

**Development of an Estimation Method of Modal Share
Considering Passengers' Latent Preference for Transportation Modes**

Munenori SHIBATA Masai MUTO Daiki OKUDA

This study has attempted to develop an estimation method of mode share of inter-city rapid trains focusing on mode choice behavior on inter-regional trips. Firstly, the paper indicates that most of travelers are mode captive, who recognize only one transportation mode as an alternative on their mode choice behavior, and latent preference factors have impact on the generation of mode captive. Thus, the paper tries to develop PLCS (Parameterized Logit Captivity and Selectivity) model to describe mode choice behavior more appropriately and the study also shows that the developed simulation method with PLCS model estimates the modal share more accurately than a traditional mode choice behavior model.