



Road Danger Reduction Forum

Casualties and Road Danger Reduction

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“How to have your cake and eat it”

Prophets of doom!

Travelwise, Travel Awareness, Modal Shift, call it what you will, the language of sustainable transport is now being spoken by road safety officers and engineers who only a few years ago would have asserted that road safety and the environment were wholly unrelated. But old habits die hard. These same people, who will now admit that modal shift is generally desirable, too readily don the mantle of the prophets of doom. They still see increasing levels of walking and cycling as a road safety problem. “More cyclists and pedestrians means more casualties - the road safety message must not be forgotten!”.

This view, however, is based on the false assumption that modal shift will occur within the same traffic and environmental conditions which currently exist. This assumes that would be cyclists and pedestrians will simply leave their cars at home when confronted by some glossy “Travelwise” publicity. This just won’t happen, as the limited success of existing Travelwise schemes to encourage modal shift clearly shows. Cyclists and pedestrians, be they real or wishful, are not stupid. They will not begin to cycle and walk more until they perceive and experience a much safer road environment. This will only be achieved through danger reduction i.e. controlling and reducing the speed, volume and threat of motor traffic. The means necessary to achieve such a change will not just benefit cyclists and pedestrians, but will reduce the danger to drivers and their passengers too.

This very logical view is echoed by the House of Commons Transport Select Committee in their report “Risk Reduction for Vulnerable Road Users” (July 1996). This states that “Vulnerable road users cause little danger to other road users, so a shift to these modes from others which cause more danger would be likely to result in a safer environment for all road users.” Whilst in theory this makes perfect sense, it is also borne out in practice. The experience of the City of York is the clearest British example.

York

The urban area of York provides a good test case for analysing the effect of implementing a danger reduction strategy. In 1989 York began the introduction of a transportation strategy based on a hierarchy of road users which placed pedestrians, the disabled and cyclists

at the top while demoting car borne commuters to the bottom. Introduction of the strategy was preceded in 1987 by the completion of the York outer ring road. This has helped reduce traffic growth since 1981-85 within the ring road (roughly the area covered by the transportation strategy) to one quarter that experienced nationally. This traffic has then been subjected to ever greater control by the measures introduced as part of the transportation strategy. These include substantial traffic calming, park and ride, city centre pedestrianisation and the introduction of cycle and pedestrian networks bringing real and widespread improvements for these modes.

Whilst the transportation strategy was introduced largely for environmental reasons its results in terms of road safety are the most striking. Since 1989 reported road accident casualties have fallen dramatically. Measuring performance against the 1981-85 base, York has seen a 42% reduction in total casualties in the average for 1991-95 with a single year reduction of 45% for 1995. Cyclist and pedestrian casualties have both fallen by over a third while these modes have seen little significant reduction in use, particularly in comparison to cycling and walking nationally. In the UK cyclist and pedestrian casualties have fallen, but cyclist and pedestrian activity has also reduced to the same or a greater degree. The conclusion to draw from this is that the road environment has in reality become more dangerous, but not in York, where danger has undoubtedly been reduced.

Yet York has not actually seen a modal shift to vulnerable modes. Its success is that it has held the shift away from these modes at bay and yet still seen substantial reductions in reported casualties. The implications for reducing casualties by a real modal shift to vulnerable modes is thus all the more exciting.

A Word of Caution

The one over-riding cloud on the validity of the York experience is the accuracy of reported casualty statistics. Recent evidence from the Transport Research Laboratory (TRL report 173, 1996) suggests that under and mis-reporting of injury accidents has increased significantly over the last two decades. This casts serious doubt on the accuracy of claimed casualty reductions, particularly for those seriously injured. However, in comparing York to the UK we are comparing like with like. Any degree of inaccuracy is likely to be similar between the two sets of data. The least positive conclusion is that York is not getting worse at the same rate as the UK. More likely is that the increase in safety for all road users detailed above is genuine to a significant degree.

And in Europe?

Evidence from Holland and Denmark also shows that increased cycling does not lead to higher casualties. Here the level of cycling is much higher than in the UK yet cyclist casualty rates (per mile cycled) are between 5 and 12 times lower. Graz in Austria managed to double cycle usage while not increasing total cyclist casualties, as the measures necessary to increase cycling ensured greater safety. This precisely backs up our view.

Conclusion

In light of the evidence set out in this paper it is the overwhelming view of the Road Danger Reduction Forum that danger reduction not only brings about great environmental benefits but also is the most effective and agreeable means of producing casualty reduction. We believe that you can have your cake and eat it!