

Special Issue

Geo-Spatial Intelligence for Compact, Resilient, and Equitable Urban Land Use Planning

Message from the Guest Editors

This Special Issue aims to explore geospatial intelligence and spatial analytical methods that support compact, resilient, and equitable urban land use planning. As cities grapple with rapid urban expansion, land scarcity, and socio-environmental inequalities, there is a pressing need to transition from generic planning strategies to spatially targeted, data-driven solutions. We invite submissions that focus on the following:

- High-resolution spatial modeling of land-use change, densification, and urban infill.
- Quantitative assessment of land-use efficiency, mixed-use optimization, and urban compactness.
- Spatial equity mapping, including access to green space, public services, and transit.
- Scenario-based geospatial decision support systems for future urban land use transitions under sustainability constraints.
- Case studies applying AI, remote sensing, and GIS in real-world planning contexts.

This Special Issue seeks to bridge gaps between geospatial science and policy-relevant urban land governance. It emphasizes measurable impacts on sustainable development, in line with SDG 11 and related goals.

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Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Steve W. Lyon

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