Abstract

Methods to estimate travel distances and times in a region either relating addresses to zones or to the road network are presented.

Characteristics that zones should have and subset of road network that should be used, statistics and formulae that enable distances and times to be estimated are presented.

Relations between zone based models and network ones are discussed, each one being able to improve the other one.

An adaptable and dynamic model based on the previous ones is specified together with its data structures requirements; computationally efficient methods to estimate times and distances are developed and criteria to detect when and where changes are needed are introduced, resulting from validation procedures.