

Rail Transit-Supported Suburbanization in Shanghai, China

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Abstract

Are the extensive rail transit systems newly constructed in many Chinese cities effective to support the travel of their suburban residents? Using Shanghai as a case study, this paper examines the car ownership and mode choice characteristics of suburban residents living near metro stations. Data from a household travel survey were employed to estimate a binary logit model of car ownership and a multinomial logit model of commute mode choice. The results show clearly that rail transit provides an option that is chosen by a significant percentage of suburbanites who reside near metro stations. Socioeconomic factors are most important determinants of car ownership and use, but several built environment factors are significant in influencing mode choice. Attitudinal factors, such as concerns for safety and money and desires for time savings and comfort, are also important for explaining car ownership and mode choice.

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