

Whose Street is it Anyway? Redefining Residential Street Design

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The Department of Transport and the office of the Deputy Prime Minister have commissioned WSP, TRL, Llewelyn Davies Yeang and Phil Jones Associates to develop the Manual for Streets (MFS), which shall supersede Design Bulletin 32 (DB32) and its companion guide, Places, Streets & Movement.

The manual will deal with underlying values that can be creatively deployed by practitioners to pursue the Government's 'placemaking' agenda of individual distinctive localities while ensuring that streets remain functional and safe. It will be based around key elements of good design in residential streets and other lightly trafficked roads.

The development of the MFS has involved some primary research to establish the relations between different link and junction characteristics and road safety. The research (which is ongoing, but will be completed by May 2006) will examine the limits of design practice as currently specified in DB32, to consider whether more liberal geometric and visibility values may be incorporated into the manual.

A review of literature and the contributions of industry stakeholders have indicated that, in terms of constraints on design, the critical dimensions for highway geometry are link widths, forward visibility, visibility splays and junction spacing. The most significant barrier to the adoption of standards which use reduced values for width and visibility is highway authority concern over road safety. The indicators of safety being considered in this research are recorded casualties and vehicle speeds. In addition, residents' perceptions of safety will be relevant as a qualitative response to different geometries.

The research is being undertaken at twenty sites across England. In the context of residential highway layouts, the research will consider:

- ? Are junction geometries and road widths that do not meet DB32 standards acceptably safe in terms of recorded casualties?
- ? Are more permeable highway layouts such as grids associated with higher levels of casualties than spine and cul de sac layouts?
- ? Does there appear to be a relationship between design/ environmental quality and driver behaviour?

MFS will be prepared against a backdrop of sustainable development guidance and initiatives to ensure that it facilitates the long term sustainability of streets, and contributes to an enhanced sense of the place. This research will provide an evidence base for redefining residential street design in the MFS.