

## Cycling Research

### A PEDESTRIAN WAY OF TRAVELLING...

One of the encouraging developments around urban New Zealand is the increase in the number of traffic-free areas such as street malls and squares. As anyone who's seen the European examples can confirm, this is a great way to entice more people into town while at the same time minimising the number of cars coming in.

Unfortunately, a disheartening trend at the same time is towards prohibiting cyclists from these same areas. The decisions often seem to be based on relatively subjective (or emotive) grounds, rather than on technical merit. There often appears to be a fear that cyclists will "run amok" creating havoc and danger for the pedestrians. Maybe there is even a concern that cyclists will drive away pedestrians and hurt local business. Is this concern justified?

Pedestrian areas where cyclists may be prohibited from riding through include pedestrian malls, squares, and even parks. The net effect is generally to force cyclists onto longer, busier traffic routes. Davies *et al* (1998) found that many alternative routes involved high capacity roads, additional hazardous junctions, additional distance and the majority required cyclists to dismount at some stage.

In many cases, there is adequate capacity in motor-free areas to safely cater for all non-motorised users. Similarly the conflicts/danger are generally more perceived than real. Providing further traffic-free links for cyclists can also encourage more cycling (particularly if the road alternative is unappealing). Remember, both cyclists and pedestrians benefit from removal of motor vehicles.



Trevelyan & Morgan (1993) analysed video recordings and questionnaires for a range of pedestrian sites in England and Wales, and also examined conditions overseas. They found that cyclists respond to pedestrian density and modify their speed, dismount, and take other avoiding actions where necessary. Interestingly, while pedestrians change their behaviour in the presence of motor vehicles, they don't in response to cyclists (as anyone who's nearly bowled a pedestrian stepping off a kerb will attest...).

Accidents between pedestrians and cyclists were very rarely generated in the areas studied; in fact only one pedestrian/cyclist accident was noted in 15 site-years. All up, the study found no real factors to justify excluding cyclists from pedestrian areas, suggesting that cycling could be more widely permitted without detriment. This is particularly important where there are no satisfactory alternative cycle routes available around the pedestrian area.

CROW (1993) reports similar findings from some German surveys into pedestrian areas. It noted that in one instance initial reservations by the public against admitting cyclists, were significantly reduced after a year's experience. Similarly, in another survey, it was found that cyclists adapted their behaviour and even dismounted when high densities of pedestrians were present. At the same time, there was no evidence that cyclists rode more quickly once legally allowed in pedestrian areas, and pedestrian-cyclist accidents were small in number and not too serious.



Of course, some consideration might still be required of how best to accommodate all parties. A wide variety of regulatory and design solutions exist to enable safe and effective shared use of pedestrian areas. Segregation is not always necessary or desirable; certainly at lower flows, both user groups mingle readily. However, where there are appreciable flows of pedestrians or cyclists, it may be worth encouraging cyclists to follow a defined path through the area to promote consistent behaviour. We'll cover design options for cyclists in pedestrian areas in another *ChainLinks* issue.

In summary, pedestrian areas should not automatically be considered cycle-free zones. What little evidence there is suggests that while there are often perceived concerns about safety initially, in

practice there is little evidence of any real effects by cyclists. Hopefully the forthcoming *NZ Cycle Design Guide* and *Cycle Route/Network Planning Guide* can reflect this. In the mean time, local authorities should review any existing restrictions there are for cyclists in pedestrian areas and either remove restrictions if appropriate, or provide adequate alternative provision for cyclists.

### **References**

- CROW (Centre for Research and Contract Standardisation in Civil Engineering) 1993, "*Sign up for the bike, design manual for a cycle-friendly infrastructure*". Netherlands. (Particularly Section 4.5)
- Davies D., Ryley T. & Halliday M. 1998, "*Alternative routes for cyclists around pedestrian area*", Report TRL371, Transport Research Laboratory, Crowthorne, Berkshire, UK.
- Trevelyan P. & Morgan J. 1993, "*Cycling in Pedestrian Areas*", Report PR15, Transport Research Laboratory, Crowthorne, Berkshire, UK.

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