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Research Progress of the Relationship between Urban Rail Transit and Residents' Travel Behavior during 1999-2019: A Scientific Knowledge Mapping Based on Citespace and Vosviewer

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Abstract : Among the attempts made worldwide to foster urban and transport sustainability, transit-oriented development certainly is one of the most successful. Residents' travel behavior is a concern in the researches about the impacts of transit-oriented development. The study takes 620 English journal papers in the core collection database of Web of Science as the study objects; the paper tries to map out the scientific knowledge mapping in the field and draw the basic conditions by co-citation analysis, co-word analysis, a total of citation network analysis and visualization techniques. This study teases out the research hotspots and evolution of the relationship between urban rail transit and resident's travel behavior from 1999 to 2019. According to the results of the analysis of the time-zone view and burst-detection, the paper discusses the trend of the next stage of international study. The results show that in the past 20 years, the research focuses on these keywords: land use, behavior, model, built environment, impact, travel behavior, walking, physical activity, smart card, big data, simulation, perception. According to different research contents, the key literature is further divided into these topics: the attributes of the built environment, land use, transportation network, transportation policies. The results of this paper can help to understand the related researches and achievements systematically. These results can also provide a reference for identifying the main challenges that relevant researches need to address in the future.

Keywords : urban rail transit, travel behavior, knowledge map, evolution of researches
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