

A SCORE CARD TO EVALUATE PEDESTRIAN SAFETY IN URBAN ENVIRONMENTS USING WALKABILITY MEASURES

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Background Accident statistics in Sri Lanka shows that nearly 35% of the fatalities are pedestrians and they are at a higher risk on roads. The main reason for the above is the absence or poor condition of pedestrian space on road sides. Even a narrow sidewalk can be converted to a pedestrian safe zone by introducing appropriate designs elements. As no clear methodology exists to evaluate pedestrian facilities road authorities do not pay much attention to pedestrian facilities.

Objectives The objective was to develop a score card that can evaluate the pedestrian facilities along a road link that include safety and comfort and be able to compare two road links with respect to walkability.

Methods Existing methods to evaluating walkability, which are qualitative in nature, were studied carefully to identify the relevant parameters affecting walkability. Method was develop to evaluate major parameters quantitatively such a way that observers biasness can be eliminated.

Results The proposed score card evaluates the pedestrian facilities on a road link not longer than 500 m. The score is given as a percentage and hence it can be used to compare two roads. This evaluates sidewalk width, obstructions, pedestrian crossings, pedestrian amenities, sidewalk paving conditions, land use mix, disability infrastructure etc.

Contribution to the Field The deficiencies in pedestrian facilities especially with respect to safety can be identified in any road and a set of roads can be ranked according to their pedestrian safety and comfort level. Hence relevant authorities can take necessary steps in improving the identified deficiencies.