

Anna Schirokoff, Juha Luoma: Effects of variable signs on the recall of fixed signs.
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ABSTRACT

This field study was designed to investigate recall of signs on highways, especially recall of fixed danger warning signs on a highway with a variable speed limit system. Specifically, recall of a general warning sign with a supplementary plate 'traffic investigation' and a bicycle warning sign located either 50 or 150 meters behind the variable sign belonging was studied. As control, a highway with conventional fixed speed limits having no other signs in the vicinity was used. In addition, the recall of the speed limit was studied. The data was collected by road side interviews.

On average, 6–28 % of the drivers recalled the warning sign. The results showed that the variable speed limit sign did not affect the recall of the fixed warning sign. Neither had the distance between the variable sign and the fixed sign an effect on the recall. A fixed speed limit sign was recalled substantially better than the warning signs. On the test site, the valid speed limit was recalled by 73 % of the drivers and on the control site by 63 % of the drivers. The results were based on 1,050 interviews.

The findings suggest that the usage of fixed warning signs should be considered carefully to improve the detection of signs and thereby improve the effects on driver behaviour. It is recommended that the current policy should be reconsidered and perhaps rewritten, that is the number of the warning signs would be limited.

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