

Summary:

Quantified Road Safety Targets: An Assessment of Evaluation Methodology

This report contains an evaluation of the effectiveness of quantified road safety targets. A quantified road safety target is any numerical target set by national or local governments for the reduction of the number of people who are killed or injured in road traffic accidents. As an example, Sweden has set a target of not more than 270 road accident fatalities in 2007.

Quantified road safety targets have been set in a number of countries in recent years. Most countries in Western Europe, as well as the United States of America, Australia, and New Zealand have set quantified targets for improving road safety and developed programmes designed to realise these targets. There is, accordingly, an increasing international interest in learning about the effectiveness of quantified road safety targets in improving road safety performance. The main question, which is investigated in this report is:

Do quantified road safety targets contribute to improving the road safety performance of countries, or local governments, that have set such targets?

In order to answer this question, the effects of 22 targets set by national governments in 15 countries, and 13 targets set by local governments in 3 countries have been evaluated. The evaluation study employed two research designs: A before-and-after study, and a multivariate analysis. The latter analysis comprised targets set by national governments only.

Based on previous research, six hypotheses about the effects of quantified road safety targets were proposed.

The before-and-after studies relied on selecting a comparison country for each country that had set a target. The results of the before-and-after supported four of the six hypotheses. One hypothesis was rejected. Evidence was inconclusive with respect to the sixth hypothesis. On the average, having a quantified road safety target was associated with a very small gain in safety performance, less than 1% per year. The multivariate analyses were inconclusive. It is highly likely that these analyses have been influenced by omitted variable bias, as well as instability due to collinearity among the explanatory variables.

Unfortunately, one cannot rule out the possibility that errors in data or analyses explain study findings. Although an effort was made to carry out both the before-and-after studies and the multivariate analyses rigorously, a number of difficulties, for which no satisfactory solutions were found, were encountered in both the before-and-after studies and in the multivariate analyses.

The main conclusion of this study is, therefore, that it is inconclusive: It does not provide a credible basis for estimating the effects on safety performance of quantified road safety targets.