No-stopping lines in cycle lanes

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1. Introduction

This memo discusses the importance of marking no-stopping ("broken yellow") lines in kerbside cycle lanes. Note that this discussion can also apply to other cycle facilities readily accessible to motor traffic, e.g. "separated cycleways" with an easily-mountable kerb.

2. Background

Whether or not to install no-stopping lines in kerbside cycle lanes was the subject of a 2009 conference paper by A. Wilke and M. Ferigo[2]; their abstract reads as follows:

> In February 2005, cycle lanes were first recognised in New Zealand law through the introduction of the Road User Rule (RUR). They now belong to the group of 'special vehicle lanes' (bus lanes also fall into this category), and thus there are rules that stipulate to road users what they can and cannot do in those special vehicle lanes. It is now illegal to park in a special vehicle lane (see Figure 1 for an example of this behaviour). Prior to February 2005, broken yellow lines had to be installed in a cycle lane next to a kerb (i.e. in a kerbside position, and not adjacent to a row of parked vehicles) if parking was to be prevented. Since then, most Road Controlling Authorities (RCAs) have omitted installing broken yellow

[1] https://creativecommons.org/licenses/by/4.0/

[2] Wilke, A. and M. Ferigo (2009). Broken Yellow Lines in Kerbside Cycle Lanes. NZ Cycling Conference 2009. Nelson.

lines in new kerbside cycle lanes, or not installed the broken yellow lines following a reseal of the road.

The experience of some RCAs (and many cyclists) has been that compliance with the no parking restriction in kerbside cycle lanes is poor. Without installing broken yellow lines, kerbside cycle lanes can be potentially critically compromised. The paper explores the underlying reasons for this behaviour. The Christchurch experiment of trying to educate motorists is commented on. Alternatives to installing and maintaining broken yellow lines are discussed.

The paper concludes that broken yellow lines need to be installed in kerbside cycle lanes if the objective is to keep these lanes free from illegal parking.

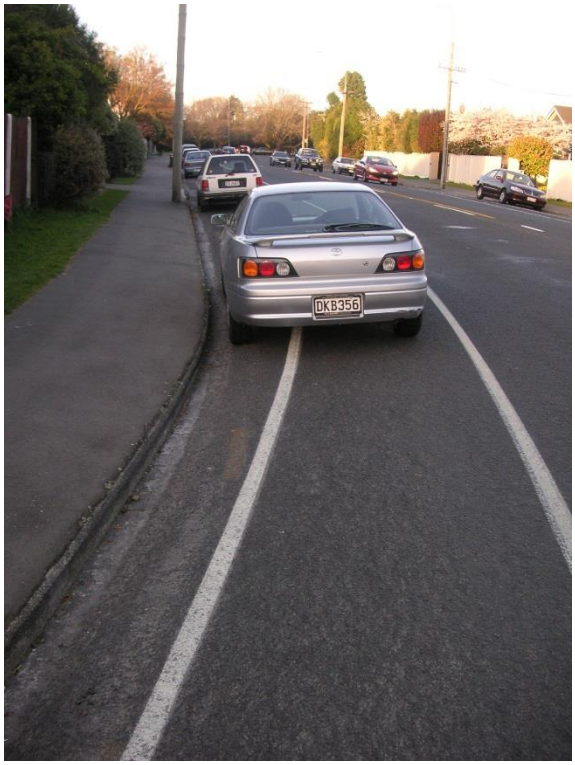

Figure 1: Illegal parking in kerbside cycle lane

3. Practical experience in Christchurch

Wilke and Ferigo (2009) explain that Christchurch City Council experienced continuing issues with new kerbside cycle lanes installed after the Road User Rule came into force. New kerbside facilities installed since the RUR introduction were installed without no-stopping lines, but, despite the legal prohibition of parking in a cycle lane, drivers would stop and park in them. In 2007, four sections of kerbside cycle lane were selected for a trial where over some months, illegally parked vehicles had educational leaflets attached to them. This was followed up by a period of parking enforcement. Levels of illegal parking before and after the education and enforcement periods were compared and whilst there had been a reduction in illegal parking, the level of violations were in all cases still described as 'prevalent'. In other words, intensive education and enforcement did not work. On the other hand, sites where no-stopping lines had been marked in kerbside cycle lanes did not experience any problem of illegal parking.

CCC staff investigated the legalities of the situation and found that in areas with a heavy parking demand, drivers may well have a legal defence if another vehicle had already been parked on a cycle symbol. A vehicle parked on a cycle logo hides the only measure that communicated the necessary information (and that made a cycle lane 'legal') required to be seen by subsequent drivers. To address the problem, the following options were considered:

1. Marking cycle symbols in all kerbside cycle lanes to a level considered necessary so that infringement notices could be defended. The advice was that this may require markings every 20 to 30 m. Costs to initiate and maintain this were considered significant.
2. Adding cycle signs at intervals similar to parking restriction signage alongside all kerbside cycle lanes. Initial costing and maintenance was considered to be significant for this option.
3. Marking BYLs in all kerbside cycle lanes.
4. Marking BYLs in all kerbside cycle lanes but not renewing them, thus slowly letting the BYLs fade away with the expectation that motorist will eventually all know the relevant road rules.
5. Undertaking a Council-funded education campaign and subsequent comprehensive enforcement programme. It was envisaged that whilst the extent of a campaign required to gain acceptable compliance was unknown, it would involve considerable expense.

Christchurch City Council staff agreed on option 3. It is suggested that a further option is viable: to maintain no-stopping lines at a much longer maintenance interval than usual, for example every 10 years. This should be a viable approach as due to their location on the carriageway within the cycle lane, no-stopping lines will seldom be driven over.

4. Comparison with other no-stopping locations

Whilst the definition of a cycle lane under the Road User Rule should in theory mean that it is not necessary to mark no-stopping lines in cycle lanes, this situation can be compared to other locations where the Road User Rule prohibits parking. The Road User Rule also stipulates that a "driver must not stop, stand, or park a vehicle" within 6 m of an intersection (RUR section 6.4), within 6 m of the driver's approach to a pedestrian crossing (RUR section 6.5), within 6 m of a bus stop sign (RUR section 6.8), or within 500 mm of a fire hydrant (RUR section 6.10). Yet those minimum no-stopping restrictions are commonly marked by no-stopping lines, a bus stop marking, or, in the case of the fire hydrant, by a yellow circle, to reinforce what the RUR requires. In other words, Road Controlling Authorities do not rely on the fact that it is illegal to park close to these features, but instead use markings to reinforce this (see Figure 2 for an example). This is presumably because RCAs have experienced that without those markings, compliance might be poor. It is suggested that the same applies to kerbside cycle lanes; without the no-stopping lines, compliance with the no-stopping restriction is poor.

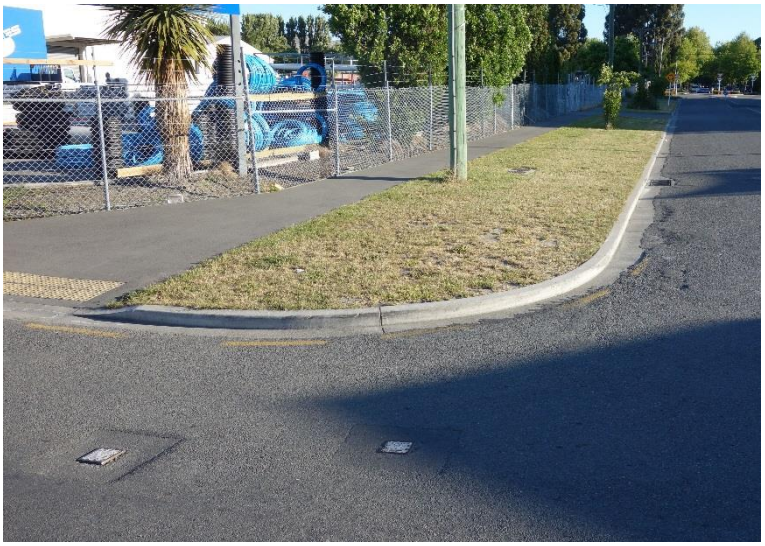

Figure 2: Superfluous no-stopping lines, as stopping within 6 m of an intersection is not allowed

5. Inconsistent marking provision along a facility

Note also that the common practice of marking no-stopping lines "within 6 m of an intersection" (despite the fact that this is not necessary under the RUR) may cause other problems. If a kerbside cycle lane is retrofitted, then a no-stopping line will exist for some length of the new cycle lane, whilst other parts of the cycle lane will not have this marking if the RCA does not add it. This lack of consistency could well be confusing for some drivers. Figure 3 shows a no-stopping line stop short just outside a doctor's clinic, and it would not be unreasonable for a driver to think that this was intentional, so that the kerbside space can cater for an obvious parking demand in this location.

Figure 3: Kerbside cycle lane with partial use of no-stopping lines

Having partial no-stopping lines in a new kerbside cycle lane is generally unavoidable, as some existing no-stopping lines will exist. Removing the existing lines, so that confusion cannot arise, will likely be much more expensive than adding the missing sections of no-stopping lines.

6. Isn't education the answer?

It is suggested that no amount of education will overcome the problem of drivers parking in cycle lanes for a network where broken yellow lines are marked in some, but not all, sections of cycle lanes. As discussed above, there are some locations where broken yellow lines will automatically be marked in cycle lanes, and others where existing broken yellow lines will remain in cycle lanes added later. Where this inconsistency (as shown in Figure 3) exists, the letter of the law is not sufficient as there is another factor at play; no-stopping lines are a strong deterrent that everybody can see, as opposed to a rule, which cannot be seen and is rarely enforced.

Figure 4 shows two cars owned by traffic engineers parked outside the 2007 Transportation Conference venue in Tauranga. Those drivers assumedly knew that parking in a cycle lane is illegal, and they respected the no-stopping lines and the patch of green, but opted to park in that part of the cycle lane that was otherwise unmarked.

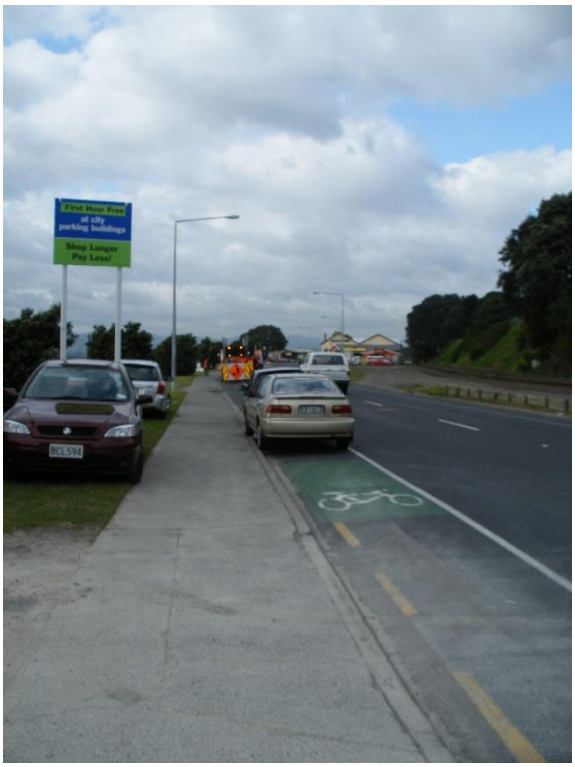

Figure 4: Traffic engineers parked in cycle lanes

7. Conclusions

As is discussed above, education and enforcement have been shown to be unsuccessful in keeping kerbside cycle lanes free of parking; when these approaches were tried by Christchurch City Council, the rate of parking in the studied cycle lanes was still

'prevalent'. Furthermore, having kerbside cycle lanes where some sections are marked with no-stopping lines, whilst other sections are unmarked, can lead to genuine confusion. No amount of education will overcome the fact that no-stopping lines that everybody can see are the stronger deterrent than having to rely on a rule, as demonstrated with Figure 4. Hence, just relying on the Road User Rule does not work; to make kerbside cycle lanes available to the intended user group, no-stopping lines are needed. This is exhibited in other locations where stopping is prohibited through the Road User Rule but RCAs still choose to mark no-stopping lines. And there is, of course, a safety risk associated with parking in cycle lanes; if people on bikes have to swerve around parked vehicles into the general traffic lane, they may come into conflict with other drivers. By addressing this issue both perceived and actual safety of people who cycle will be improved.