Reviewer's report

Title: Are we there yet? Australian road safety targets and road traffic crash fatalities

Version: 1 Date: 6 February 2011

Reviewer: Roderick McClure

Reviewer's report:

This is a clearly written manuscript describing an important study that makes a substantial contribution to the literature in the field.

Minor Essential Revisions

A: Is the question posed by the authors well defined?

In essence this paper "relies on the assumption that recent trends in RTCs (Road Traffic Crashes) fatalities (in Australia) will continue in the near term, and simply examines the rate at which Australia and its jurisdictions are approaching the target policy-makers formerly aspired to."

The rationale and background for this study is well argued and clearly presented. The elegance of the introduction lies in i) the conservative specification of the question posed by the researchers, and ii) the well justified examination of the implications of an answer to what is at first glance, an apparently simple question. The researchers have finessed some quite substantial issues and challenges they may have faced in their methods, results and interpretation sections, by defining and justifying the research question the way they have. In particular, the authors have clearly identified the potential limitations in their approach in a succinct explanation in the discussion that prevents the readers drawing inappropriately strong conclusions from the data presented.

But, the issue the authors do have to face is whether their aim is too "simple" to make an important contribution to knowledge.

My view is (like the authors) is that the stated purpose of the paper is critically important. There is a need for the road transport system to be held accountable for the safety performance of the system. If targets are set, then at some point an assessment has to be made, (and made public), about the extent to which the system has met the targets prescribed. Without a public stock-take against the prescribed targets, the preventive power of setting future targets is weakened. While the authors suggest this argument, a more succinct presentation of this as the rationale for the paper would be beneficial.

Are the methods appropriate and well described?

Substantial effort has been made to make explicit the approaches and choices that drove the methods. The methods were appropriate within the context of the
aims. But some of the authors assumptions underlying their analysis and interpretations need to be better explained; eg,

1) The authors appear to expect that a national target is intended to be reached by each of the states making an equal contribution. Could we not expect that the national target is the collective for the nation taking into account the realities that different states, have different socio, economic and geographical challenges.

2) With all the known factors that affect the road toll, it could be argued that future changes in these factors need to be included in the model for the predictions to be valid. Or even that future predictions should be made on the basis of socioeconomic/policy and programmatic predictive models, rather than simply extrapolating from past trends. This issue presents itself in a number of different guises throughout the paper. And indeed the authors to acknowledge this issue in a number of places, (including the introduction and a good account of these factors in the discussion). I think however the authors could address the issue more specifically in a preemptive fashion up front in their justification of their approach rather than present these issues post hoc in the discussion to explain differences observed.

For example, the authors say trends estimated from 1971 are unlikely to be as representative of future outcomes as those determined using more recent data. This is true, but are future rates are determined by past trends, or by the socioeconomic and specific policy/programs that explained the past trend, that the authors are assuming will persist unchanged into the future. I feel further specific discussion of causation issues would strengthen the papers conclusion that we need a step change in approach if we are going to get the required step change in outcomes to meet already promised targets.

Are the data sound?

The data has been obtained from the authoritative source and are as sound as possible. However, some brief discussion of the strength (or weaknesses) of this available data source would be beneficial.

Does the manuscript adhere to the relevant standards for reporting and data deposition?

Yes

Are the discussion and conclusions well balanced and adequately supported by the data and are limitations of the work clearly stated?

As noted previously, the discussion provides an excellent account of many of the issues I have raised above as potential problems. It is a fair and comprehensive acknowledgement of the restricted extent to which the study findings can be interpreted, and it does appropriately highlight the important contribution of this paper to the published literature.

**Level of interest: An article of importance in its field**
Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare no competing interests