

The Reliability Increase of Road Infrastructure Based on New Road Safety Improvements

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The main motivation of these researchers is to reduce the annual death toll of road accidents. The analysis considers the problem of transport safety improvement by application of additional impact energy dissipating elements and materials, which can be applied in road barrier structures. The aim of the carried out investigations is the choice of the new road railing structure. These elements can be incorporated into structures designing process for the better protection of people or the limitation of complete structural failure, e.g. in the case of car crash. The failure progressing in a relatively uniform manner results in the fact that the work used for failure of an energy absorbing element causes a substantial reduction of the impact load results. In the paper authors are going to present the numerical tests as well as the experimental results recorded during real car crash tests. In the summary will be presented very interesting conclusions focused on road infrastructure improvements which can directly influence on traffic safety.