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### **[Abstract Title]**

Analysis of the socio-economic impact of the COVID-19 epidemic based on the urban travel intensity

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Traffic is one of the important factors affecting urban economic activities. During the COVID-19 epidemic outbreak, most cities in China implemented a city lockdown strategy. In order to understand the impact of city lockdown strategy on the social economy, this research collects the urban travel intensity published by Baidu's migration big data and uses time series analysis to compare and analyze the changes in travel intensity in different cities in China during the epidemic in 2019 and 2020. Under the assumption that urban travel intensity can represent the urban recovery capacity, the relationship between the hazard factors (number of confirmed cases, number of deaths, etc.), the vulnerability factors (enterprise recovery time, emergency policy, etc.) and urban travel intensity was studied by regression analysis. From the perspective of urban travel intensity, the research analyzes the social and economic impact of the COVID-19 epidemic, on one hand, it provides an evidence for risk management of major public health emergencies; on the other hand, it can be a comparison of the traditional socio-economic impact research using questionnaire survey data or macro statistical data.

### **[Keywords]**

the urban travel intensity, the COVID-19 epidemic, the socio-economic impact