

LECTURE SUMMARY

Planning support tools and methods for integrated planning

EXPECTED LEARNING OUTCOMES

- Understand the concept of “planning support tools and methods for integrated planning”, its role and value for the integrated planning process of livable cities
- Get familiar with the core concepts, background and fundamental metrics of the selected thematics: 1/ built form and built density, 2/ urban mobility and network configuration, 3/ uses, activities and functional mixture.
- Comprehend the fundamental quantitative methods and techniques for analyzing the urban configurations that emerge in the contemporary city as crucial analytical tools supporting integrated planning processes.
- Get familiar with the different computational tools (software, plug-ins, and packages) for performing the types of analyses described in this lecture¹, as well as with the relevant data sources providing the needed datasets for performing such analyses.
- Overall, acquire a high-level understanding of all crucial aspects relating to planning support tools (background, metrics, methods, computational tools, and data) in order to be able to independently utilize them as needed (both in research and practice context).

¹ It should be noted that a basic understanding of Geographic Information Systems (GIS) is considered prerequisite for this lecture and therefore there is no specific focus on describing GIS architecture, or basic GIS software (e.g. QGIS, ArcGIS, GeoDa etc).



SUMMARY OF THE LECTURE

In this lecture we delve into the multifaceted nature of planning support tools, Given the intricate nature of planning support tools, we acknowledge the necessity of a targeted exploration rather than an exhaustive coverage.

The lecture begins with a detailed examination of the background and fundamental metrics of analytical tools supporting the integrated planning process, providing participants with a solid grounding in the key elements influencing integrated planning. To facilitate a deeper understanding, we focus on specific thematic areas: built form and built density, urban mobility and network configuration, and uses, activities, and functional mixture. These subjects provide a structured framework for exploring the various dimensions of the built environment and urban fabric.

A significant portion of the lecture is dedicated to an exploration of geoprocessing methods, computational tools and data sources useful for implementing the analyses described in this lecture. We navigate through various software, plug-ins, and packages, emphasizing their relevance in the analysis of built form, urban mobility, and functional mixture. The objective is to familiarize participants with the technical landscape, enabling them to make informed choices based on project-specific and context-specific requirements of their work.

Additionally, the lecture underscores the pivotal role of data sources and datasets, emphasizing the importance of reliable information in the planning process. Students will gain insights into relevant data sources, enabling them to access the necessary datasets for effective analysis. The integration of these data-driven analytical tools forms a cornerstone in supporting integrated planning approaches for the contemporary city.

As the lecture concludes, students are expected to comprehend the concept of planning support tools and methods within integrated planning. The focus on core concepts, background, metrics, methods, computational tools, and data sources equips participants with the technical know-how required for independent utilization in both research and practical contexts. This lecture serves as a conceptual and technical foundation, fostering a high-level understanding of essential aspects related to planning support tools in the realm of integrated planning.





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