Abstract

This study was designed to investigate how drivers assess safe behaviour at passive railway-road grade crossings and how they estimate the risk of crossing. The drivers were also asked to provide suggestions for improving the conspicuity of railway-road grade crossings and increasing caution while crossing, and about the content of safety campaigns. The study was limited to traditional and relatively inexpensive safety measures. Fifty-six car and van drivers were interviewed after passive railway-road grade crossings with low traffic volume. Both basic requirements of safe behaviour (i.e. decrease of speed and observation of potential trains) were indicated by 29–70% of drivers depending on the classification of responses. This result suggests that a substantial percentage of drivers have no proper concept of safe behaviour at railway-road grade crossings. Another important result was that drivers found the crossing of main roads to be more difficult than crossing passive railway-road grade crossings – despite the fact that they considered the latter to be more dangerous. This suggests that the drivers estimated the crash risk at railway-road grade crossings to be relatively low, although they know that it is dangerous in general. Furthermore, the drivers suggested that the conspicuity of grade crossings could be improved by increasing lateral visibility early enough and with advance warning signs. The drivers also suggested that caution could be increased with the use of STOP signs, improving the visibility of road signs and increasing the lateral visibility of tracks. The results suggest that there are several potential safety measures that could support drivers. An overall evaluation of the effects of these measures should be carried out.