Developing a model for planting trees along the walkway

Abstract

Non-motorized transport (NMT), also called active transport and human power transportation denotes to walking, cycling and many other variants of transportation such as scooters. Walking is the foundation of other modes of transport and is also the main mode of transportation. Strategies for upgrading footpaths offer a range of benefits to society, which can increase the safety and comfort of pedestrians and cyclists, expand travel options for non-rivers, reduce conflicts between motorists and other road users, reduce automobile traffic and enhance recreational experiences and improve health. Based on these priorities, this study was conducted specifically to study the needs of planting trees along the walkway that will influence road users' willingness to use it. The primary objective of this study is to develop a transport model for the willingness to walk if there is sufficient foliage cover along a walkway. The linear regression method was used to produce transport model. This model can be used to determine the suitability of planting the trees. Results showed that the highest number of pedestrians are willing to walk a maximum distance of 400m if there is inadequate trees along the pathway. Planting trees result in a willingness of pedestrians in UKM to walk between 400 to 800 m, double the distance compared to the normal state.