

MfS Research- Muddled Thinking

During the course of my work, I have recently come across a few instances where the research behind Manual for Streets (MfS) has been misunderstood. This misunderstanding used to limit the application of the visibility guidance set out in Table 7.1 of MfS.

It appears that some local authorities are using a traffic flow of 2000VPD (derived from Table 4.1 of The Manual for Streets: Evidence and Research, TRL Report TRL661) as a limiting factor for the application of MfS. This is further justified by commenting that MfS is only applicable to lightly-trafficked streets. The general argument usually goes on to say that DMRB standards should be applied on streets with traffic flows greater than 2000VPD, although some local authorities have arbitrarily set higher values, eg 5000VDP.

This interpretation is based on two fallacies. The first concerns Table 4.1 which does not identify sites that were used to review Stopping Site Distances (SSD), rather it concerns sites used to gather data for and identifying factors affecting driver behaviour such as visibility and carriageway width. Research used to review SSDs is completely separate and concentrates on driver perception-reaction times and rate of deceleration. This is not dependent on the volume of traffic as can be seen from the formula given in MfS (paragraph 7.5.3). Consequently there is no basis to limit use of MfS SSDs based on traffic volume when determining appropriate visibility requirements.

The second fallacy concerns MfS only applying to purely residential streets since these are the only streets likely to be lightly trafficked. While the focus is definitely on residential and 'lightly trafficked streets' (MfS, Status and Application), the same paragraph goes on to say that, 'but many of its principles may be applicable to other types of street, for example High Streets and lightly trafficked lanes in rural areas'.

The document goes on to say the DMRB is not an appropriate design standard for *most streets*, particularly those in lightly-trafficked residential and *mixed-use areas* (paragraph 1.4.4). While the focus is on lightly trafficked residential streets, it is clear that the principles and some of the research can be applied in other circumstances.

Perhaps the most telling pointer to this is MfS Table 7 itself, which includes design speeds up to 37MPH. If this is compared to statements elsewhere in MfS where it recommends that speeds in residential areas are limited to 20MPH it becomes clear that the revised SSDs can be applied to the wider highway network regardless of traffic volume.

The arbitrary application of rigid standards without foundation is something that we tried to steer away from when drafting MfS since it runs counter to the whole ethos of the document. The intention was to produce guidance that could be used flexibly reacting to site specific circumstances. It is clear that the 'fundamental culture change' still has some way to go!

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Published in April 2008 Transportation Professional