

River Publishers Series in open

Udpegning af risikolokaliteter på det tosporede vejnet i åbent land baseret på data om vejens karakteristika

Author: Camilla Sloth Andersen, Aalborg Universitet, Institut for Byggeri og Anlæg, Trafikforskningsgruppen

e-ISBN: 9788793237483
Available From: January 2015
Price: € 0.00

Description:

Since the 1970s, identification, analysis and treatment of hazardous road locations – i.e. black spots - have been the cornerstone of the Danish site specific traffic safety work. However, recent developments have undermined this approach due to various reasons. The two main reasons are the fact that the most hazardous locations have now been treated, the remaining locations are less hazardous, and the safety effect of measures in these locations is less effective. The elimination of the most hazardous locations is obviously favourable; however, another main reason is troublesome. The identification of hazardous roads is based on deteriorated data. Data on traffic accidents in Denmark is registered by the police, but there is a considerably dark figure in the data. Coverage of the police registration has decreased in the past 10 years. In 2001, police registered 18.5 % of people injured in traffic accidents in Denmark, whereas in 2011 the rate was 18.5 %

Consequently, many road authorities are unable to identify hazardous road locations on the basis of accident recordings, especially in rural areas. Road authorities stand before a paradox: a predominant part of the fatalities in traffic are killed in accidents on rural roads, yet the authorities have problems identifying hazardous road locations on rural roads. As a result there is a requirement for workable non-accident based methods to identify hazardous road locations.

The thesis presents a method that can be implemented immediately in the site specific traffic safety work in the road authorities. The span of used is limited to sections on two-lane rural roads with a maximum of 6,000 vehicles in annual average daily traffic.

The method requires the municipality to split the road network into sections by defined splitting points. Furthermore the municipality must collect information on annual average daily traffic and density of intersections connected to those sections. The method does not require specially trained observers or access to special software. The only software used is spreadsheet, as for example Excel.

The above requirements mean that participants in the performed test considered the method workable. The method provides municipalities with the opportunity to prioritize their traffic safety work in rural roads here and now. The presented method can to some extent help road authorities solve the previous mentioned paradox, since the method enables identification of hazardous road locations. The method is seen as a supplement to existing identification methods. The existing methods should still be used to identify locations where local accident factors are problematic, if possible.

Keywords: Hazardous road locations, black spots, traffic safety, traffic accidents, rural roads, two-lane roads, non-accident based method