KEYWORDS: Travel time estimation, traffic systems, traffic network data, traffic network analysis, navigation

Abstract:

Travel time estimation is an important issue related to all kinds of traffic systems, such as the Advanced Traffic Management System (ATMS), the Advanced Traveler Information System (ATIS) and the Commercial Vehicle Operation System (CVOS). However, many uncertainty issues exist in the estimation of vehicle travel time, especially in urban areas, such as the peak hour delay and the intersection delay, etc. This paper discusses these issues in detail, and proposes a formula to estimate the delay. Meanwhile, the data needed in traffic network analysis and navigation decision also discussed in this paper.