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Influence Of Climate Change on Safety of Road Traffic: Case of Lithuania

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Abstract

Road traffic safety is contingent upon both the driver and external factors, with climate change exerting an increasing influence. It is frequently challenging for drivers to safely navigate the roads due to the significant impact of extreme weather conditions on road safety. As the frequency and severity of weather events become more frequent as a result of climate change, the likelihood of accidents on our roadways is on the rise. The comprehension of the consequences of these occurrences is indispensable for the enhancement of road safety and the diminution of the annual accident rate. It is undeniable that weather has an impact on the safety of road traffic, affecting individuals, vehicles, and road conditions. Nevertheless, the precise impact of weather on road traffic fatalities has been comparatively understudied. The frequency of fatal traffic accidents is significantly correlated with the average temperature and the number of hail weather events. An increase in the average temperature may result in an increase in the frequency of fatal traffic accidents. The characteristics of the data are introduced in a separate section. Data processing procedures, statistical analyses, and discussions are detailed in the subsequent section. In the final section, the conclusions are presented.

Keywords: Climate change, Road safety, Accidents