

Manual for Streets: bringing out the kids

Study of social activity within a residential area in Cardiff supports development of street design favouring pedestrian movement. This paper is by Mike Biddulph.

Introduction

Research funded by the urban realm campaigning and membership organisation Urban Design Group is highlighting the extent to which innovative streets can promote social activity.

Hitherto, in a study of 20MPH traffic calmed zones in the UK, Hodgkinson and Whitehouse (1999, p59) concluded that traffic calming alone did not change how streets were used, and that despite reducing vehicular speeds: “there has so far been little impact on the function of traffic calmed streets.”

During the mid 1990s a group of charities dedicated to sustainable forms of travel and children’s play lobbied for ‘home zones’ to be recognised in law and for highway guidance to be revised to embrace a more balanced relationship between vehicular and other street users (Biddulph 2001; Gill 2006).

This led to central government support for pilot projects and also a series of guidance documents to help engineers embrace the concept (Department for Transport 2005; Institute of Highway Incorporated Engineers 2002). Such thinking and emerging practices helped shape the philosophy and content of Manual for Streets (Department for Transport 2007). Since then there has been very little systematic observation of whether and how such treatments work.

A recent study of two streets in Cardiff provides some evidence of the extent to which residents benefit from the more innovative approaches advocated by the Manual for Streets – rebalancing hierarchy of road users in favour of pedestrians. These Cardiff streets are directly comparable, being a short distance apart in the Grangetown area of the city. They were both originally terraced bylaw streets, but as a result of renewal efforts in the wider area, they now have similar built forms and populations, but different designs (see Figure 1).



Study of two streets in Cardiff supported previous findings that traffic calming (above) has little effect on street functionality. Home zones (below) are found to encourage social activity



As a result of community participation Street One has been calmed with a series of speed tables and build-outs, tree planting and planters. The form of this street, however, retains a clear distinction between carriageway and pavement. A post-occupancy study has shown that the traffic calming work is liked by residents.

Street Two was closed off in the 1950s when Cardiff City Council built what became some unpopular maisonettes at one end. The result was a bylaw street with a wall across its end. The maisonettes have since been demolished and 46 new homes have been built around a home zone style treatment, with a paved surface, tree planting and gate posts demarcating the start of the treatment. Although open to

pedestrians, the street remains closed to through traffic. Critically, a turning space has been retained where the wall used to be. The result is a street of two halves, with one end being a traditional bylaw street and the other a form of home zone.

The method of study

Previous street studies have tended to focus on traffic speed and accident data or used questionnaires to examine residents’ perceptions. In Cardiff, innovative techniques have been employed to study how the two Grangetown streets are used. In particular, time lapse photography has been used to examine activity. The streets were simultaneously observed for a 24 hour period during the school



Figure 1: Street One has been 'traffic calmed'; street two partially subjected to a 'home zone' treatment

summer holidays using cameras mounted on lamp posts and taking pictures every seven seconds. This created a permanent record and allowed the research to remain hidden from residents who may have altered their behaviour if surveyors or researchers stood in the street for periods of time. From the film, a period of six hours between 15.00 and 21.00 was selected for detailed analysis because during this period the differences between the streets were most evident.

The results

The detailed analysis shows quite distinct differences between how the streets were used on this occasion. In contrast, the streets have equal safety records. A request for details about accidents recorded with the South Wales Police over the previous 10 year period provided a nil result for both streets.

Street One had 100 adults passing through on foot, very often to destinations in the street. Only eight children were seen in the street with six passing through accompanied by adults. Two others came out with adults to buy an ice cream and stayed a short while. Six teenagers passed through, with three of them walking straight down the middle of the road.

This was the only time the pavements were not used. No elderly people were observed. No playing was observed, and 'hanging out' was relatively insignificant, typically observed as brief moments of waiting for someone. The street was visited by 94 cars during the six hour period, which embraced 'rush hour'. That is roughly one car every four minutes. This is

a relatively low level of vehicular activity, allowing plenty of time for other activities to flourish.

Street Two was used intensely by children. It was sometimes difficult to record the discrete events associated with children in this street, but roughly 13 played actively for two hours and 41 minutes. Younger children tended to play near the 'gates' at the entrance to the home zone and closer to their homes, although on occasion they also moved freely within the wider street space. They played ball games, rode bikes and hung around. One child repeatedly played in some puddles. These children often engaged with adults who appeared to be their parents. Six older boys played football for an hour in front of a makeshift goal painted onto a wall at the far end of the street.

Street Two was generally well used, with a steady stream of 96 adult and 19 teenage pedestrians using the street. A small number of elderly residents were also observed passing through. This street was also used by more motorists despite being a dead end, with 114 car movements recorded. This is roughly one car every three minutes. Because there was a turning space half way up the street, some cars turned before the home zone area. This feature is an important by product of how the street has evolved.

Conclusions

This research supports the view that more radical treatments like home zones can result in greater intensity of activity, particularly childrens' play. No evidence here conflicts with the previous findings



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about traffic calming streets, which found that despite the calming, patterns of activity remain largely unchanged.

As the streets studied are closely comparable in terms of form and population, differences in use are largely attributable to the street designs. Within the home zone, 13 children played and socialised for relatively long periods of time. This compares to no equivalent activity in the traffic calmed street. Children were the main beneficiaries of the treatments, although adults were also frequently observed engaging in forms of social activity.

The design features were well interpreted by the home zone residents with children playing and hanging out across its entire area. This is despite the relatively straightforward nature of the scheme. Additionally, the activities of the children appeared to be well supervised due to the close relation between homes and street spaces.

The Manual for Streets encourages such innovative approaches to residential street design, and while it is unlikely that all streets would result in such vibrancy, this research has found few reasons not to embrace the possibilities which simple design innovations might allow.

Xtra-info: A film showing the intensity of street activity in the home zone can be found on You Tube: www.youtube.com/watch?v=trRLPoncWNs

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