers).

[Ref: 2.4(5)]

Proportionality of markings

PROPOSAL 16. It is proposed that *subclause 5.4(3)* of the Rule be amended to accurately reflect the scaling process for increasing the dimensions of markings.

Reason for proposed changes

Subclause 5.4(3) of the Rule provides that markings may be increased provided the dimensions are kept in approximate proportion to other details of the marking. For M7-1 (lane use arrow markings) the longitudinal dimensions increase with the speed environment, while lateral dimensions remain the same. This is not the 'approximate proportion' implied by the Rule, which is to be amended to reflect the scaling process described.

Exceptions to the scaling proposed include those words that are marked parallel to the road (for example, those described as M3-1 Taxi stand, M3-2 Bus stop and M3-3 Loading zone) and which will be excluded.

[Ref: 2.6(1)]

Descriptions of markings

PROPOSAL 17. It is proposed that the number of markings specified in *Schedule 2* of the Rule be increased to provide for uniformity.

Reason for proposed changes

Subclause 5.4(5) specifies that a letter or numeral displayed by a marking must be of a type specified in *Schedule 2*. While there are some markings specified in the Schedule, there is no general form for letters or numerals from which a road controlling authority could create an appropriate marking.

The current, inadequately defined, marking options do lead to non-standard markings. The letters, numerals and additional symbols proposed will go a considerable way in achieving consistency of markings.

[Ref. 4.2]

Provision of traffic signals

PROPOSAL 18. It is proposed to amend *subclause 6.2(1)* of the Rule to clarify the requirements relating to traffic signals on driveways approaching areas controlled by traffic signals.

Reason for proposed changes

Subclause 6.2(1) requires traffic signals to be installed on each approach to an area controlled by traffic signals, strictly requiring that, as well as every roadway, any driveway within that area should be controlled.

Most road controlling authorities do not routinely install signals to control driveways, particularly where the driveways serve one or perhaps a few residential properties. However, if the driveway is serving commercial premises that are used by the general public, there is often confusion as to the status of the driveway as a road – in many cases, they are constructed in a way that resembles a public road and should be controlled by the signals.

Clause 4.4 of the *Road User Rule* requires drivers entering or leaving a driveway to give way to road users on a footpath but is otherwise silent as to who should give way when the movement conflicts with road users on the roadway. Although recent changes to the *Road User Rule* clarify give-way provisions at signals, these apply only to drivers controlled by signals.

This lack of clarity regarding give-way rules requires any road controlling authority that is planning to install traffic signals at an intersection, where a driveway enters the intersection, to carefully assess the risks and impact on efficiency of controlling or not controlling the driveway.

It is proposed to support existing practices in relation to driveways within an area controlled by traffic signals by giving road controlling authorities the discretion to control the driveway. However, it is proposed to explicitly place an onus on the authority to consider the implications of traffic safety and efficiency in deciding whether or not to control the driveway.

[Ref. 2.8]

Multi-lane approaches to areas controlled by traffic signals

PROPOSAL 19. It is proposed to amend the Rule to enable traffic signals on the left and right sides of multi-lane approaches to areas controlled by traffic signals to have different displays as appropriate for the different lanes that they control.

Reason for proposed changes

On multi-lane approaches to traffic signals, where separate left and right turn lanes may have been provided, it is common practice to install two sets of primary and secondary signals – one set on the left-hand side and one on the right. The left-hand set display depicts signals applying to the left turn lane(s) and through-lanes, while the right-hand set display depicts signals applying to the right turn lane(s) and through lanes.

It has been suggested that *paragraphs 6.2(1)(b) and (c)* of the Rule imply a multi-lane approach is a single approach in terms of the opening statement in *6.2(1)*. This would mean signal displays in the form of three columns (or even more, if special vehicle phases are also included) would be required on the right- and left-hand side of the roadway at the limit line and as supplementary (secondary or tertiary) displays beyond. A proportion of each display would have no relevance to those road users viewing the display and would increase the cost of installation and maintenance. It is proposed to insert an additional provision in the Rule (*clause 6.2(1B)*) to specifically address multi-lane approaches.

[Ref: 2.8]

Description of traffic signals

PROPOSAL 20. It is proposed to correct the references in paragraph 6.3(1)(b) to the standards for traffic signal lanterns.

Reason for proposed changes

The reference in 6.3(1)(b) is incorrect and should read:
AS/NZS2144:2002 Traffic signal lanterns rather than *AS2144:2002 Traffic Signal Lanterns*.

[Ref: 2.9(a)]

Corrections to stripes on signal poles and to barrier arm descriptions

PROPOSAL 21. It is proposed to correct the dimensions of the red and white stripes on flashing signal poles and the description of 'level crossing barrier'.

Reason for proposed changes

Red and white stripes

Subclause 6.3(6) provides for poles supporting flashing red vehicle displays to be marked with alternate reflectorised red and white bands. The dimension for each band is set at 300 mm. The most common flashing signal displays occur at level crossings, and the standard used for these was the basis for the width adopted. However, an error occurred in transcribing the standard, which is 225 mm.

[Ref: 2.9(c)]

The dimensions of the alternate bands described in *subclause 9.4(3)* need to be changed from 300 mm to 225 mm.

[Ref: 2.13(1)]

Barrier arms

The reference in *paragraph 9.4(9)(b)* to 'Schedule 2' should be to 'Schedule 1', as the 'sign' to which it refers is listed in *Schedule 1* of the Rule as an R3-14 barrier arm. In addition, the date (30 June 2006) by which these barrier arms had to be reflectorised has since passed. The proposed amendments will correct these errors in the Rule relating to stripes on signal poles and barrier arms.

[Ref: 2.13(2)]

Signal displays for special classes of vehicle

PROPOSAL 22. It is proposed to replace the term 'bus lane' by the term 'bus only' to clarify the requirements for providing signal displays for buses.

Reason for proposed changes

Subclause 6.4(10) of the Rule describes when a 'B' signal display for buses must be used. The provision, however, refers to a 'bus lane', which is a facility that can be shared with cycles, mopeds and motorcycles. If those vehicles are occupying the lane at the limit line, a bus would not be able to proceed when a 'B' was displayed. The prime function of the 'B' display is to allow a bus to make a movement not permitted by other vehicles (eg, turning right from the left, proceeding straight though into a bus only facility, etc).

It is proposed that the provision be changed to clarify that it only applies to 'bus only lanes' and not to 'bus lanes'. It follows that the signs installed approaching the signal would have to indicate that cycles, mopeds and motorcycles are specifically excluded.

[Ref: 2.10(2)]

Special routes or zone restrictions for motor vehicles

PROPOSAL 23. It is proposed that some minor changes be made to the signing of special routes and zone restrictions.

Reason for proposed changes

For consistency with other similar requirements (for example, **Proposals 1 and 10**) it is proposed that *subclause 11.5(3)* of the Rule relating to the provision of signs for special routes and zone restrictions be amended. This would require the end of a route or zone restriction to be indicated by a sign.

[Ref: 2.17]

Indication of fire hydrants

PROPOSAL 24. It is proposed to correct the reference to a standard.

Reason for proposed changes

The reference to '*NZS4509:2003 Code of Practice for New Zealand Firefighting Water Supplies*' should be changed to '*SNZ PAS 4509:2008 New Zealand firefighting water supplies code of practice*'.

[Ref: 2.18]

Amendments to definitions

PROPOSAL 25. It is proposed to insert a number of definitions in the Rule.

In addition to adding definitions to terms identified in the proposals described above, it is proposed to insert the following definitions to assist users of the Rule.

[Ref. 3.1]

Define ‘driveway’

It is proposed to insert the definition of ‘driveway’ as used in the *Road User Rule*.

Define ‘rider’

The proposed amendments to the Rule place greater emphasis on facilities for cycles, mobility devices and wheeled recreational devices. It is proposed to define this term to assist users of the Rule and to align with the *Road User Rule* and other legislation.

Define ‘wheeled recreational device’

This term is used within the *Traffic Control Devices Rule* but reference to the *Road User Rule* or other legislation is required. It is, therefore, proposed that the term be defined to assist users of the Rule.

Proposed changes to Schedules

Amendments to descriptions of signs

PROPOSAL 26. It is proposed that minor corrections or changes be made to a number of traffic signs described in Part 3, Schedule 1 of the Rule.

Reason for proposed changes

Errors in description

A number of errors, primarily in relation to colour, have been identified in some of the descriptions of traffic signs contained in *Schedule 1* of the Rule. Signs affected are:

R5-9.1 Heavy vehicle limits distance supplementary

W1-1.9 Road works supplementary – works end

W2-1 Hazard warning symbol

A12-3 EXIT ONLY supplementary

Production efficiency and greater uniformity

To reduce production waste and provide greater uniformity of design, a number of sign dimensions have been reduced to take advantage of standard sign material sizes. The proposed changes will not affect the effectiveness of the signs but could reduce cost and waste and may improve ease of installation and aesthetics when those signs are installed, where permitted, on the same pole. Any sign installed prior to the commencement of the amendment Rule will remain legal as long as it remains fit for purpose (see **Proposal 12**). It is intended that further changes of this type will occur in due course.

Signs affected by this process are:

A13-1 Intersection direction – arrow board

A13-1.1 Intersection direction – arrow board with distance

A13-2 Intersection direction – arrow

A13-3 Intersection direction – arrow board two directions

A22-1 Single service adjacent to road

A22-2 Two or more services adjacent to road

A22-3 Service or services on a side road

A32-1 Feature adjacent to road

A32-2 Feature on a side road

[Ref: 4.1(a)]

Minor amendments arising from proposals in this Rule

An amendment to the description of a R2-4 school patrol sign is discussed at **Proposal 14**. If approved, this would allow the sign to be perforated.

[Ref: 4.1(a)]

If **Proposal 5** regarding roundabout metering signals is approved, two existing signs, namely W10-4.1 and W10-4.2, which support the previously described roundabout signals will no longer be needed and should be removed from the schedule of signs.

[Ref: 4.1(d)]

Revocation of sign

The W14-9.3 'All vehicles use low gear' sign has been replaced by the W14-9.4 'Use low gear' sign. It is proposed, therefore, to revoke the W14-9.3 sign but any such sign installed prior to the commencement of the amendment Rule will remain legal as long as it remains fit for purpose.

[Ref: 4.1(d)]

New signs to be included

PROPOSAL 27. It is proposed that a number of signs be added to those listed in *Part 3, Schedule 1* of the Rule.

Reason for proposed changes

Since the most recent amendment of the Rule, the NZTA has, under *subclause 4.4(4)*, approved, by notice in the *Gazette*, a number of signs that display words or symbols other than those provided for in the Rule. These signs were approved because of an established need. It is considered appropriate that these approved signs be included in the Rule.

[Ref: 4.1(b)]

Signs to be substituted

PROPOSAL 28. It is proposed that a number of signs replace the signs currently listed in *Part 3, Schedule 1* of the Rule.

Reason for proposed changes**R2-3 Give way roundabout sign**

It is proposed that the existing description of the R2-3 'Give way roundabout' sign be replaced to provide for the optional use of the 'Give Way' supplementary plate.

The original intention in introducing the 'give way roundabout' sign was to support the newly-defined, specific roundabout give-way rules in the *Road User Rule*. Overseas jurisdictions provide only the triangular sign with the roundabout symbol, and this was the original intent. It was decided that New Zealand drivers required an additional reminder of the need to give way, which resulted in the addition of the 'Give Way' plate below the give way roundabout sign. This was intended to be a transitional arrangement.

A recent sign comprehension survey carried out for the NZTA indicated that drivers' understanding of the meaning of the give way roundabout sign without the Give Way plate was at least as good as that when both the triangular sign and plate were posted.

In many locations the Give Way plate has impeded drivers' vision because of the height at which it is mounted. To overcome this, road controlling authorities have not installed desirable duplicate signs in the central island in some cases. Amending the sign description to provide for the Give Way plate to be optional will allow road controlling authorities to consider removing plates where these could be causing problems for visibility, or for other reasons, and opt not to reinstall the plate when replacing the give way roundabout signs.

R2-7 Single lane, give way

In the *Road User Rule*, this sign is referred to as the 'One way give way' sign. It is proposed to change the name of this sign for consistency with that Rule. In addition, the interpretation of the sign as stated in *Schedule 1*, will be changed to incorporate the meaning as defined in the *Road User Rule*.

R4-12.2 Emergency stopping lane (combination)

Under the *Road User Rule*, an emergency stopping lane operates at all times, unless otherwise stated. Consequently, if a bus lane is established for a specific time on an emergency stopping lane, this does not preclude the lane being used by another vehicle for stopping in an emergency. The existing description of an R4-12.2 sign is, therefore, incorrect and needs to be replaced.

The NZTA has approved the corrected sign description for use, under 4.4(4) of the Rule, and this Proposal would make the corresponding correction to the Rule.

R5-9 Heavy vehicle – bridge limits

The current description of the R5-9 sign in the Rule is inadequate. The meaning of the term 'GROSS [percent] % CLASS I' was not defined and required the NZTA to approve an altered description under 4.4(4) to clarify the meaning. Furthermore, an option, provided by the *Heavy Motor Vehicle Regulations 1974*, to allow a road controlling authority to describe a single gross weight limit is not permitted.

This Proposal would make the corresponding correction to the Rule and include the option of specifying the gross weight limit.

A13-1.2 and A13-3.2 cycle route direction signs

The current descriptions of these signs are incorrect. It is proposed that, with the need to correct the description, the opportunity should be taken to amend other aspects of the sign descriptions to conform with more efficient sheet and sign plate sizes.

[Ref: 4.1(c)]

Amendments to markings

PROPOSAL 29. It is proposed to insert a number of new markings and alternatives to existing markings contained in Part 3, Schedule 2 of the Rule.

Reason for proposed changes

The proposed changes to *Schedule 2* of the Rule largely give effect to the proposed amendments discussed above.

- (a) **Format of warning lights for pedestrian crossings** supports **Proposal 8**.
- (b) **Format of pedestrian symbol marked on a path.** This arises from provisions in the *Road User Rule* which provide for priorities to be assigned to specific users on shared paths by means of signs or markings. Previously, no standard marking for a pedestrian was set.
- (c) **Alternate formats for taxi stand and bus stop** provides an alternative that is consistent with other forms of lane markings and marking of parking spaces. These options use less paint and utilise the standard letters described in (e) below and support **Proposal 1**.
- (d) **Formats for parking area markings** support **Proposal 1**.
- (e) **Formats for numbers and letters used in road marking** support **Proposal 17**.

[Ref: 4.2]

Amendments to traffic signals

PROPOSAL 30. It is proposed to add a number of new traffic signal descriptions to those described in Part 3, Schedule 3 of the Rule.

Reason for proposed changes

The proposed changes to *Schedule 3* largely give effect to amendments proposed in this amendment Rule.

- (a) **Format of nearside pedestrian displays** supports **Proposal 6**.
- (b) **Format of countdown signal displays** supports **Proposal 7**.
- (c) **Corrections to diagrams** are proposed to provide clarity and consistency.

An error was identified in the original Rule, which resulted in two, five-aspect displays incorrectly assigned as S4-6, 6D and 6E being corrected to S4-5, 5G and 5H in the 2005 amendment of the Rule. However, the diagrams themselves were not amended, and this has led to some confusion in published documents.

The diagrams depicted in S4-8, while clearly describing the format of 8-aspect signals, use a slightly different format from the other diagrams.

(d) Special vehicle displays

Special vehicle displays, as currently described, provide only for a single column of special vehicle displays alongside the standard vehicle displays S4-3 to S4-9. In practice, it has been found desirable to reflect this layout in the signal displays because, for example, of the placement of a special vehicle lane in the centre of lanes for other vehicles. It is proposed, therefore, to allow a column displaying special vehicle displays to be placed as an additional column within the standard vehicle displays.

Currently, it is not permissible to display more than one form of special vehicle display in the same column. It is proposed to provide for this option.

[Ref: 4.3]

Issues for comment

The following issues are included for discussion only and there are no corresponding provisions in the draft Rule.

Issue 1: Minimum size of signs

There have been calls for some signs to be reduced in size. These include signs installed and directed primarily toward pedestrians or cyclists who, because they are not travelling at normal motor vehicle speeds, are able to read, comprehend and react to smaller signs. The ability to provide smaller signs in pedestrian and cycle environments would reduce the visual intrusion such signs can create at their current size.

In other situations, where the sign is duplicating a message from a standard-sized sign (eg, where the standard sign is mounted on the left-hand side of the road and a second sign is to be mounted on the right-hand side), a reduction in size may also be acceptable.

A further example may be where the sign is repeating a provision first signified by a standard-sized sign (eg, no stopping signs installed along a length of highway, 'repeater' speed signs, particularly within areas covered by a speed limit less than 50 km/h).

The general requirements for traffic control devices described in 3.1 of the Rule have been used in determining current minimum sizes for signs based on drivers, in particular, being able to see and react appropriately to messages on signs. With the increasing proportion of older drivers the need for maintaining, or even increasing sign sizes, to achieve effectiveness suggests there cannot be a general provision allowing sign size reductions.

The NZTA suggests a clarification to the Rule (*subclause 4.4(4)*) enabling the NZTA to define new minima and to impose conditions on the use of such smaller versions of a standard sign.

Submissions providing clear arguments for reducing existing minima for any specific sign or range of signs, however, would be welcome. Comment on how this issue might be managed would also be welcome.

Issue 2: Permitted combinations of signs

Subclause 4.5(1) of the Rule effectively limits the use of multiple signs or a panel that contains a number of different signs. Although this is highly desirable under normal circumstances, for reasons of legibility, comprehension and a driver's ability to react appropriately, multiple signs can create additional clutter and require more poles.

The examples below have been presented to the NZTA in support of a change to the Rule that would allow the use of combinations of signs at single locations.

Entry to motorways – at this point there are three or more signs, representing the speed change from urban speed to motorway speed, and the banning of pedestrians and cyclists. In Auckland, with ramp metering as well, the numbers of signs within a very short length of roadway creates visual intrusion and distraction.

Entry to malls or shared zones – at these locations there are restrictions on parking, motor vehicles and a mix of other activities that could lead to a large number of visually intrusive signs. Given the low operating speeds anticipated in those locations, some relaxation on the numbers of signs that may be installed at the same location could be justified.

Comments are invited on any combinations that might be appropriate for specific signs, and the reasons for considering those combinations. Comment on how this issue might be managed would also be welcome.

Issue 3: Shared zone sign

The shared zone concept has been provided for legally since 1995 and was transferred into the *Road User Rule* when it came into effect in 2005. *Clause 10.2* of that Rule requires that, within a shared zone, a vehicle driver (which includes a cyclist) give way to a pedestrian and that a pedestrian must not unduly impede the passage of any vehicle. Shared zones are one of the “Pedestrian environment concepts” described in the *Pedestrian Planning and Design Guide*³.

Until recently there has been little interest among road controlling authorities in introducing shared zones and there is currently no approved shared zone sign. Following a request from a road controlling authority two possible sign formats, shown below, were included in an internet-based sign comprehension survey conducted for the NZTA in May 2009.



Format 1



Format 2

³ Paragraph 5.5.3, *Pedestrian Planning and Design Guide*. Land Transport NZ, March 2008 – see <http://www.nzta.govt.nz/resources/pedestrian-planning-guide/docs/chapter-5.pdf>

The survey results indicated that the concept of vehicles sharing the zone with pedestrians was well understood, with the scores for Format 1 and Format 2 being similar and moderately good (respectively 0.67 and 0.70 in a range up to 1.00 for complete and accurate comprehension). However, most responses in the survey did not demonstrate an understanding of the need for drivers to give way to pedestrians. Clearly, drivers need to understand their responsibility to give way to pedestrians in a shared zone for these zones to be effective and safe.

Additionally, a shared zone must be designed to encourage vehicle operating speeds of around 10 km/h. Most European jurisdictions do not appear to generally impose specific speed limits within shared zones. However, Australian Road Rules, which apply similar rules to drivers and pedestrians within shared zones to those of New Zealand, also require the zones to be denoted by a sign which includes a speed limit, most commonly 10 km/h although other speeds (no more than 20 km/h) can be used.



Australian Road Rules – Rule 24⁴: Shared zone sign

Land Transport Rule: Setting of Speed Limits 2003 requires (*paragraph 3.2(6)(c)*) road controlling authorities setting speeds of less than 50 km/h to install safe and appropriate engineering measures to ensure the mean operating speed is within 5 km/h of the proposed speed limit.

A shared zone should be designed so that vehicle-operating speeds are appropriate and pedestrians can, and do, walk safely in the area over which vehicles cross. In those environments, it is argued that additional signs add little of value other than to reinforce the essential rules that should apply.

Comments on a shared zone sign that is likely to be best understood by shared zone users are invited. In particular, comment on the need for the sign to include a speed limit (which would oblige a road controlling authority to follow setting of speed limit procedures) is encouraged.

⁴ http://www.ntc.gov.au/filemedia/Reports/ARR_February_2009_final.pdf

Matters to be taken into account

The Act provides the legal framework for making Land Transport Rules.

Section 161 of the Act states the procedures by which the Minister of Transport makes ordinary rules. These include the obligation to consult, which has been developed into a series of formal and informal discussion procedures.

Application of Rule-making criteria

Proposed activity or service

Section 164(2)(b) of the Act requires that appropriate weight be given to the nature of the proposed activity or service for which the Rule is being established. The 'proposed activity or service' that is covered by the proposed amendment Rule is to provide for the design, construction, maintenance and operation of traffic control devices to enable road controlling authorities to regulate the use of roads and to control, restrict or prohibit traffic.

Risk to land transport safety

Section 164(2)(a), (c) and (d) requires the Minister to take into account the level of risk to land transport safety in each proposed activity or service, the level of risk existing to land transport safety in general in New Zealand, and the need to maintain and improve land transport safety and security.

Traffic management that makes effective use of traffic control devices can deliver significant benefits through the smoother flow of traffic and the avoidance of crashes. Traffic control devices must be uniform in appearance and be used consistently so that the attention of road users is drawn to them, and road users understand the purposes of the devices and have adequate time to respond correctly and safely.

The purpose of this proposed Rule, therefore, is to contribute to the safe and efficient operation of our road network by introducing new and proven traffic control devices to those already available to road controlling authorities and amending or reinforcing existing provisions of the Rule by:

- requiring uniformity in the form, appearance and placement of traffic control devices;
- establishing minimum standards for traffic control devices;

- ensuring that road controlling authorities have regard to safe practice in the design and installation of traffic control devices and how they are used for traffic management.

Assisting achievement of strategic objectives for transport

The *Land Transport Amendment Act 2004* amended the matters that the Minister must take into account when making Rules, to reflect the overarching importance of the government's New Zealand Transport Strategy (NZTS). The NZTS envisages that New Zealand will have an affordable, integrated, safe, responsive and sustainable transport system.

Section 164(2)(e) of the Act requires that the Minister must have regard, and give such weight as he or she considers appropriate in each case, to whether a proposed Rule (i) assists economic development; (ii) improves access and mobility; (iii) protects and promotes public health; and (iv) ensures environmental sustainability.

The proposals in the amendment Rule generally have an indirect impact on the strategic objectives for transport through the use made of the traffic control devices by road controlling authorities.

Economic development

Economic development issues associated with the proposed amendments are limited. Road projects of road controlling authorities that are intended to have significant economic development effects, such as the Roads of National Significance, will benefit from compliance of road users with traffic control devices conforming to the Rule.

Some economic benefit arises from the standardisation of devices – benefits of scale and reduction of waste in production (eg, for traffic signs) or efficiencies arising from application (eg, for road marking) – but these are not expected to be significant and are most likely to reduce or restrain cost rather than directly affect development.

Access and mobility

The proposed amendments generally support road controlling authority activities in providing for access and mobility rather than having direct impacts. An example is the amendment (**Proposal 1**) that includes specific, optional markings for mobility parking spaces. Road controlling authorities that are experiencing difficulties in obtaining compliance with the use of those spaces will, if the proposal is adopted, be provided with an option for more clearly denoting the space.

Public health

Public health benefits largely arise from efficiency and safety benefits obtained through application of traffic control devices. Other health benefits arise from traffic control devices used to reinforce the correct use of facilities, such as cycle paths, provided by road controlling authorities.

Environmental sustainability

There are minimal direct issues for environmental sustainability associated with the proposals in the amendment Rule.

Indirectly, however, standardised traffic control devices (for example, traffic signs) have the potential to reduce production waste. Additionally, improved traffic efficiency arising from the appropriate design and correct application of traffic control devices has a positive impact on emissions and, therefore, on environmental sustainability.

Benefits and costs of the proposed changes

Section 164(2)(ea) of the Act requires that the Minister have regard to the costs of implementing measures proposed in a Rule. An assessment of potential benefits and costs is provided in *Appendices 3* and *4* below.

International considerations

Section 164(1) and *164(2)(f)* of the Act requires that Rules may not be inconsistent with New Zealand's international obligations concerning land transport safety, and that international circumstances in respect of land transport safety be taken into account in making a Rule.

Although New Zealand is not a signatory to the *United Nations Convention on Road Signs and Signals*, the principles and recommendations of that agreement are taken into account in New Zealand's policy on signs marking and signals.

How the proposed amendment Rule fits with other legislation

Land Transport (Road User) Rule 2004

The proposed amendment Rule contains four proposals for which consequential changes to the *Road User Rule* are recommended.

These relate to:

- (i) the operation of the flashing school bus sign (**Proposal 4**), which may require the addition to the *Road User Rule* of the responsibility for operating this sign; and
- (ii) the definition of 'school bus' (**Proposal 4**), which would require a change to *clause 1.6* of the *Road User Rule*; and
- (iii) the creation of the new 'P\$' paid parking symbol (**Proposal 4**), which would require a change to *subclause 6.4(2)* of the *Road User Rule*; and
- (iv) the definition of 'parking machine' replacing 'parking meter' (**Proposal 1**), which would require a change to *clause 1.6* of the *Road User Rule* by the insertion of the new definition 'parking machine' and a consequential change to the definition of 'parking'.

Publication and availability of Rule

Amendments to Traffic Control Devices Rule

This proposed Rule is the fourth amendment to the *Traffic Control Devices Rule*.

Copies of this Rule proposal document may be obtained by calling the NZTA Contact Centre on 0800 699 000. It is also available at: www.nzta.govt.nz/consultation/tcd-amendment-2010/.

Availability of Rules

Bound copies of Land Transport Rules and their amendments can be purchased from selected bookshops throughout New Zealand that sell legislation. The final, published versions of Land Transport Rules are also available at www.nzta.govt.nz/resources/rules/about/. They can also be inspected at regional offices of the NZTA.

Information about Rules

Information about the Rules programme and process can be found on the website at: www.nzta.govt.nz/resources/rules/about/. An electronic form is also provided for registering an interest in Rules.

If you have not registered your interest to receive drafts of this proposed amendment Rule (or other draft Rules in the Rules programme), you can do so by contacting the NZTA at the addresses shown in the *Making a submission* section at the front of this publication, or at www.nzta.govt.nz/resources/rules/about/registration.html.

APPENDIX 1

Proposed new zone parking regime

1. **Proposal 1** sets out a proposed new regime for defining parking zones.
2. A parking zone would be indicated by signs indicating the nature of the parking restriction and include the word 'Zone'. The restriction on the sign would apply to the surrounding area of roadway.
3. The extent of the zone must be indicated by signs:
 - (a) where the zone starts, with the words 'Zone Begins';
 - (b) where the zone ceases:
 - (i) and no other zone parking restriction applies, with the words 'Zone Ends'; or
 - (ii) where another zone parking restriction applies, with the words 'Zone Begins' below the new zone restriction.
 - (c) within the zone, at appropriate intervals, signs must be installed displaying the restriction and the word 'Zone' to indicate the restriction applies over a zone. Such signs should not be located more than 200 m apart and should be installed after each exception in 4(a) below.
4. Exceptions to the restriction described on the sign may apply for:
 - (a) sections of roadway within the 'Zone' where specific restrictions, generally more onerous, are signed and marked (see **Proposal 1**); or
 - (b) where a general parking restriction imposed by the *Road User Rule* (eg, no parking over a driveway) applies.

Examples applying this regime are detailed below.

Example 1: Coupon parking zone

Figures 1.1 and 1.2 depict an atypical residential block over which a residents' parking zone has been established. Within the zone there is a loading zone and a small length of part-time no parking.

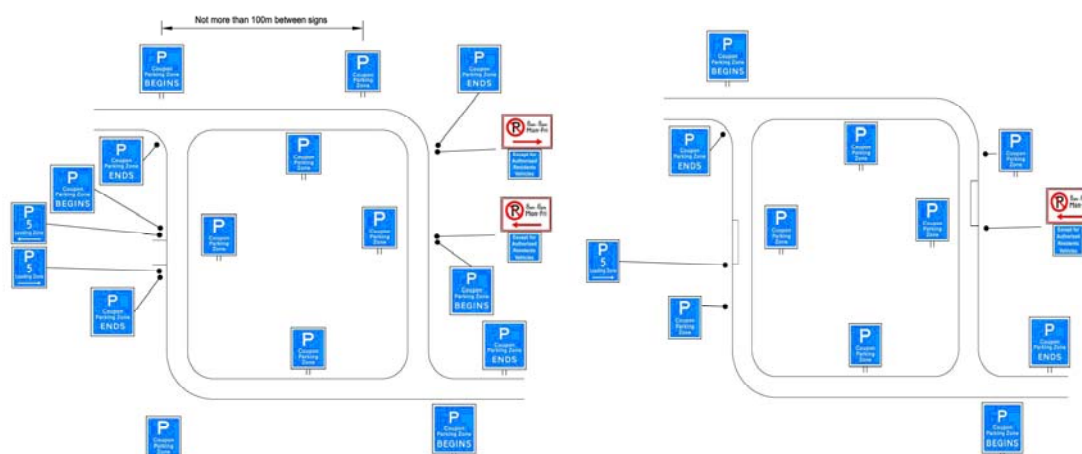


Figure 1.1 As required now

Figure 1.2 As proposed

Figure 1.1 describes the current sign requirements. This indicates 'Zone Begins' and 'Zone Ends' at the two entry and exit points; Zone signs at each end of the two additional parking areas and additional Zone signs at 100 m intervals along each kerb face, plus the two signs required at each end of the additional parking areas detailing them. This leads to a total of 18 signs.

Figure 1.2 indicates the number of signs under the proposed Rule. Again, each entry and exit would have 'Zone Begins' and 'Zone Ends' signs and one sign at the end of each of the additional parking areas. This leads to a total of 12 signs.

The road controlling authority may decide to install additional Zone signs and would be required to mark the special parking areas.

Example 2: Shopping block

Figures 2.1 and *2.2* depict a 'typical' shopping block with a P60 time restriction interspersed with four different parking areas – a bus stop and mobility space on one side and a loading zone and P5 on the other side – plus an additional no stopping restriction imposed in advance of the pedestrian crossing.

Figure 2.1 indicates the number of signs and the markings required by the current Rule. This requires signs at each end of a restriction, thus two each for the bus stop, mobility space, P5 and loading zone. It also requires signs for the P60 area at each end of the restriction and at every place where it is interspersed by a different parking restriction, and at intervals of no more than 50 m. This means 22 parking signs for the block.

Figure 2.2 indicates the number of signs and the markings required under the proposed Rule. Both sides of the road are declared a P60 parking zone (thus a 'Zone Begins' and 'Zone Ends' at each end). It requires a single sign for each of the different parking spaces and, because of both the length of the block and the fact that each side is interspersed by two other restrictions, an additional 'P60 Zone' sign is installed on each side. This leads to 10 signs. The road controlling authority could install additional 'P60 Zone' signs if they considered this was necessary.

The proposal could lead to some additional marking – this would include words or symbols in the P5 and Loading Zone and the marking of a line along the boundaries of the bus stop, loading zone and P5 areas. Such marking could be recommended to reinforce the difference between these areas and the underlying P60 zone restriction.

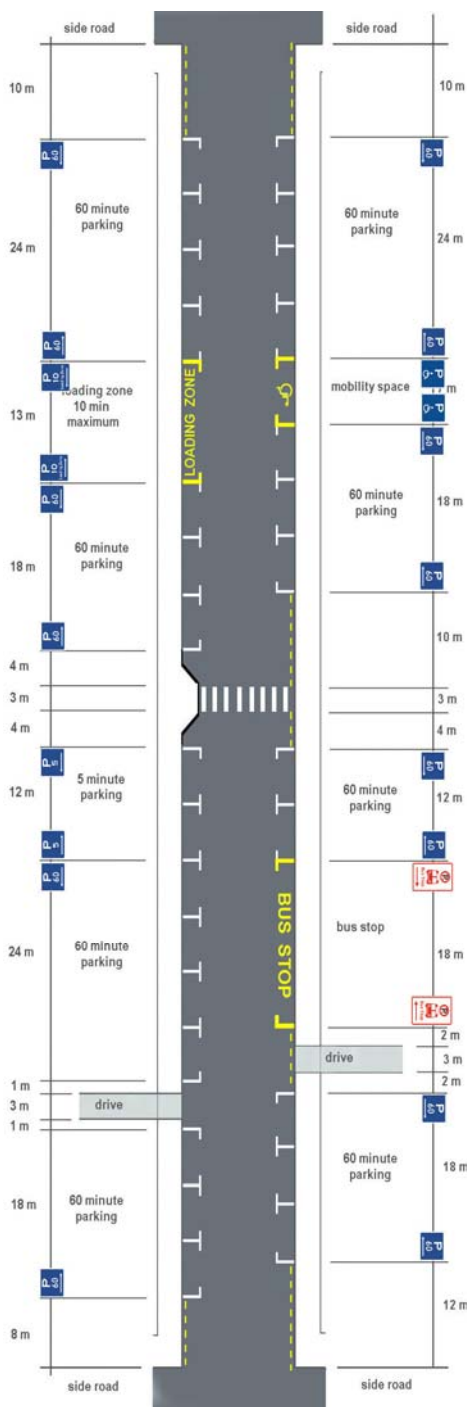


Figure 2.1 As required now

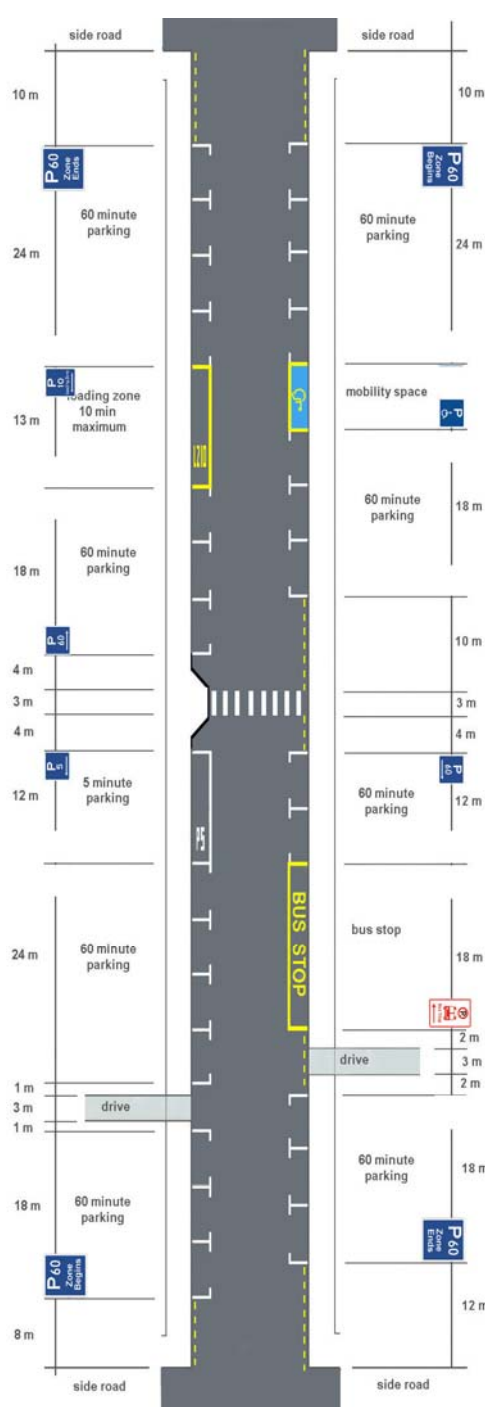


Figure 2.2 As proposed

Example 3: Parking precinct

The proposed parking sign regime was applied in a desk-top exercise to an existing parking precinct (the central business district of a medium-sized, regional city) to provide a further, more realistic, measure of the possible differences between it and the existing sign regime.

The area had a number of reserved spaces (primarily mobility spaces) and loading zones (bus stops and taxi rank). It also had P30, P60, P120 parking restrictions and there were also 'Pay and Display' areas limited to 60 and 240 minutes (ie, P\$60 and P\$240 respectively).

For the existing regime, signs were ‘installed’ for each block at each end of the restriction, with additional signs installed if the distance exceeded 100 m. Based on the layout and restriction used in the exercise, it was estimated that approximately 270 signs would be required.

Signs installed in accordance with the proposed regime were then applied to the same layout and parking restrictions. In this case, it was assumed that each of the P30, P60, P120, P\$60 and P\$240 were zone restrictions. Each ‘special’ parking restriction (eg, bus stop, taxi rank and mobility space) required only one sign. It has been estimated that about 120 signs would be required.

It should be noted that the existing parking regime would not be automatically invalidated by the proposed change. Existing signs would remain until a road controlling authority reviewed its parking restrictions. It is possible the proposed parking sign regime will encourage road controlling authorities to consider zone restrictions and be less likely to impose special restrictions on an ad hoc basis.

Zone parking signs

Examples



'Zone Begins' sign



Sign within Zone



'Zone Ends' sign

A P60 zone may apply over several streets. Within the ‘P60 Zone’, there may be several intersections, a pedestrian crossing, and a signed and marked bus stop or mobility parking space. The normal rules of no stopping within 6 m of an intersection; on, and within 6 m of the approaches to, a pedestrian crossing; and, for using bus stops or mobility spaces, would apply, while for the remainder of the zone, the P60 applies.



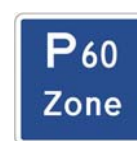
'Zone Begins' sign



Sign within zone



2nd 'Zone Begins' sign



Sign within zone

Where a zone exists within or adjacent to another zone (eg, a ‘P60 Zone’ within or adjacent to a ‘P120 Zone’) the point at which a driver moves from one zone (the end of that zone) to the other is signed by the beginning of the second zone.

APPENDIX 2

Report on trials of pedestrian countdown signal displays

This Appendix relates to **Proposal 20**, which would allow road controlling authorities to install countdown pedestrian signals or 'clocks'.

The NZTA has conducted trials of pedestrian countdown signal displays at three existing intersections controlled by traffic signals – Quay Street/Queen Street and Queen Street/Victoria Street in Auckland City and Queens Drive/Margaret Street/Bunny Street in Lower Hutt.

A report on the two Auckland sites has been received from Auckland City Council. The results for the two sites showed good pedestrian understanding of the countdown signals. However, the sites differed in the impact of the countdown signals on the occurrence of risky pedestrian behaviour, which was measured in two ways.

- The pedestrian is still on the roadway when the steady red man is showing.

At one site (Queen Street/Victoria Street) this fell from 9.0% to 5.0%, and at the other (Quay Street) it rose from 1.0% to 5.5% of pedestrians crossing.

- The pedestrian starts to cross when the red man is flashing

At Queen Street/Victoria Street, this behaviour remained almost the same (23.0% before and 23.7% after) whereas at Quay Street, this rose from 5.6% to 10.8% of pedestrians crossing.

These results reflect the difference in the locations of the two sites. Queen Street/Victoria Street is a crossroad in a main shopping street, whereas the Quay Street site is a crossing on a major road between a major ferry terminal and a major train and a bus station.

The results are not inconsistent with those found in a number of US studies. They highlighted the concern with such systems that the number of pedestrians starting to cross during the flashing red man phase is likely to increase, which would be a significant problem where parallel crossing is permitted. With scramble-phase ('Barnes Dance') traffic signals, all motor vehicles are stationary when pedestrians are crossing, unlike in parallel crossing systems.

Any increase in pedestrians entering a crossing at parallel crossings during the flashing, red standing human figure phase increases the likelihood of crashes. Evidence from the US suggests that this does occur and countdown systems are therefore not recommended for other than scramble phases or mid-block crossings.

APPENDIX 3

Regulatory Impact Statement and Benefit Cost Analysis

Regulatory Impact Statement

Agency Disclosure Statement

This Regulatory Impact Statement has been prepared by the Ministry of Transport.

It provides an analysis of the proposed *Land Transport Rule: Traffic Control Devices Amendment [2010]* (Rule 54002/4). The draft Rule proposes changes to *Land Transport Rule: Traffic Control Devices 2004*, which sets out the requirements for the design, construction and use of traffic control devices.

There are 55 proposed changes to the Rule relating to traffic sign, markings, and traffic signals that are explained in the Overview document included with the consultation draft of the amendment Rule. The majority of changes to existing signs relate to changes to dimensions or colours. A more substantive proposal relates to the way that zone (or area) parking restrictions are to be implemented.

None of the proposed changes are likely to have effects that the government considers will require a particularly strong case before regulation changes are considered – namely, that they could:

- impose additional costs on businesses;
- impair private property rights, market competition, or the incentives on businesses to innovate and invest; or
- override fundamental common law principles.

Existing arrangements

Land Transport Rule: Traffic Control Devices 2004 (the TCD Rule), sets out the requirements for the design, construction and use of traffic control devices.

Problem definition

Over time, new traffic control devices are tested, or adopted from overseas jurisdictions. To authorise their use, changes must be made to the TCD Rule.

Proposed changes

There are 19 proposed amendments to existing signs, 54 new signs and 5 substituted signs. Eight new road markings are proposed. New nearside pedestrian walking man signals and pedestrian countdown signals are also proposed. There is a completely new proposal for how multiple parking restriction signs should be laid out and constructed, and a new policy proposal that relates to the way that zone (or area) parking restrictions are to be implemented.

Objectives

The objective of the changes is to provide a greater range of approved traffic signs for use by road controlling authorities. Traffic management that makes effective use of traffic control devices can deliver significant benefits through the smoother flow of traffic and the avoidance of crashes.

Traffic control devices must be uniform in appearance and be used consistently so that the attention of road users is drawn to them, and road users understand the purposes of the devices and have adequate time to respond correctly and safely.

The purpose of this proposed amendment Rule, therefore, is to contribute to the safe and efficient operation of our road network by introducing new and proven traffic control devices to those already available to road controlling authorities and amending or reinforcing existing provisions of the Rule by:

- requiring uniformity in the form, appearance and placement of traffic control devices;
- establishing minimum standards for traffic control devices;
- ensuring that road controlling authorities have regard to safe practice in the design and installation of traffic control devices and how they are used for traffic management.

Regulatory impact analysis**Economic development**

Economic development issues associated with the proposed amendments are limited. Road projects of road controlling authorities that are intended to have significant economic development effects, such as the Roads of National Significance, will benefit from compliance of road users with traffic control devices conforming to the Rule.

Some economic benefit arises from the standardisation of devices – benefits of scale and reduction of waste in production (eg, for traffic signs) or efficiencies arising from application (eg, for road marking) – but these are not expected to be significant and are most likely to reduce or restrain costs rather than directly affect development.

Production efficiency and greater uniformity

To reduce production waste and provide greater uniformity of design, a number of sign dimensions have been altered to take advantage of standard sign material sizes. The proposed changes will not affect the effectiveness of the signs but could reduce cost and waste and may improve ease of installation and aesthetics when those signs are installed, where permitted, on the same pole. Any sign installed prior to the commencement of the amendment Rule will remain legal as long as it remains fit for purpose.

Benefits and costs of the proposed changes

The major benefits arising from the Rule are that the changes proposed to traffic control devices provide for consistency with, and support, the *Road User Rule* and other legislation; update engineering practice and allow for some new technologies. These would ensure that road controlling authorities are able to take advantage of a wider range of effective devices to implement, improve or maintain safe and efficient traffic management.

There are costs involved in moving to a new standard for a traffic control device, eg, a new sign or road marking. The cost difference between an old sign or marking compared to a new sign or marking is minimal (a reduction in some cases). The main cost is in replacing old traffic control devices and in meeting new requirements, eg, different placement.

To reduce costs, it is proposed that existing traffic control devices that do not reflect new requirements in the proposed Rule would be allowed to continue to be used as long as they remain in good repair and were safe and adequate for their intended use.

Installation of a new traffic control device is assessed by a road controlling authority, which considers the costs against the benefit for the specific site proposed. Where a road controlling authority intends imposing a restriction or prohibition, the TCD Rule specifies the traffic control devices that must be used to give effect to the requirement. While this does impose a cost, it does ensure road users are clearly and effectively advised of the requirement. This ensures a good level of compliance and provides the ability to prosecute those who fail to comply.

A new zone parking sign regime (Proposal 1) proposed in the amendment Rule addresses concerns from road controlling authorities about the numbers of signs currently required and the visual impact of such signs. Estimates of the numbers of signs required for the proposed new regime suggests the numbers of signs could potentially halve with cost savings, as well as a reduction in visual impact. Other changes to the parking sign requirements will also potentially see reductions in numbers and costs of parking signs. Road controlling authorities will not be required to replace existing signs but are expected to use the new sign regime when the need for changes to their parking requirements arises. They may also be able to obtain some advantage from the new system even if no changes do take place to their parking restrictions.

APPENDIX 4*Benefits and costs of the proposed changes*

Section 164(2)(ea) of the Act requires that the Minister have regard to the costs of implementing measures proposed in a Rule.

The analysis which follows is mostly qualitative. Accurate data to measure the costs and benefits is not readily available. The proposed amendment Rule generally provides options for road controlling authorities who will consider the relative costs and benefits of installing any traffic control device on a case-by-case basis. These decisions will consider the need for a device and its likely effectiveness in terms of traffic efficiency, safety and any other factor they consider relevant. It is impossible to assess the numbers of any new devices or applications described in the amendment Rule that are likely to be used throughout the country.

Most of the proposed amendments are minor and technical – imposing little or no cost. The major benefits arising from the Rule are that the changes proposed to traffic control devices provide for consistency with, and support, the *Road User Rule* and other legislation; update engineering practice and allow for some new technologies. These would ensure that road controlling authorities are able to take advantage of a wider range of effective devices to implement, improve or maintain safe and efficient traffic management.

Status quo and problem definition

Where a road controlling authority intends imposing a restriction or prohibition, the TCD Rule specifies the traffic control devices that must be used to give effect to the requirement. While this imposes a cost on road controlling authorities, it does ensure road users are clearly and effectively advised of the requirement. This ensures a good level of compliance and provides the ability to prosecute those who fail to comply. No change is proposed to this existing provision and, therefore, the cost imposed by this proposed Rule amendment is considered in relation only to the changes to traffic control devices and methods of installation arising from the proposed amendments.

Not updating the Rule will mean road controlling authorities would be unable to use a number of new and effective tools or take advantage of a range of new signs, markings and other devices that are proposed, in achieving their traffic management objectives.

Objective of proposals

The proposed amendment Rule will assist road controlling authorities to manage traffic in their respective jurisdictions. It will provide industry with clear guidance in terms of the form and installation of devices. Application of the Rule should also enhance road user understanding of their obligations and provide clarity for enforcement of the requirements relating to traffic control devices.

Proposals have been made with a clear objective of minimising or reducing implementation costs. For example, it is proposed [Proposal 12] that existing traffic control devices that do not reflect new requirements in the proposed Rule would be allowed to continue to be used as long as they remain in good repair and are safe and adequate for their intended use.

This proposal has a significant impact on the costs and potential savings of many of the other proposals in the amendment Rule and how, over time, such costs or savings might fall. It will

allow road controlling authorities to ensure that the optimum benefits are obtained from a device before it is replaced by the 'new' option rather than requiring a premature replacement of an adequate device. In such cases, the device would have had to be replaced and the cost of the new device is offset by the replacement cost of the existing device. In these cases, the cost of the amendment Rule is, therefore, the incremental cost (or possible saving) over the cost of the existing device.

Analysis of each proposal

The table below provides an analysis of the status quo and problem statement, costs and benefits for each of the proposals contained in the draft amendment Rule. The proposed changes have been classified into five categories based on their cost impact. These are described in further detail below the table in *Summaries by types of proposal*.

Table 1 Problem definition and cost and benefit comments by proposal

| No. | Proposal | Status quo and problem definition | Costs (government, society, industry ⁵) | Benefits (government, society, industry) | Type |
|-----|---|--|--|--|------|
| 1.1 | A new regime for defining parking zones. | <p>The current zone parking regime requires signs at frequent intervals and at the start and end of each intervening parking restriction (eg, loading zone, reserved space or time restricted) that differs from the zone restriction.</p> <p>The proposal will reduce the numbers of signs, yet is intended to retain clarity for road users regarding the parking restrictions that apply.</p> | <p>Cost to provide guidance to road controlling authorities (RCA).</p> <p>There is no need for an RCA to change their existing parking sign regime although it is expected they will adopt the new option as soon as any underlying parking restriction is changed. Any cost of applying the new regime is, therefore, not driven by the Rule.</p> | <p>It is estimated that the number of zone parking signs required could halve with consequential cost saving and improved visual amenity.</p> | C |
| 1.2 | Where an RCA has marked the extent of a parking restriction, signs will not be required at each end of the restricted area. | <p>The current Rule requires signs at each end of every parking restriction and at intervals within it where greater than 100 m, whether or not the restriction is marked and even it applies to space for only one vehicle.</p> | <p>Cost to provide guidance to RCAs.</p> <p>Many parking restrictions are already required to be marked if practicable (loading zones and reserved spaces). Time-restricted parking spaces may be marked and many short lengths are. Some additional cost for marking will be incurred if an RCA opts for the new regime. However, there is no need for an RCA to change their existing parking sign and marking regime although it is expected they will adopt the new option as soon as any underlying parking restriction is changed. Any installation of markings and removal of duplicate signs will be considered and applied, when justified, by the RCA on a case-by-case basis.</p> | <p>The number of signs required for parking areas will reduce by at least a half with consequential cost saving for signs and improved visual amenity.</p> | C |

⁵ For the purposes of *Land Transport Rule: Traffic Control Devices 2004*, the term industry means primarily, but not exclusively, road controlling authorities and their consultants, contractors and suppliers who provide advice in relation to the use of traffic control devices or who supply, install or maintain traffic control devices.

| No. | Proposal | Status quo and problem definition | Costs (government, society, industry ⁵) | Benefits (government, society, industry) | Type |
|-----|---|--|--|--|------|
| 1.3 | <p>Parking areas equipped with parking machines should have signs.</p> | <p>Currently, a space with a parking meter does not legally require a sign. Changes to parking technologies over the last decade mean that RCAs are now rarely using individual parking meters but rather vending machines or other devices which control the payment for a number of spaces. The current rules actually require these areas to be signed although there has been some confusion on this point.</p> <p>Users must be aware they are in an area controlled by such a machine which may be remote from the space they have chosen.</p> <p>The proposed Rule clarifies the requirements to sign areas controlled by parking machines.</p> | <p>There are few RCAs that do not sign their paid parking areas by some means. There will be some additional cost for those locations with no signs but these are actually a requirement under the current Rule.</p> | <p>Greater clarity for users with improved compliance. This should reduce costs associated with enforcing parking rules.</p> <p>Proposed changes to the parking regime [Proposal 1.1] should reduce RCA maintenance costs over time as fewer replacement signs will be required.</p> | D |
| 1.4 | <p>Define 'parking machine' and consequently amend definition of 'parking'.</p> | <p>Improve the clarity of the Rule in relation to the wide range of devices used for paid parking when the only term used in the Rule relates to 'parking meter'. It is evident more technological changes will occur in future and the term 'parking machine' is defined to provide some future-proofing. A consequential change to the term 'parking', which uses the words 'parking meter', will be required.</p> | <p>Minor cost to provide guidance to RCAs. Costs associated with a minor consequential change to definitions in the Land Transport (Road User) Rule.</p> | <p>Greater clarity for RCAs, parking enforcement staff and users.</p> | D |

| No. | Proposal | Status quo and problem definition | Costs (government, society, industry ⁵) | Benefits (government, society, industry) | Type |
|-----|--|---|---|--|------|
| 1.5 | Marking of words or symbols be required for loading zones, reserved spaces and time-restricted spaces within parking zones [see also Proposal 29]. | Currently marking of loading zones and reserved spaces is optional. Under the new zone parking regime [Proposal 1.1] it will be necessary to clearly define those areas within a parking zone that are subject to a different restriction to that underlying the zone. | Minor cost to provide guidance to RCAs. Many loading zones and reserved spaces are already marked with the current optional marking. Time-restricted parking spaces do not generally have words or symbols marked. It is anticipated that reductions in signs and poles required by the regime would more than off-set any additional cost incurred by the marking. There is no need for an RCA to change their existing parking sign and marking regime although it is expected they will adopt the new option as soon as any underlying parking restriction is changed. Any installation of markings and removal of duplicate signs will be considered and applied, when justified, by the RCA on a case-by-case basis. | Greater clarity for RCAs, parking enforcement staff and users. Reduced cost for installing a new parking restriction and improved visual amenity (marking versus signs). | C |
| 1.6 | Road surface used for parking spaces for disabled persons may be marked in blue and no other spaces can be so marked. | The observance of parking rules at parking spaces for disabled persons is often not good. A trial marking, painting some of these spaces blue (as is often the case overseas), showed a marked improvement in compliance. To preserve the effectiveness of such a marking, if used, blue needs to be reserved for such spaces. | Blue marking will not be mandated so its use will be decided on a case-by-case basis by RCAs. Any decision at a site would be based on poor driver compliance with the parking restriction, inability of the disabled to take advantage of the space and a disproportionate level of enforcement effort. No cost from limiting use of blue as there is no other current use for such marking. | At sites where used, better compliance, improved accessibility for the disabled and reduced enforcement effort. | E |
| 1.7 | Make changes to the marking of loading zones – bus stops and loading zone symbols or words [see also Proposal 29]. | Current marking does not align with other new proposed parking marking and other word messages. Will introduce an option for marking loading zones to align with other markings. | Minor cost to provide guidance to RCAs. As the marking format is optional to an already required marking no additional cost incurred. The proposed marking should be cheaper than current requirements. | More consistency with other marking formats and option provides reduced cost (amount of paint required and alignment with other marking formats reduces need for special templates). | C |

| No. | Proposal | Status quo and problem definition | Costs (government, society, industry ⁵) | Benefits (government, society, industry) | Type |
|-----|---|--|---|--|------|
| 2.1 | Change the numbers of parking signs that may be installed on one pole or in the same location. | The current Rule limits number of parking signs (2 and, under some circumstances, 3) and is becoming increasingly limiting. It is proposed to increase the number of signs permitted to 4. | Minor cost to provide guidance to RCAs. No direct cost as existing signs may continue as long as fit for purpose [Proposal 12]. New signs will be installed on a case-by-case basis by an RCA which has an express need to describe multiple parking restrictions for an area. | Provision will allow RCAs to adopt more flexible parking provisions within an area based on user demand and local policies. Should allow RCAs to reduce numbers of poles and signs and thereby reduce cost and improve visual amenity. New formats for signs [Proposal 2.2 and 2.3] will support this proposal and provide clarity for users regarding parking provisions. | C |
| 2.2 | Replace existing descriptions of parking signs by a new format to provide more flexibility and support changes to parking sign proposed in this amendment Rule. | Current Rule attempts to describe a wide range of parking signs but is not able to cover the full spectrum of signs required. The proposal provides a more flexible method to design parking signs. | Minor cost to provide guidance to RCAs and road users. No direct cost as existing signs may continue as long as fit for purpose [Proposal 12]. Costs of manufacturing and installing new signs will not change as a result of this proposal. | Provision will allow RCAs to design and install signs that best meet the need of the site (both in terms of content and format). Format of signs will provide a consistent means for explaining parking restrictions that apply and provide clarity to road users and enforcement staff. | C |
| 2.3 | Clarify the status of supplementary signs in relation to the requirements on numbers of signs permitted to be installed at the same place. A definition of 'supplementary plate, sign or notice' is to be inserted. | The Rule limits the numbers of signs that may be installed at one place. Where a supplementary notice is required to amplify the meaning of the sign, it could be argued the notice constitutes another sign, although this is not the intent. The proposal addresses this issue. | Minor cost to provide guidance to RCAs. No other cost as the proposal clarifies an existing provision. | Removal of any potential misunderstanding of the Rule by users. | D |
| 2.4 | Include a new term relating to pay parking. | A range of words are used to describe the various types of parking systems used to manage paid parking [see also Proposal 1.4]. The proposed changes to the zone parking regime and the proposal that all areas with paid parking have signs would benefit from a term that simply indicates users must pay to park in the zone they are entering. | Cost to provide guidance to RCAs and road users. Costs associated with a minor consequential change to the Road User Rule. No direct cost as existing signs may continue as long as fit for purpose [Proposal 12]. New signs will be installed on a case-by-case basis by an RCA which has an express need to describe paid parking restrictions for an area. | Fewer new signs will be required for zones [see Proposal 1.1] and those new signs should cost less as a single symbol rather than multiple words will convey the message. Greater clarity for road users that parking must be paid for in an area signed. | D |

| No. | Proposal | Status quo and problem definition | Costs (government, society, industry ⁵) | Benefits (government, society, industry) | Type |
|-----|---|--|---|--|------|
| 2.5 | Provide for 'reverse-in' parking. | Introduce a definition of a term to be used where an RCA has restricted entry to angle parking by reversing only. | Minor cost to provide guidance to RCAs and road users. No other direct cost as a term is required whenever an RCA restricts entry. It is desirable the same term is used whenever such a restriction is imposed. | Reduce any potential misunderstanding of the meaning of such a restriction on angle parking by the general public. | D |
| 2.6 | Define 'carpool' | Introduce a definition of a term to be used where an RCA has restricted parking to a 'carpool'. | No direct cost. The meaning of this term would be covered by any local publicity implementing a 'carpool' system in the area. The sign merely supports such a policy rather than instigates it. | Reduce any potential misunderstanding of the meaning of such a restriction on parking by the general public. | B |
| 2.7 | Define 'motor home' | Improve the clarity of the Rule which would be aided by a definition of 'motor home'. | No cost. It is desirable, however, that the same meaning applies whenever such a term is used. | Removal of any potential misunderstanding of the meaning of the term by users. | B |
| 3 | Enable the conditional extension of a trial for a traffic control device pending a Rule change. | Currently, once a satisfactory trial of a device has concluded, it is not possible to allow the device to be used elsewhere until the Rule is changed. Conditional use at further limited sites is proposed. | A potential cost could arise if the Rule is not changed to accept the general use of a trialled device. This would result in any device installed having to be removed. The extent of the cost will depend on the specific nature of the device being trialled. This cost will be a factor in any decision by an RCA and NZTA before any trial extension is approved. | Further evaluation in a wider range of situations would improve understanding of the device's potential use to ensure its more effective future use. Efficiency and safety gains could arise prior to the Rule being changed at the sites where the device is trialled. | C |
| 4 | Amend definition of 'school bus'. | Current definition includes school trips which differ in operation from normal school bus use. However, this limits bus to 80km/h and requires display of school bus sign. | Minor cost to educate operators and staff about Rule change. Costs associated with a minor consequential change to the Road User Rule. | Potential cost reductions and greater flexibility in use of bus fleet as bus used on school trip will be able to travel up to 90km/h and will not need to have school bus sign (many charter buses that could be used for these purposes do not have signs). | D |
| 4 | Insert a new subclause, 4.4(15A), in the Rule to place a time limit on the use of manually-operated flashing school bus signs, with a consequential change to subclause 13.6A. It is also proposed to amend the definition of 'school bus'. | Improve clarity in the operational requirements for flashing devices installed with school bus signs. | Minor cost to educate operators and staff about Rule change. No additional costs incurred as signs are already an option and, where fitted, proposal simply provides clarification of operating procedures. | Reduced probability of flashing lights being used when they should not be, leading to enhanced compliance by other road users of speed when passing a stopped school bus. | D |

| No. | Proposal | Status quo and problem definition | Costs (government, society, industry) ⁵ | Benefits (government, society, industry) | Type |
|-----|---|--|---|--|------|
| 5 | Replace the existing provisions for controlling roadways entering a roundabout. | Existing roundabout metering system in the Rule has not been used in New Zealand. The proposed alternative has demonstrated effectiveness at less cost. It is also proposed this form of control be extended to allow use for priority traffic rather than solely on safety grounds. | Minor cost to provide guidance to RCAs. | Proposed roundabout metering signal will impose fewer costs on RCAs than the system included currently in the Rule. RCAs will evaluate the costs and benefits of installing a roundabout metering system on a case-by-case basis and only install such a system if it can be economically justified – this will generally see reduced overall delays and potentially improve safety at these sites. The proposal provides wider scope for considering whether or not to install a metering system. | E |
| 6 | Define 'mid-block pedestrian signal'. | Introduce a definition of a term used in the roundabout metering and mid-block near-side pedestrian signal [Proposal 6] | Minor cost to provide guidance to RCAs as this is a term generally well understood by traffic practitioners. | Removal of any potential misunderstanding of the Rule by the general public. | D |
| 6 | Amend <i>clause 6.6</i> to allow mid-block nearside pedestrian signal displays. | Current Rule does not provide for nearside pedestrian signal displays. | No cost, as displays consistent with existing road user rules. RCAs are provided with nearside displays as an option. Any installation of these displays will be considered and displays installed, when justified, by the RCA on a case-by-case basis. Installation and maintenance costs will not differ from current pedestrian displays. | A trial site has demonstrated improved pedestrian compliance with nearside pedestrian signal display compared with normal standard. | E |
| 7 | Allow RCAs to install countdown pedestrian signals. | Current Rule does not provide for countdown pedestrian signals. | Minor cost to provide guidance to RCAs. RCAs will be provided with countdown displays as an option in a restricted type of site where full pedestrian compliance is not an issue, but desirable, to ensure pedestrian clearance of roadway at end of phase, which is more critical. Any installation of these displays will be considered and displays installed, when justified, by the RCA on a case-by-case basis. | Trial sites have demonstrated some improved pedestrian performance (clearance of roadway by end of display) at some restricted sites ('Barnes dance' or scramble phasing or mid-block pedestrian crossings where vehicular traffic is stopped when pedestrians cross). | E |

| No. | Proposal | Status quo and problem definition | Costs (government, society, industry ⁵) | Benefits (government, society, industry) | Type |
|-----|--|---|--|---|------|
| 8 | Allow on-roadway warning lights as an additional warning device at pedestrian crossings. | Current Rule does not provide for on-roadway warning lights. | Minor cost to provide guidance to RCAs. RCAs will be provided with on-roadway warning lights as an option to pedestrian crossing signals. Any installation of these displays will be considered and on-roadway warning lights installed, when justified, by the RCA on a case-by-case basis. | Trial sites have demonstrated some improved vehicular traffic performance – slower approach speeds and improved compliance with giving way to pedestrians. On-roadway warning lights are cheaper than pedestrian crossing signals but are more limited in terms of the locations where they could be effective. | E |
| 9 | Change a number of aspects relating to the description of roundabouts. | Improve the clarity of the Rule in relation to a number of descriptions regarding roundabouts. | Minor cost to provide guidance to RCAs. | Removal of any potential misunderstanding of the Rule by traffic practitioners and the general public. | B |
| 10 | Clarify the requirements in <i>subclause 11.2(1)</i> for defining special vehicle lanes after each intersection along their length. | Improve the clarity of the Rule in relation to having a special vehicle lane sign after each intersection the lane crosses so that entering drivers can clearly see the sign, and relax the restrictive location implied in the current Rule. | Minor cost to provide guidance to RCAs. | Provide more flexibility to RCAs in siting signs for special vehicle lanes after each intersection. This will achieve better clarity for road users and potentially reduce the numbers of signs and poles, thereby reducing cost and enhancing visual amenity. | D |
| 11 | Define 'shared path' | Improve the clarity of the Rule by having a definition of 'shared path'. | Minor cost to provide guidance to RCAs as this is a term generally well understood by traffic practitioners. | Removal of any potential misunderstanding of the Rule by users. | D |
| 11 | Amend <i>clause 11.4</i> of the Rule to clarify aspects of defining paths and recognising changes made in the Road User Rule in defining 'shared paths'. It is also proposed to define a pedestrian symbol for use on shared paths to assist in defining usage of those paths. (See Proposal 29) | Improve the clarity of existing provisions contained in the Rule in relation to shared paths. Need to facilitate the installation of signs and marking required to give effect to recent changes made to the Road User Rule. | Minor cost to provide guidance to RCAs. When RCAs create a shared path no additional costs will be incurred, and some reduction in cost is possible, compared with the current Rule. | Greater clarity of signing and marking and improved compliance by users | D |

| No. | Proposal | Status quo and problem definition | Costs (government, society, industry ⁵) | Benefits (government, society, industry) | Type |
|-----|--|---|--|---|------|
| 12 | When amendments are made to the Rule, the savings effects of <i>subclause 3.2(1)</i> should apply to any traffic control device affected by the amendment and installed prior to the amendment coming into effect, unless specifically excluded by that amendment. | Currently, the Rule does not provide any general saving provision that allows a traffic control device that was legal at the time of its installation to remain if a new form of the device is defined. | No cost, as the proposal allows the continued use of a device as long as it remains fit for purpose. | Reduced cost of compliance with the Rule. | C |
| 12 | Clarify that, despite <i>3.2(1)</i> , a traffic control device does not continue to remain valid if the Rule specifies a date by which it is intended to replace the traffic control device. | Improve the clarity of the Rule to ensure devices are removed before any date that may be specified in the Rule. | No cost, as the proposal clarifies an existing provision. | Removal of any potential misunderstanding of the Rule by users. | C |
| 13 | Clarify ability of NZTA to authorise traffic signs that are not in the Rule | To avoid any legal challenge to established practice, this proposal clarifies the ability of the NZTA to approve a traffic sign required for an identified operational need that conforms with a general format of an existing sign but is not specifically approved. | No cost, as the proposal clarifies an existing provision. | Removal of any potential challenge to interpretation of the Rule. Enables a sign not specifically approved by the Rule and that meets an identified operational need to be approved rather than having to await an amendment to the Rule. | A |
| 14 | Amend <i>subclauses 4.4(5)</i> and <i>4.4(6)</i> of the Rule to allow the practice of perforating owner marks on temporary traffic signs, subject to further changes if the dimensions of perforations are to be specified. | To validate an established practice to avoid any technical legal challenge. | No cost, as the proposal formalises an established practice. | Removes the potential costs incurred in the replacement of signs were a legal challenge made to the current, generally accepted, industry practice. | A |
| 14 | Amend <i>Schedule 1</i> of the Rule to allow for the perforating of school patrol signs. | To validate an established practice to avoid any technical legal challenge. | No cost, as the proposal formalises an established practice. | Removes the potential costs incurred in the replacement of signs were a legal challenge made to the current, generally accepted, industry practice. | A |

| No. | Proposal | Status quo and problem definition | Costs (government, society, industry ⁵) | Benefits (government, society, industry) | Type |
|-----|--|--|---|--|--------|
| 15 | Amend the Rule to allow for limited use of variable message signs on vehicles that are moving. | To validate an established practice to avoid any technical legal challenge. | No cost, as the proposal formalises an established practice. | Allows more efficiency and flexibility in use of technology. | A |
| 16 | Amend <i>subclause 5.4(3)</i> of the Rule to accurately reflect the scaling process for increasing the dimensions of markings. | To validate an established practice to avoid any technical legal challenge. | No cost, as the proposal formalises an established practice. | Removes the potential costs incurred in the replacement of signs were a legal challenge made to the current, generally accepted, industry practice. | A |
| 17 | Increase the number of markings specified in <i>Schedule 2</i> to recognise a requirement for marking to conform to non-existing specifications. | Improve the clarity of the Rule in relation to the existing provisions contained in the Rule. To provide some detailed drawings of specific markings [see Proposal 29]. | Minor cost to provide guidance to RCAs and the industry. No other cost, as the proposal formalises a generally accepted and established standard. Existing markings that may not fully conform can continue in use as long as they remain fit for purpose [Proposal 12]. | Removal of any potential misunderstanding of the Rule by users or for legal challenge. | B or C |
| 18 | Clarify the requirements relating to driveways within areas controlled by traffic signals. | The current Rule is clear but according to RCAs unnecessarily restrictive. Driveways at areas controlled by signals should, under the current rules, be controlled by the signals. The proposal provides for an RCA to decide not to control every driveway but places an onus on it to ensure this decision will not adversely affect safety and efficiency at the intersection. | Minimal cost, as RCAs already consider the safety and efficiency aspects of controlling a driveway at a signal-controlled intersection. However, this provision would require them to record the outcome of any review, which may incur some additional cost. There will remain some small increase in risk to users of the driveway than might occur if it were controlled. | The proposal will allow an RCA to decide, after review, not to control a driveway and this would reduce the cost of installation. Some benefits may arise in terms of efficiency where the driveway is not controlled, as users would not require a change of phase to enable them to enter or exit the driveway, thereby imposing additional delay to other users. | A |
| 19 | Insert a new provision (<i>6.2(1B)</i>) to ensure that current practice in relation to multi-lane approaches to signals is adequately covered in the Rule. | To validate an established practice to avoid any technical legal challenge. | No cost, as the proposal formalises an established practice. | Removes the potential significant costs incurred in the installation of additional signal displays were a legal challenge to be made to the current, generally accepted, industry practice. | A |
| 20 | Correct the references in <i>paragraph 6.3(1)(b)</i> to the standards for traffic signal lanterns. | The current Rule has an incorrect reference to a standard. | No cost. | Removal of any potential misunderstanding of the Rule by users. | B |

| No. | Proposal | Status quo and problem definition | Costs (government, society, industry) ⁵ | Benefits (government, society, industry) | Type |
|-----|--|---|--|---|------|
| 21 | Correct details and update the Rule in relation to barrier arms. | To validate an established practice to avoid any technical legal challenge. | No cost, as the proposal formalises an established practice. | Removes the potential significant costs incurred in the installation of replacement devices were a legal challenge made to the current, generally accepted, industry practice. A number of these devices occur at each of more than 500 signal-controlled level crossings. | A |
| 21 | Correct error in dimensions from '300 mm' to '225 mm' in the two places in <i>subclause 6.3(6)</i> . | To validate an established practice to avoid any technical legal challenge. | No cost, as the proposal formalises an established practice. | Removes the potential significant costs incurred in the installation of replacement devices were a legal challenge made to the current, generally accepted, industry practice. A number of these devices occur at each of more than 1700 level crossings. | A |
| 22 | Replace the term 'bus lane' by the term 'bus only' to clarify the intention of <i>subclause 6.4(10)</i> in relation to the 'B' symbol used on signals. | If a 'B' signal is used in advance of a 'bus' lane, other vehicles, cycles and motorcycles, entitled to use the lane, could stop any bus in the lane from proceeding when the white 'B' is displayed. This can only be avoided if the lane is limited to buses (ie, a 'bus only' lane) and was the original intent of this clause. | (i) Cost will be incurred for those sites with a 'bus' lane where the 'B' signal is to be retained and a 'bus only' lane imposed. This could include the administrative cost of changing the instrument by which the RCA has imposed the special vehicle lane and replacing the words 'BUS/LANE' with 'BUS/ONLY' on signs and markings. (ii) If the above changes are not made, the 'B' signal would have to be removed and efficiency and reliability benefits for buses at the signals would be compromised. Removing the signal display, changing the phasing and loss of efficiency for buses impose costs. | (i) If a 'bus only' lane is installed buses should be able to proceed when the 'B' signal is displayed, thereby improving bus efficiency, reliability and safety. (ii) If the 'B' signal is removed, the use of the lane by vehicles other than buses would produce some safety benefit as a result of clarifying their use of the lane. | D |
| 23 | Make minor changes to the signing of special routes and zone restrictions. | Within the Rule there is a lack of consistency in the way in which special routes and zone restrictions are required to be signed. The proposed changes provide that consistency. | Most special routes and zones are signed in the manner proposed. Some costs, assessed in the range of \$250-400 per sign, will be incurred for those locations which currently do not comply. | Removal of any potential misunderstanding, by users, of the extent of any route or zone. | D |
| 24 | Correct the reference to a standard relating to fire hydrants | The current Rule contains an incorrect reference to a standard. | No cost. | Removal of any potential misunderstanding of the Rule by users. | B |

| No. | Proposal | Status quo and problem definition | Costs (government, society, industry) ⁵ | Benefits (government, society, industry) | Type |
|-----|---|--|---|--|--------|
| 25 | Define 'driveway' | Improve the clarity of the Rule by adding a definition of 'driveway'. | No cost, as this is a term that is generally well understood by users. | Removal of any potential misunderstanding of the Rule by users. | B |
| 25 | Define 'rider' | Improve the clarity of the Rule by adding a definition of 'rider'. | No cost, as this is a term that is generally well understood by users. | Removal of any potential misunderstanding of Rule by users. | B |
| 25 | Define 'wheeled recreational device' | Improve the clarity of the Rule by adding a definition of 'wheeled recreational device'. | No cost, as this is a term that is generally well understood by users. | Removal of any potential misunderstanding of Rule by users. | B |
| 26 | Minor corrections or changes to a number of traffic signs described in <i>Part 3, Schedule 1</i> of the Rule. | The existing Schedule includes descriptions of signs requiring alteration. These changes include: (i) correction of errors in descriptions; (ii) amendments to sizes to achieve greater production efficiency and uniformity; (iii) amendments arising from other proposals in the amendment Rule; (iv) revocation of two outmoded signs. | Minor cost to provide guidance to RCAs and the industry. Existing signs will be able to continue in use provided they remain fit for purpose [see Proposal 12]. | Removal of any potential misunderstanding of Rule by users or legal challenge due to incorrect descriptions. The amendment to sizes described at (ii) should allow production efficiencies (standard-sized sign plates and efficient use of sheeting sizes) and thereby contain or reduce costs. | B or C |
| 27 | That a number of signs be added to those listed in <i>Part 3, Schedule 1</i> of the Rule | A number of signs are proposed for inclusion. These were initially approved by the NZTA under <i>subclause 4.4(4)</i> and should be included in the Rule for completeness. | No additional cost as guidance to RCAs and industry was provided when the signs were approved. The signs were approved because of an existing need and the formats were consistent with other existing signs. | Ensures good access by RCAs, the industry and the general public to a consolidated list of legally adopted traffic signs. | A or B |
| 28 | That a number of signs replace the signs currently listed in <i>Part 3, Schedule 1</i> of the Rule. | A number of signs require replacement to allow for: (i) changes in practice : 'roundabout Give Way'; (ii) alignment with other rules: 'single lane give way' [Road User Rule] and 'heavy vehicle bridge limits' [Heavy Motor Vehicle Regulations and the Vehicle Dimensions and Mass Rule]; or (iii) to correct errors: 'emergency stopping lane' and 'cycle route direction'. | No direct costs will be incurred by these changes. Note the changes proposed at (ii) in relation to 'bridge limit' signs will be an essential element of recent changes to the Vehicle Dimensions and Mass Rule. Any cost associated with installation of these signs is a direct impact of that Rule. | (i) Future cost reductions will arise by making the supplementary Give Way sign optional. (ii) Removal of any potential misunderstanding of Rule by users or legal challenge due to different names for the single lane give way sign and provision of greater clarity and the full range of options currently provided by Heavy Motor Vehicle Regulations for the bridge limit sign. (iii) Removal of any potential misunderstanding of Rule by users or legal challenge due to incorrect descriptions. | A or C |

| No. | Proposal | Status quo and problem definition | Costs (government, society, industry ⁵) | Benefits (government, society, industry) | Type |
|-----|---|--|--|--|--------|
| 29 | Insert some new markings and alternatives to existing markings contained in <i>Part 3, Schedule 2</i> . | Other proposals require changes to specifications of markings. These are: (i) Proposal 1 – alternate forms of marking parking spaces; (ii) Proposal 8 – format of on-road warning lights in advance of pedestrian crossings; (iii) Proposal 11 – pedestrian symbol for use on shared paths; (iv) Proposal 17 – format of letters and numbers. | Costs of this proposal are covered in the appropriate proposals above. | Benefits of this proposal are covered in the appropriate proposals above. | C |
| 30 | Add new traffic signal descriptions to those described in <i>Part 3, Schedule 3</i> of the Rule. | Some changes to the specification of signal displays are required as follows: (i) changes arising from adoption of nearside pedestrian signals and countdown signals [Proposals 6 and 7]; (ii) corrections to diagrams to reduce any potential misinterpretation; and (iii) to validate an established practice in relation to special vehicle displays to avoid any technical legal challenge. | (i) Cost covered in appropriate proposals above. (ii) No cost, as merely removes a potential misinterpretation of the Rule. (iii) No cost, as the proposal formalises an established practice. | (i) Benefits of this proposal are covered in the appropriate proposals above. (ii) Removes potential for misinterpretation of the Rule. (iii) Removes the potential significant costs incurred in the installation of replacement devices were a legal challenge made to the current, generally accepted, industry practice. | A or B |

Summaries by type of proposal

Type A proposals

Type A proposals provide for a relaxation of requirements or validation of existing practices. These proposals do not incur additional costs above those already arising. In many cases, these proposals reduce costs as a strict interpretation of the current Rule, if imposed, would require the replacement of devices that have demonstrated their adequacy for the purposes intended. This category covers the following proposals.

- 13 Clarify the ability of the NZTA to authorise traffic signs that are not in Rule.
- 14 Amend the Rule to allow the practice of perforating owner marks on temporary traffic signs, subject to further changes if the dimensions of perforations are to be specified, and allow for the perforating of school patrol signs.
- 15 Amend the Rule to allow for limited use of variable message signs on vehicles that are moving.
- 16 Amend the Rule to accurately reflect the scaling process for increasing the dimensions of markings.
- 18 Clarify the requirements relating to driveways within areas controlled by traffic signals.
- 19 Insert a new provision to ensure current practice in relation to multi-lane approaches to signals is adequately covered.
- 21 Correct details and update the Rule in relation to barrier arms and correct some errors in dimensions specified in two places relating to red and white signal poles.
- 27 Add a number of signs currently in use, or signs for which specifications have been corrected or changed, to those listed in *Part 3, Schedule 1* of the Rule.
- 28 Replace a number of signs currently listed in *Part 3, Schedule 1* of the Rule.
- 30 Add new traffic signal descriptions to those described in *Part 3, Schedule 3* of the Rule.

Type B proposals

Type B proposals provide clarification of existing requirements of the Rule or other legislation and effectively do not incur any change or costs. This category covers the following proposals.

- 2.6 Define 'carpool'.
- 2.7 Define 'motor home'.
- 9 Change a number of aspects relating to the description of roundabouts.
- 17 Increase the number of markings specified in *Schedule 2* to recognise a requirement for marking to conform to non-existing specifications.
- 20 Correct the references to the standards for traffic signal lanterns.
- 24 Correct the reference to a standard relating to fire hydrants
- 25 Define 'driveway', 'rider' and 'wheeled recreational device'
- 26 Minor corrections or changes to a number of traffic signs described in *Part 3, Schedule 1* of the Rule.
- 27 Add a number of signs to those listed in *Part 3, Schedule 1* of the Rule.
- 30 Add new traffic signal descriptions to those described in *Part 3, Schedule 3* of the Rule.

Type C proposals

Type C proposals provide greater flexibility or further options with potential reduction in costs. This category covers the following proposals.

- 1.1 Provide a new regime for defining parking zones.
- 1.2 Where a road controlling authority has marked the extent of a parking restriction, signs will not be required at each end of the restricted area.
- 1.5 Require the marking of words or symbols for loading zones, reserved spaces and time-restricted spaces within parking zones [see also Proposal 29].
- 1.7 Make changes to the marking of loading zones – bus stops and loading zone symbols or words [see also Proposal 29].
- 2.1 Change the numbers of parking signs that may be installed on one pole or in the same location.
- 2.2 Replace existing descriptions of parking signs by a new format to provide more flexibility and support changes to parking signs proposed in this Rule.
- 3 Enable the conditional extension of a trial for a traffic control device pending a Rule change.
- 12 When amendments are made to the Rule, the savings effects should apply to any traffic control device affected by the amendment and installed prior to the amendment coming into effect, unless specifically excluded by that amendment, and clarify that a traffic control device does not continue to remain valid if the Rule specifies a date by which it is intended to replace the traffic control device.
- 17 Increase the number of markings specified in *Schedule 2* to recognise a requirement for marking to conform to non-existing specifications.
- 26 Make minor corrections or changes to a number of traffic signs described in *Part 3, Schedule 1* of the Rule.
- 28 Replace a number of signs currently listed in *Part 3, Schedule 1* of the Rule.
- 29 Insert some new markings and alternatives to existing markings contained in *Part 3, Schedule 2*.

Zone parking

The most significant proposal in this category relates to changes to the zone parking and other parking sign requirements which will potentially see reductions in numbers and costs of installing parking restrictions. Road controlling authorities will not be required to replace existing signs or markings but are expected to use the new sign and marking regime when the need for changes to their parking requirements arises. They may also be able to obtain some advantage from the new system even if there are no changes to their parking restrictions.

An example is shown in Table 2 below in relation to a 20 m long loading zone with 10 minute maximum duration.

Table 2: Comparison of costs between current and proposed provisions for a typical loading zone

| Cost component | Current provision | | | Proposed provision | | |
|-------------------------------|-------------------|-------|----------------|--------------------|-------|----------------|
| | Quantity | Cost | 10 year* | Quantity | Cost | 10 year* |
| Signs | 2 | \$500 | \$1000 | 1 | \$250 | \$500 |
| Marking of lines around space | 20 m | \$100 | \$ 500 | 20 m | \$100 | \$500 |
| Marking of 'LOADING ZONE' | | \$200 | \$1000 | | | |
| Marking of 'LZ10' | | | | | \$ 75 | \$150 |
| Total | | | \$2,500 | | | \$1,150 |

* Note: 10-year costs are based on marking at 2-year intervals and replacement of signs every 5 years. There is considerable variation in the length of time a sign might exist and the period between remarking.

The new zone parking sign regime (Proposal 1) proposed in the amendment Rule addresses concerns from road controlling authorities about the numbers of signs currently required and the visual impact of such signs. Estimates of the numbers of signs required for the proposed new regime suggests that the numbers of signs could potentially halve, with cost savings, as well as a reduction in visual impact.

Costs of installing signs and markings for three different parking scenarios are provided below, comparing current requirements and the proposed provisions for signs and markings. Estimates of the costs arising from these are tabulated below on a similar basis to that detailed for Table 2 above.

Table 3 relates to a small neighbourhood area with a coupon parking zone and two lengths of kerb within the zone with different, more restrictive parking restrictions. The existing requirements include additional signs at intervals of no more than 50 m along each block within the zone, plus coupon parking signs plus signs with the description of the parking restriction at each end of the two different parking restrictions. The proposal provides for zone signs at 200 m intervals and one parking restriction sign at each end of the two different parking restrictions, provided that these spaces are marked.

Table 3: Comparison of costs: Scenario 1 - coupon parking scheme in a small neighbourhood area

| Cost component | Current provision | | | Proposed provision | | |
|----------------------------------|-------------------|---------|-----------------|--------------------|---------|-----------------|
| | Quantity | Cost | 10 year* | Quantity | Cost | 10 year* |
| Signs | 20 | \$8,000 | \$16,000 | 12 | \$4,800 | \$9,600 |
| Poles | 16 | \$1,600 | \$ 3,200 | 10 | \$1,000 | \$2,000 |
| Marking of lines around 2 spaces | | | | 40 m | \$ 200 | \$ 400 |
| Total | | | \$19,200 | | | \$12,000 |

* Note: 10-year costs are based on marking at 2-year intervals and replacement of signs every 5 years. There is considerable variation in the length of time a sign might exist and the period between remarking.

Table 4 relates to a block within which a time restriction applies, four different reserved or restricted spaces exist and several no stopping restrictions are applied. The current requirements require signs at each end of each type of restriction and at intervals of no more than 50 m. The proposal removes the need for signs at each end of the reserved or restricted spaces or no stopping restrictions, provided they are marked. Currently, a number of the reserved or restricted spaces are required to be marked.

Table 4: Comparison of costs: Scenario 2 – shopping block

| Cost component | Current provision | | | Proposed provision | | |
|--------------------------------|-------------------|---------|-----------------|--------------------|---------|-----------------|
| | Quantity | Cost | 10 year* | Quantity | Cost | 10 year* |
| Signs | 22 | \$8,800 | \$17,600 | 10 | \$4,000 | \$8,000 |
| Poles | 16 | \$1,600 | \$3,200 | 10 | \$1,000 | \$2,000 |
| Marking of lines around spaces | 45 m | \$ 225 | \$1,125 | 60 m | \$ 300 | \$1,500 |
| Marking of symbols in spaces | 2 | \$ 200 | \$1,000 | 4 | \$ 400 | \$2,000 |
| Total | | | \$22,925 | | | \$13,500 |

* Note: 10-year costs are based on marking at 2-year intervals and replacement of signs every 5 years. There is considerable variation in the length of time a sign might exist and the period between remarking.

Table 5 relates to an extensive parking precinct with various time-restricted spaces including paid parking and various reserved and special parking restrictions, most of which currently are marked. This scenario was based on an existing parking regime in a regional central business district. A desk-based calculation of the existing and proposed regimes was used to provide an estimate of the likely costs of the two.

Table 5: Comparison of costs: Scenario 3 – parking precinct

| Cost component | Current provision | | | Proposed provision | | |
|--------------------------------|-------------------|------------|------------------|--------------------|----------|------------------|
| | Quantity | Cost | 10 year* | Quantity | Cost | 10 year* |
| Signs | 273 | \$109,200 | \$218,400 | 118 | \$47,200 | \$94,400 |
| Poles | 256 | \$ 25, 600 | \$ 51,200 | 118 | \$11,800 | \$23,600 |
| Marking of lines around spaces | 140 m | \$ 630 | \$ 1, 260 | 140 m | \$ 630 | \$ 1,260 |
| Marking of symbols in spaces | 13 | \$ 1,500 | \$ 3,000 | 13 | \$1, 300 | \$ 2, 600 |
| Total | | | \$273,860 | | | \$121,860 |

* Note: 10-year costs are based on marking at 2-year intervals and replacement of signs every 5 years. There is considerable variation in the length of time a sign might exist and the period between remarking.

It is accepted these costs are rough estimates but are believed to be in the correct order of magnitude. The costs of installing a parking restriction appear to be reduced by between 45% and 60%, and it appears the bigger the area the greater the potential impact. The major input into this estimated cost saving clearly arises from the reduction in signs needed, which also improves the visual amenity of the streetscapes. The significant cost reduction does provide considerable scope for the road controlling authority to install any additional reminder signs that experience may suggest

are required in some locations. It is believed this would justify road controlling authorities considering the application of zone restrictions, and be less likely to impose restrictions on an ad hoc basis. Well-structured zone restrictions could reduce the different types of parking restrictions and numbers of signs, yet should make for clarity for the road user who is required to comply.

Multiple signs at one location

The ability for a road controlling authority to install up to four parking signs at one location (Proposal 2) will allow the adoption of more flexible parking provisions within an area based on user demand and local policies. The specifications for sign design and content provide for formats that best meet the need of the site. The format of the signs will provide a consistent means for explaining parking restrictions that apply and provide clarity to road users and enforcement staff.

While the cost of manufacturing and installing multiple signs could be more expensive than the existing limited provisions, this will be offset by the more efficient and effective utilisation of affected parking spaces. This will be achieved by enabling control over the changing demands throughout a day or week. Further cost offset could also arise through the proposal to reduce numbers of poles and signs.

Type D proposals

Type D proposals could incur minor costs associated with the new or changed requirements. These costs will largely arise through the provision of guidance material for road controlling authorities and road users. These are described in more detail below. This category covers the following proposals.

- 1.3 Parking areas equipped with parking machines should have signs.
- 1.4 Define 'parking machine' and consequently amend definition of 'parking'.
- 2.3 Clarify the status of supplementary signs in relation to the requirements on numbers of signs permitted to be installed at the same place. A definition of 'supplementary plate, sign or notice' is to be inserted.
- 2.4 Include a new term relating to pay parking.
- 2.5 Provide for 'reverse-in' parking.
- 4 Amend definition of 'school bus' and insert a new subclause in the Rule to place a time limit on the use of manually-operated flashing school bus signs.
- 6 Define 'mid-block pedestrian signal' and allow mid-block nearside pedestrian signal displays.
- 10 Clarify the requirements for defining special vehicle lanes after each intersection along their length.
- 11 Define 'shared path' and amend the Rule to clarify aspects of defining paths and recognising changes made in the Road User Rule in defining 'shared paths'. It is also proposed to define a pedestrian symbol for use on shared paths to assist in defining usage of those paths. (See Proposal 29)
- 22 Replace the term 'bus lane' by the term 'bus only' to clarify the intention of the Rule in relation to the 'B' symbol used on signals.
- 23 Make minor changes to the signing of special routes and zone restrictions.

Type E proposals

Type E proposals do incur costs when applied. However, the use of the device is not mandated but rather may be one of a number of options a road controlling authority might consider to address a specific issue. The road controlling authority would assess the relative costs and the benefits which

would accrue using any of the options, including that provided by the proposed change. This analysis would be considered on a case-by-case basis. This category covers the following proposals.

- 1.6 Road surface used for parking spaces for disabled persons may be marked in blue and no other spaces can be so marked.
- 5 Replace the existing provisions for controlling roadways entering a roundabout.
- 7 Allow road controlling authorities to install countdown pedestrian signals.
- 8 Allow on-roadway warning lights as an additional warning device at pedestrian crossings.

Cost to provide guidance to road controlling authorities

The proposed changes, not exclusively those described for Type D above, will lead to changes in a number of documents and include:

- amendment to, or preparation of, technical notes or manuals for road controlling authorities and industry; or
- change to existing guides, including the *Road Code* and preparation of some specific publicity material for road users.

Guidance for road controlling authorities and industry

The NZTA publishes a number of documents providing guidance to road controlling authorities and the industry. These include technical notes and manuals. As much as possible, the NZTA involves road controlling authorities and the industry in the development of this material to ensure it meets industry needs and recognises good practice.

An example document is the *Traffic control devices manual: Part 7 Parking control*. This document was authored under the direction of a working group representing road controlling authorities, parking enforcement, road users and regulatory authorities and amended, before final publication, as the result of extensive public consultation.

It is estimated that the cost of amending the technical guidance provided is about \$20,000. These documents are web-based to avoid the high costs that can be incurred with printed versions. The cost of amendment will be absorbed by the NZTA as part of its normal operation of maintaining the documents.

Guidance to road users

The most important changes arising from the proposed amendment Rule directly affecting road users relate to the parking provisions and, in particular, the zone parking regime and some of the changes proposed to sign formats and content. Many of the other changes, for example, introduction of new signs, conform to past practice or have been tested for road user comprehension and will require very little, if any, publicity.

The NZTA, as required, reflects changes arising from Land Transport Rules in a number of official guidance documents – the most critical being the *Road Code* – to advise the general public. Other material requiring change includes a range of advice on the NZTA website and, potentially, some publicity leaflets may be required.

It is estimated that the cost of amending or preparing the road user guidance material is about \$20,000. In this case, the material requiring changes is a mixture of web-based and printed information. Once prepared for publication, the print component becomes a part of the regular reprint (usually annual) for these documents and would not be separately costed. This cost of amendment

will be absorbed by the NZTA as part of its normal maintenance operations, while the printed documents are published with full cost-recovery.

Benefits summary

The major benefits from the proposed amendment Rule will result from the changes proposed to traffic control devices, which will provide for consistency with, and support, the Road User Rule and other legislation, update engineering practice and allow for some new technologies. These changes would ensure that road controlling authorities are able to take advantage of a wider range of effective devices to implement, improve or maintain safe and efficient traffic management.

It is estimated that the number of zone parking signs required could halve with consequential cost saving and improved visual amenity. The proposed parking regime will allow road controlling authorities to adopt more flexible parking provisions within an area, based on user demand and local policies, and to design and install signs that best meet the need of the site in terms of content and format. The parking proposals should also provide greater clarity for enforcement staff and road users.

It is proposed that the Rule will incorporate a number of devices that have been successfully trialled. These devices have demonstrated improved pedestrian and driver compliance and should provide greater safety and efficiency. It is proposed to increase the scope of trials to allow evaluation of a device in a wider range of situations to improve understanding of the device's potential use so as to ensure more effective future use and appropriate level of specification in the Rule.

Proposals in the amendment Rule give road controlling authorities more flexibility in the use of some new technology or techniques, which will allow them to assess a wider range of options that will enhance efficiency and safety.

The proposed amendment Rule acknowledges a number of errors in the Traffic Control Devices Rule or identifies where the Rule varies from standard practices. It consequently makes corrections to some references and the descriptions of signs, markings or signal displays, which will reduce the potential of any technical challenge to interpretation of the Rule, provide consistency in interpretation and improve user compliance.