

## Mining Multicity Urban Data for Sustainable Population Relocation

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**Abstract :** In this research, we propose to conduct diagnostic and predictive analysis about the key factors and consequences of urban population relocation. To achieve this goal, urban simulation models extract the urban development trends as land use change patterns from a variety of data sources. The results are treated as part of urban big data with other information such as population change and economic conditions. Multiple data mining methods are deployed on this data to analyze nonlinear relationships between parameters. The result determines the driving force of population relocation with respect to urban sprawl and urban sustainability and their related parameters. Experiments so far reveal that data mining methods discover useful knowledge from the multicity urban data. This work sets the stage for developing a comprehensive urban simulation model for catering to specific questions by targeted users. It contributes towards achieving sustainability as a whole.

**Keywords :** data mining, environmental modeling, sustainability, urban planning

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