

Planning & Design For Cyclists

THE RIGHT STUFF

Ask many cyclists and they'll tell you that the most difficult manoeuvre to make when riding is a right turn. The prospect of moving into the middle of a road (and crossing busy traffic to do so), then waiting there (often unprotected) until a gap appears, can deter many cyclists. Indeed, some will choose an alternative, more indirect route to avoid having to make a difficult right-turn.

For confident cyclists, it's very useful to learn how to "claim the lane" for situations where cycle facilities are not available. But what can we do to make right turns easier for all? Of course, the ultimate solution would often be a nice underpass or overbridge to completely separate the various movements, but it is rare that this can be justified. So here are some other suggestions:

- For a start, many of the same tools used to make turning right easier and safer for motor vehicles also provide some assistance for cyclists. So even by providing a right-turn bay/lane or a painted ("flush") median strip, you may also be helping to give cyclists a safe refuge.
- Likewise, features to help pedestrians cross may also be useful for cyclists. For example, central refuge islands also provide a physical shelter for cyclists. If one is located near a side-road, cyclists can wait in the "shadow" of it when trying to cross. Cyclists could also be allowed to use signalised crossings to get to the other side.
- A common problem for cyclists is finding a suitably clear time to cross over to the right, preferably without having to stop first. One option is to provide a long length where cyclists can cross at any point. The right-turn bay shown below has a special cycle lane in advance of the full turn lane, allowing cyclists to move over when it is convenient to them.



- In some locations (especially T-intersections), a waiting place on the left can be provided for cyclists to stop clear of the traffic and cross over to the right when safe to do so. For example, a hold-rail on the left-hand kerb provides a comfortable stopping place to check for traffic. Even better, a special kerb area could shelter turning cyclists outside of the through lane (including straight-through cyclists!), and point them perpendicular to the traffic, with a hold-rail to wait at.
- Intersections with merge and diverge areas (e.g. those that have a bypass lane for through traffic) can be pretty difficult for cyclists, especially on high-speed roads. In the adjacent picture, the location for cyclists to cross over to the right has been moved away from where the traffic lanes diverge (a hold rail on the left hand side would be handy too). Meanwhile in the picture below, side-road cyclists turning right onto the main road can avoid a tricky merge further up, by waiting here to cross over to the shoulder.





There are some other innovative treatments that have been specifically developed for cyclists turning right at traffic signals. Next time, we'll look further at some of these.

Some Relevant Reading

- Austroads 1999, *Guide to Traffic Engineering Practice, Part 14: Bicycles*, Section 5 (Road Intersections).
- Christchurch City Council 2001, *Marking of Advanced Cycle Lanes and Advanced Stop Boxes At Signalised Intersections*, provides some useful research on the effectiveness of some treatments. Web: <<http://www.ccc.govt.nz/Recreation/Cycling/TechnicalResearch/>>
- CROW, 1993. *Sign up for the Bike: Design Manual for a cycle-friendly infrastructure*, especially Sections 6.2-6.3, which discuss various design aspects of intersection facilities for cyclists.

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