

## The influence of transportation policies and infrastructures in urban sprawl expansion in the Lisbon Metropolitan Area between 1991 and 2011

### Summary

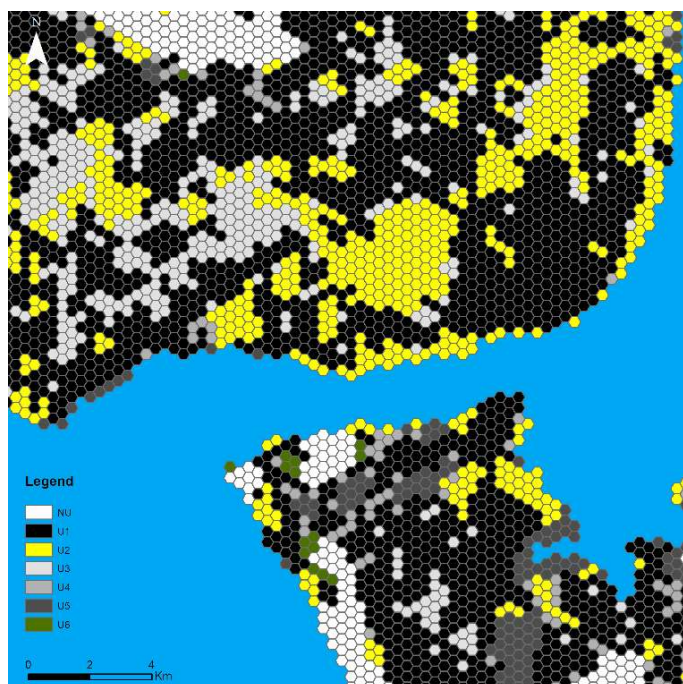
The objective of the research is to assess the level of influence that transportation policies and infrastructures had on the evolution of urban sprawl in the Lisbon Metropolitan Area between 1991 and 2011. Besides transportation indicators other ones, such as economic, demographic, accessibility, mobility, geographic and spatial planning indicators were also included in a broad framework. This framework was created mainly through GIS and Excel.

New methodologies were also created to define and simulate the urban space and to identify urban sprawl, as well other urban forms. Preliminary findings point out the importance of local spatial plans in restraining sprawl while transportation features influenced heavily its expansion.

Lack of coordination and integration of transportation as a component of the local spatial plan curbed the efficiency of this in directing all types of urban expansion. Also, the development of sprawled areas is not influenced by the level of accessibility. The same applies to the presence of amenities like hospitals or high-schools.

### Keywords

Transportation, urban sprawl, GIS, spatial analysis, network analysis, data analysis, modelling, multinomial logit, panel data model, latent class analysis.



An example of the methodology employed to define urban space.



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