

KEY MESSAGES

- The decision making process for safety interventions is complex, involving a number of actors (experts, public, politicians, etc.) and issues (environment, economy, congestion) competing for the scarce resources available. The risk of making poor decisions and the cost of making better decisions can be reduced by the use of reliable studies on how effective different safety measures are (i.e. Crash Modification Functions – CMFs).
- Road safety policy is increasingly dependent on sound indicators of the effectiveness of interventions. Policy makers need not only to justify expenditure on safety in terms of effectiveness but also to argue convincingly for measures in the face of sceptical and sometimes hostile lobbies. Crash modification factors and crash modification functions (CMFs) – the indicators that quantify the crash reductions that result from interventions – are persuasive in this context.
- CMFs are fundamental to identifying the most effective road safety countermeasures and for calculating safety benefits in economic analyses of safety policies when trying to make optimal use of resources.
- Demand for CMFs is growing in many jurisdictions as policy makers are increasingly required to demonstrate results and undertake cost-benefit and efficiency assessments.
- Lack of reliable knowledge of the effects of countermeasures is a key barrier to the advancement of many critical, life-saving initiatives. CMFs can be an effective tool in communicating that knowledge. Improved CMFs – in terms of presentation and dissemination, methodology and transferability between jurisdictions – will have tangible benefits for decision making.
- There is a need for more training and regular practical usage of CMFs to support the development of transferable CMFs. We are currently at a turning point, with the prospect of rapid advances and major cost savings through the transfer of results internationally.
- Transferability of CMFs relies first and foremost on analysing the extent to which a CMF is dependent on the circumstances in which it was developed.
- Variability in CMF research results is a major deterrent to transferability. Reducing variability through proper study design and reporting enhances transferability. Studies should control for the most important confounding factors related to the countermeasure analysed. Variability due to different circumstances can be reduced by making the CMF a function of the relevant circumstances. A key aim of the current report is to provide guidance for uniform screening and control procedures.