Title: Attempts to improve road safety data in the Netherlands

Author: Rob Methorst, Netherlands Rijkswaterstaat WVL

Email: rob.methorst@rws.nl

Keywords: Road safety data, policy development, data validity and reliability, strategic policy development, system approach

Background:
Due to cutbacks, and societal and organisational changes the quality of basic statistical data regarding travelling and road safety in the Netherlands has degraded. Long time monitoring studies (safety belts, child restraints, road safety conditions) have been stopped. Road safety authorities, particularly road authorities, have become (almost) blind regarding road accidents in their jurisdiction. Unexplainable trends in safety data are found. Research institutes want more and better data, but it is highly improbable that things will go back to the way they used to be.

Aim:
Improve insight in status quo and developments in road safety, in order to be able to develop strategies, policies and measures for the improvement of road safety, and thus support the wealth and wellbeing of the population.

Method or methodological issues:
In principle one will only find what one is looking for. Systems theory is used to help define questions. New ways of acquiring and validating insight in road safety and its determinants are developed. The aim is build goal-oriented, valid and reliable data sets for (integral) policy development and policy decisions. This is realized in two ways: by enriching existing data sets and by critically examining data sets on unexplained analysis outcomes.

Results obtained or expected:
Lean data collection is adopted because the financers (central government) are no longer in the position to take up the costs for other policy actors. Economic developments do not promise larger budgets for basic data sets. When it is more difficult to collect data anyway, data validity is not the first priority.

Combining data sets and triangulation can help to deliver adequate coverage of the road safety domain. This approach is used in many strategic projects, i.e. a study about travel safety risks of the elderly. Here an unexplained phenomenon was found: a 100% increase in 5 years in hospital admittances amongst elderly pedestrians and cyclist. This was researched. Indications were found that changes in casualty reporting (for a large part) explain the increase. The implication however was that older data had undetected underreporting as well.

Another approach to compensate for data quality changes is data enrichment. ‘Opportunities’ like ‘Big Data’, ‘data-mining’ are not the answer, because of uncertainties about their origin, validity, representativeness and reliability. Specialised consultants have big interests in ‘Big Data’ processing. A promising initiatives arose: the STAR system initiative. Data from insurance accident forms (delivered by a new dedicated reporting Apps), police reports, ambulance, ER, and hospital data, road environment and weather services data are linked. For accidents involving motorized vehicles this is a promising initiative. For accidents involving vulnerable road users, particularly single accidents, however, the STAR initiative is not likely to deliver a proper solution. A major problem will be localising the accident. This poses new challenges.