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Empirical Study and Modelling of Three-Dimensional Pedestrian Flow in Railway Foot-Over-Bridge Stair

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Abstract : Over the years vehicular traffic has been given priority over pedestrian traffic. With the increase of population in cities, pedestrian traffic is increasing day by day. Pedestrian safety has become a matter of concern for the Traffic Engineers. Pedestrian comfort is primary important for the Engineers who design different pedestrian facilities. Pedestrian comfort and safety can be measured in terms of different level of service (LOS) of the facilities. In this study video data on pedestrian movement have been collected from different railway foot over bridges (FOB) in India. The level of service of those facilities has been analyzed. A cellular automata based model has been formulated to mimic the route choice behaviour of the pedestrians on the foot over bridges.

Keywords : cellular automata model, foot over bridge, level of service, pedestrian
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