

Abstract

Because of the significance of commuting to daily trip making and traffic congestion, the travel between home and workplace has been a topic of research for decades. Since commuting is resulted from the separation between work place and residential place, jobs-housing relation is long considered one of the major determinants of commuting patterns. The relationships between jobs-housing relation and commuting patterns have been extensively studied. There are, however, hardly any conclusive findings. This paper reports a study of a case where jobs and housing are well-balanced in compounds. It is well known that the jobs-housing relation in China had been dictated and is still largely influenced by the so-called *Danwei* system, in which work units provide employees housing at places close to or even in the same location of the workplace. We believe that such physical relation between workplace and residential place may lead to the commuting patterns largely different from that observed in the West and thus a study on the relations between the two may enrich the literature on commuting behavior. More importantly, we intend to argue that the reform of the *Danwei* system has led to spatial restructuring of Chinese cities, increased transport demand and traffic congestion. To that end, we apply the structural equation models to investigate the interactions between sources of housing (provided by work unit or not), jobs-housing relation, transport mode and commuting time. The sample involves 736 employed heads of households, which is derived from a survey conducted in Beijing in 2001. The results show that workers living in houses provided by *Danwei* have shorter jobs-housing distance, higher propensity towards using non-motorized transport mode and shorter commuting duration. This finding seems in agreement with the hypothesis that jobs-housing balance leads to shorter commuting time. We argue, however, that while the *Danwei* system was able to balance the ratio between jobs and housing almost perfectly and thus the demand for transportation is contained, the sacrifices, however, are people's preferences and tastes towards residential location and commuting choices. It is also suggested that the spatial restructuring of Chinese cities resulted from the reform of the *Danwei* system is another important contributor to the ever deteriorating traffic conditions in Beijing and other Chinese cities.

Keywords: *Danwei*; Jobs-Housing Balance; Commuting; Structural Equation Models; Beijing.