

Estimation of the Station Catchment Area for Short-distance Travel on Limited Express Trains

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Demand for short-distance travel on limited express trains are not ignorable, but neither sufficient knowledges nor techniques have been provided to estimate such demand. To overcome the insufficiency in demand forecasting, we developed a model for estimating station catchment areas regarding short-distance demand for limited express trains, based on mode choice behavior. A questionnaire survey was conducted to collect travel behavior data. Service levels of transport and geospatial data were also employed. The mixed logit model was applied to consider personal difference in model choice preference. An example of the catchment area estimation obtained from the model developed is given.