



**To:** City Development  
**From:** Adrian Davis  
**Date:** 23/04/2010  
**Subject:** Essential Evidence on a page - No. 55:  
**Casualty and Road Danger Reduction**

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**Top line:** In an era when there is greater collective agreement than previously as to the need to promote walking and cycling, a change in emphasis in road safety is required, with a redeployment of resources towards tackling the sources of danger, rather than just looking at those groups who are the victims.<sup>1</sup>

In the past, the casualty reduction approach has been in tune with the general drift of transport policy, with its encouragement of and provision for increasing motorisation. However, this emphasis is now changing, partly as a result of the realisation that predicted increases in motorised traffic simply cannot be accommodated. More recently, as well as a focus on casualty reduction, road safety professionals are being encouraged to consider approaches to improving safety based on reducing danger at source and promoting equity and accessibility for non-motorised road users. Such an approach has been termed the road danger reduction (RDR) approach and a key early paper by Tight et al articulated the potential conflicts and benefits of a RDR approach with that of casualty reduction.<sup>2</sup> RDR attempts to look at a wider range of issues than just casualties and to develop more appropriate measures of 'road safety'. These might include consideration of casualty rates, the speed and volume of motorized traffic and the number of trips made by the more vulnerable modes. The RDR approach involves the examination of the sources of danger on our roads, and therefore particularly targets motorized users, attempting to make them aware of their responsibilities to others because of the dangers they pose.

Danger in this context refers to the potential for harm to occur and places the emphasis firmly on the agent/party which causes actual or potential harm, i.e. attention is focused on the potential ability to *do* damage to others, rather than to *be* damaged by others. The overwhelming source of danger on the road is motor vehicles—RDR can be achieved by controlling the threat posed by motor vehicles. More particularly an RDR approach considers the wider equity issues involved in any safety intervention. One group which may benefit from a more RDR approach is children and young people whose independent mobility has been adversely impacted by growth in private motorised transport.

Nonetheless, there are many ways in which aspects of both approaches might be used to make roads safer, not least the need for speed control - excessive speed is regarded by many as the biggest road safety problem. Perhaps the RDR target of increasing use of benign modes represents the greatest potential area of conflict between those who would like to reduce the overall numbers of casualties on our roads and those who would like to reduce the danger present. The RDR approach argues that travel by benign modes of transport should be encouraged, and that at the same time provision for increasing the actual levels of safety of these road users should be made. Tight et al note that it is difficult to escape the conclusion that cycling is safer in countries such as Sweden and The Netherlands partly because more people cycle, more finance is put into the provision of cycling facilities and there is a real consideration at all levels of decision making, of the needs of cycling and cyclists as a mode of transport.

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<sup>1</sup> A road danger reduction project is being conducted within Bristol City Council in partnership with the University of the West of England. Further details can be obtained from [tom.calvert@Bristol.gov.uk](mailto:tom.calvert@Bristol.gov.uk)

<sup>2</sup> Tight, M., Page, M., Wolinski, A., Dixey, R. 1998 Casualty reduction or danger reduction: conflicting approaches or means to achieve the same ends? *Transport Policy*, 5: 185-192.