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„Räumgeschwindigkeiten von Fußgängern an lichtsignalgeregelten Knotenpunkten“

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Abstract

In the German guidelines for traffic signals (RiLSA) from 2015 there are given six cases of road users' clearance speed for the calculation of intergreen times. Case 6 is for pedestrians. It recommends a guideline value for pedestrians clearance speed. But there are also some variations.

This Bachelor work shall examine how the clearance speed of pedestrians named in RiLSA changed over the years. The different clearance speeds used in other European countries are also named. The walking speeds were checked by measurement in different towns. They were chosen depending on their number of inhabitants. The values taken in these towns were compared to find differences or common grounds. The measurement was taken in the centre of the cities on norm weeks and days. The differences between the cities are shown in graphs and tables. The different pedestrian groups are examined taking into account the variation of length of the pedestrian crossings. The time mean of all measured speeds was calculated as well as for the different age groups. This shall make it possible to compare the values measured and those named in RiLSA to show differences.

In Germany the demographic development causes changes in the population structure. Lower birth rates and higher life expectancy are leading to an increase of the mean age of people. Predictions up to the year 2060 do not show any reversal process. This is why the necessity to change the clearance speed shall be discussed.

A clearance speed of 1,2 m/s is too high for many senior citizens as the results show. The guideline value is sufficient for grownups. The highest speed of 1,5 m/s is too high for many people and is not enough to cross the road. The different values named in RiLSA should be described more in detail and should take into account the population of the town.