

Development of Road Safety Performance Indicators in NSW

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Abstract

Setting evidence-based road safety targets relies on the development of safety performance indicators linked to trauma outcomes. The use of safety performance indicators is an internationally recognised approach to improving road safety management, and are now being developed in NSW. Safety performance indicators will assist in monitoring progress of road safety actions in the Road Safety Plan 2021 and focusing on the key drivers of road trauma so that priorities can be refocused if necessary. They can also assist strategic planning for future activities that will drive further trauma reductions beyond 2021.

Background

The 2018 provisional NSW road toll of 354 fatalities unfortunately remains above the target required to meet the State Priority Target of a 30 per cent reduction by 2021. The Road Safety Plan 2021 (the Plan), launched in February 2018, will deliver targeted and proven initiatives to address key trauma trends on NSW roads.

The Plan includes an action to set road safety targets to drive the investment strategy for the state network, including targets for the proportion of travel on four and five star roads, and the proportion of the road network with safety features. The Plan also commits to setting new road safety targets every 10 years. Setting evidence-based road safety targets relies on the development of safety performance indicators linked to trauma outcomes.

Issue

Most jurisdictions focus on outcome measures (e.g. fatalities) to indicate a level of road safety performance. However, this does not allow us to understand whether specific initiatives are having any impact in affecting trauma reductions. Focusing on intermediate measures of system performance (i.e. safety performance indicators) will address this issue, and has become an internationally recognised approach to improving road safety management. For example, Sweden has achieved one of the lowest fatality rates in the world through successful interventions which are guided by development and ongoing performance monitoring of safety performance indicators. Example indicators include proportion of vehicles with critical safety features, proportion of the road network with safety barriers, and proportion of motorists complying with speed limits.

Methods and Approach

The process to identify appropriate road safety performance indicators included:

- A review of current road safety performance and reporting measures in NSW
- A review of NSW crash data to determine the key drivers of road trauma
- A review of performance indicator models developed or proposed elsewhere
- An environmental scan of available research evidence to support specific road safety performance indicators
- Subject matter consultation across Transport for NSW and with key experts in this area

The following criteria were then considered in selecting a core set of indicators, based on best-practice:

- There should be scientific research evidence to support a relationship between each indicator and trauma outcomes
- Indicators should be readily measurable
- There should be a practical total number of top-line indicators that measure how well key elements of the transport system is operating in safety terms
- Each indicator should link to practical safety measures that need to be implemented to achieve the desired outcome

Findings and Implications

A core set of safety performance indicators are now being finalised for NSW. The proposed set of indicators is not intended to capture all areas of road safety activity. They are intended to:

- Provide a practical number of indicators for regular monitoring and reporting of progress against the Plan and beyond
- Focus attention on the key drivers of road trauma
- Help refocus priorities where needed to achieve reductions in road trauma
- Enable a better understanding of the how well the key elements of the system are operating
- Be able to be understood by stakeholders, the community and senior management

Measurement, collection and monitoring of performance indicator data for the selected factors will provide a means of measuring progress over time, alongside delivery of road safety actions and tracking of outcomes, so that priorities can be refocused if necessary. This will also support strategic planning of future activities to drive further trauma reductions toward zero.