Special Issue

Advances in Urban Mobility Analysis, Air Quality Modelling and Spatiotemporal Data Science for Urban Pollution, Health and Social Disparities

Message from the Guest Editors

- Urbanisation, industrial activity, and rising energy demand have intensified the complex interactions that shape urban environments, with urban mobility emerging as a central driver of both economic activity and environmental change. Addressing these challenges requires innovative, data-driven, and multidisciplinary approaches. Advances in mobility analysis, spatiotemporal data science, satellite remote sensing, and machine learning allow us to better simulate, monitor, and forecast how changes in urban movement patterns affect air quality. New forms of digital trace data (e.g., mobility phone, GPS, and transport smart card data) can capture mobility dynamics at fine spatial and temporal scales, enabling the integration of transport behavior into urban air quality models.
- This Special Issue welcomes original research articles and reviews that advance the understanding of how urban mobility interacts with air quality, health impacts, and social disparities. We encourage studies that integrate multiple data sources, explore scenario-based modelling of mobility interventions, and link their findings to urban planning, environmental policy, and public health strategies.

Guest Editors

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Message from the Editor-in-Chief

Urban Science is a scholarly international journal which provides a platform for the exchange of theories, ideas, methods, analyses, and comparative studies of urban and regional development. It is a peer-reviewed, open access journal that publishes high quality original articles, theoretical essays, critical reviews, research notes, and shorter communications. Its broad definition of "science" includes both quantitative and qualitative methods of social, environmental, and spatial analysis. There is no restriction on the maximum length of the papers.

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