

Reducing driveway conflict on cycleways

Anna Davison, Jared Thomas

Opus International Consultants, Opus Research

Brett McPhedran

Wellington City Council

While there is a lot of evidence of the benefits of separating cyclists from live traffic lanes, off-road cycleways are often interrupted by driveways, which can cause conflict, especially in urban commercial environments. There is a gap in international research around effective treatments to reduce conflict between motorists and cyclists as motorists are entering or exiting a driveway across a cycleway. Currently property owners are implementing design solutions to reduce conflict without any consistency for driver or rider, and with no evaluation of treatment success.

This study examines a real-world trial of a cost-effective driveway marking treatment. Video footage was used to monitor rider and driver behaviour to evaluate behaviour change and conflict before and after a treatment condition. The treatment involved the use of road markings that are familiar and meaningful to drivers in other contexts to encourage drivers to yield (including limit lines and a pedestrian crossing shape format), and to indicate a shift in user priority to cyclists (using a green colour and cycle symbols). The findings showed consistent evidence of success, with a 28% improvement in drivers yielding at the edge of the driveway, lower motorist-cyclist conflict and avoidance behaviours, and a reduction in the approach speed to the driveway for cyclists, indicating recognition of a change in the riding environment. The next stages of the trials are discussed in addition to the potential for a driveway treatment hierarchy based on level of exposure to risk.