Issues in Travel Demand Forecasting

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Abstract : Travel demand forecasting including four travel choices, i.e., trip generation, trip distribution, modal split and traffic assignment constructs the core of transportation planning. In its current application, travel demand forecasting has associated with three important issues, i.e., interface inconsistencies among four travel choices, inefficiency of commonly used solution algorithms, and undesirable multiple path solutions. In this paper, each of the three issues is extensively elaborated. An ideal unified framework for the combined model consisting of the four travel choices and variable demand functions is also suggested. Then, a few remarks are provided in the end of the paper.

Keywords : travel choices, B algorithm, entropy maximization, dynamic traffic assignment

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