

A STUDY ON EFFECTS OF GUIDING CITY COMPACT FOR HOUSING AND TRANSPORTATION MARKET AND ADMINISTRATIVE COSTS

- Empirical study in Tokyo Metropolitan Area -

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[SYNOPSIS]

Compact city is considered one of the effective measures in the aged society in Japan. It is necessary to analyze empirically whether compact city measurement could effect mismatch of housing demand, mobility of the elderly and administrative costs.

This study aims to consider and analyze effects of compact city from the following three view points; (1) mobility of the elderly, (2) housing demands and administrative costs in the ubiquitous society and (3) housing location model analysis with using GIS data.

In chapter 1, we considered how housing relocation affects mobility and housing demand gaps. It is also pointed out possibilities of transit-oriented development in the less population society. Secondary, in chapter 2, administrative costs and housing market in the ubiquitous society is considered. Finally, in chapter 3, we proposed the Bayesian spatio-temporal econometrics model to analyze housing location with using detail GIS data set. Here, geographically weighted regression model with temporal dependency is estimated by Gibbs sampling that is one of the Markov-Chain Monte Carlo methods. The proposed model is applied to estimate housing location model in Yokohama city with using 250m mesh population census.