Residential Location and Travel: The Cases of the Metropolitan Areas of Copenhagen and Hangzhou

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This paper is based on two in-depth studies of residential location and travel in a European and a Chinese urban region, viz. the metropolitan areas of Copenhagen and Hangzhou. In important ways these two studies go beyond the scope of most previous investigations into the relationships between urban land use and travel. The traditional quantitative travel survey approach has been combined with qualitative interviews in order to identify the more detailed mechanisms through which urban structure affects travel behavior. The statistical analyses include a broad range of urban structural, socioeconomic and attitudinal variables. Both studies show that the location of the dwelling relative to the center structure of the metropolitan area exerts considerable influence on the travel behavior of the respondents. On average, living close to downtown in each of the two cities contributes to a lower total amount of travel, a higher share of trips by bike or on foot, and lower energy use for transport. The location of the dwelling relative to the closest second-order and third-order center also influences travel, but not to the same extent as the location of the residence relative to the main city center of the urban region. The geographical differences in travel behavior exist independently of residential preferences and attitudes to transport and environmental issues and can therefore not be explained by residential self-selection. Instead, a number of rationales for travel behavior identified in the qualitative interviews show important links in the causal mechanisms by which residential location influences travel.

Keywords: residential location, travel, metropolitan area, Copenhagen, Hangzhou