

Part 01:

Introduction to Operational Urban Planning

- ✓ Definition and principles of operational urban planning
- ✓ Objectives and challenges of operational urban planning
- ✓ Difference between strategic and operational urban planning
- ✓ The role of actors in operational urban planning
(administrations, developers, urban planners, etc.)

Course 1 : Introduction to Operational Urban Planning

1.1 Definition and principles of operational urban planning

Operational urban planning is a branch of urban planning that is distinguished by its practical and immediate purpose. The aim is to translate urban development projects into concrete actions, achievable in the short or medium term, in order to meet the specific needs of society. Unlike strategic urban planning, which focuses on long-term planning, operational urban planning aims to materialize the objectives defined by public policies through direct interventions on the ground. According to "Jean-Pierre Dovery" (2019), operational urban planning is above all a tool for managing urban spaces, with specific objectives such as the renovation of run-down neighbourhoods, the construction of new housing, or the management of public infrastructure.

The fundamental principles of operational planning include:

- **Sustainability** : This approach aims to integrate environmental concerns into the design and implementation of urban projects. It seeks to minimize the ecological impact of buildings and to promote urban planning that respects natural resources.
- **Flexibility** : Operational urban planning must be able to adapt to the social and economic changes of the territories. Projects must therefore be responsive and scalable according to the needs of the inhabitants and market developments.
- **Inclusiveness** : This principle emphasizes the creation of accessible and equitable cities, offering all citizens, regardless of their social class, a quality living environment.

The role of operational urban planning in modern cities is essential for the transformation of urban spaces and for responding to demographic, social and environmental challenges. Indeed, as the urban population grows, the provision of infrastructure and public services becomes a major issue, making operational urban planning essential to ensure the quality of life in cities.

1.2 Objectives and challenges of operational urban planning

The objectives of operational urban planning are many and varied. One of the main ones is **the improvement of the quality of life of the inhabitants**. This involves creating accessible,

quality housing, but also developing public spaces, such as parks, playgrounds, or community centres, that promote social life and community cohesion.

In addition, operational urban planning aims to **reduce social and economic inequalities** within cities. This involves integrating the most disadvantaged neighbourhoods into the general urban fabric, offering them modern infrastructure and economic opportunities. For example, the rehabilitation of old neighbourhoods and the creation of new commercial activity zones can stimulate the local economy and improve the living conditions of residents.

Environmental issues are also crucial. Rapid urbanization puts considerable pressure on the environment, in terms of energy consumption, waste management and the preservation of green spaces. Thus, one of the main objectives of operational urban planning is to promote sustainable urban development. This includes the implementation of buildings with a low ecological footprint, the development of efficient public transport systems and the sustainable management of natural resources. According to a report published by ADEME (French Environment and Energy Management Agency, 2023), sustainable urban planning projects are now priorities for municipalities and private actors.

1.3 Difference between strategic and operational planning

It is essential to differentiate between **strategic and operational urban planning**, although they are complementary.

- **Strategic planning** : This is a long-term process that focuses on the overall planning of land use. It includes approaches such as defining major urban development orientations (residential, industrial, commercial areas), developing master plans at the regional level, as well as reflecting on the major issues of the future, such as the impact of climate change on cities. This type of planning is based on a 10, 20 or even 30-year vision, aimed at anticipating the future needs of the population.
- **Operational Planning** : Unlike strategic planning, which is more theoretical and forward-looking, operational planning is more concrete and focused on immediate execution. It consists of translating the projects defined in the strategic framework into practical actions on the ground. This includes the construction of infrastructure, the renovation of buildings, the establishment of transport networks or the development of new districts.

While strategic urban planning sets the direction to be followed, operational urban planning is responsible for the implementation of these guidelines, which involves daily coordination work between the different actors involved, such as local authorities, developers and citizens. As "Bérénice Sabourin" (2020) points out, operational urban planning is the link between long-term visions and the reality on the ground.

1.4 The role of actors in operational urban planning

Operational urban planning involves a large number of actors, each of whom plays a key role in the implementation of urban projects.

1. **Public administrations** : They are primarily responsible for the regulation and planning of urban space. Local authorities, in particular, draw up urban planning documents, such as Local Urban Plans (PLU), which define the rules for land use. They are also responsible for the allocation of building permits and the financing of public projects.
2. **Real estate developers**: These private players play a crucial role in the realization of real estate projects. As financiers and project managers, developers invest in the construction of new neighbourhoods, the renovation of old buildings and the creation of commercial complexes. Their objective is to meet market demand while respecting urban and environmental standards.
3. **Urban planners and architects** : These professionals are primarily responsible for the design of projects. Urban planners define the main lines of land use planning, while architects are responsible for the design of buildings and the aesthetic integration of projects into their environment. Their expertise is crucial to ensure that projects meet the needs of the inhabitants, technical constraints and environmental objectives.
4. **Citizens and civil society** : Finally, citizens are playing an increasingly important role in the decision-making process. Thanks to consultation and public participation tools, such as public inquiries or citizen forums, residents have the opportunity to make their voices heard in development projects. This makes it possible to better meet the needs of the community and to ensure better acceptance of projects.

Course 2: The Dynamics of Operational Urban Planning

2.1 Management of complex urban projects

Urban project management is a complex task that involves many technical, financial and social challenges. Operational urban planning projects are often large-scale, with a variety of components, ranging from the construction of new housing to the creation of public infrastructure such as schools, hospitals, or transport networks.

Cost **management** is one of the main challenges in the implementation of urban projects. Budget overruns are common due to project complexity, unforeseen events related to field conditions, or changes made during the project. The implementation of rigorous **project management techniques** is therefore essential to avoid these overruns. Tools such as **Building Information Modeling (BIM)** are increasingly being used to improve project coordination and planning, allowing for better anticipation of costs and timelines.

The **risks associated with** these projects are also numerous: technical risks (foundation problems, choice of inappropriate materials), social risks (opposition from residents, conflicts of interest), and environmental risks (ecological disruptions). Proactive risk management is therefore essential to ensure the success of projects.

2.2 Integration of environmental issues into operational urban planning

The integration of environmental issues into operational urban planning projects has become a priority in most countries. With rapid urbanization, cities are increasingly exposed to environmental risks, such as **flooding, air pollution, and urban heat islands**.

Thus, operational urban planning seeks to integrate sustainable solutions, such as **stormwater management**, the **use of ecological materials**, and the **optimization of the energy efficiency** of buildings. Many projects now incorporate **eco-friendly neighbourhoods** or **passive buildings**, which consume little energy and are built to strict environmental impact standards. The development of **urban green spaces** is also a key element in improving the quality of life in the city, reducing air pollution and providing recreational spaces for residents.

2.3 The importance of consultation and citizen participation

Citizen participation is essential to ensure the success of urban projects. Indeed, urban planning projects can arouse resistance or opposition if citizens are not properly involved in the decision-making processes. Thus, consultation mechanisms, such as **public consultations, neighbourhood meetings, or social surveys**, are now used to collect the opinions and needs of residents.

The benefits of citizen participation are manifold. It makes it possible to enrich projects by taking into account local needs that are often ignored in the early planning phases. It also

contributes to a better acceptance of projects by the inhabitants, which reduces the risk of social conflicts and promotes social cohesion in the neighbourhoods concerned.