



IVA GREDELJ

URBAN PLANNING CRITERIA FOR THE IMPROVEMENT OF UNPLANNED SETTLEMENTS IN CROATIA

URBANISTIČKI KRITERIJI ZA UNAPRJEĐENJE NEPLANSKI IZGRAĐENIH NASELJA U HRVATSKOJ

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Date of public defence: September 22, 2025.

In 2012, the legalization of illegally constructed buildings was made possible in Croatia, highlighting the problem of illegal construction that has been observed and present in Croatian cities since the 1920s.

The number of illegally built buildings has increased over time, as evidenced by reports on the state of the area from the Ministry of Physical Planning, Construction and State Property, which point out that every second household in Croatia has engaged in illegal construction. In some locations: in cities, outside cities (mainly in tourist attractive areas) and in planned urban areas, unplanned settlements were formed. Following legalization, they became a legitimate factor in the area, and considering that they are most often characterized by a whole series of negative phenomena and that they generate numerous dysfunctions of the micro and macro environment, it is necessary to improve them. What exactly is substandard in unplanned settlement that requires improvement is expressed in the form of urban planning criteria. Their application, through the prescription of planning measures, results in a set of activities aimed at improving the urban quality of unplanned settlements.

With the aim of observing and systematizing their characteristics, and in order to identify possibilities and recommendations for improvement that should be guided in practical application, 16 areas with illegal construction were detected in the largest urban centers in Croatia: Zagreb, Split, Rijeka, Zadar i Osijek. These urban areas were selected for research because illegal construction is most common in large city centers and because the negative phenomena of unplanned settlements stand out most in the city, where the degree of urbanity is the highest.

Among the 16 identified areas, the largest one in each city was examined in greater detail. Four unplanned settlements in the largest urban centers in Croatia were studied: Kozari bok in Zagreb, Sirobuja in Split, Rujevica in Rijeka and the South Stadium settlement in Osijek, and the planned settlement with unplanned parts Bili brig in Zadar.

All five settlements were analyzed using the same methodology. Schematic layouts of buildings and structures in unplanned settlements were made and graphically processed, for all buildings, for buildings by purpose, and for traffic areas. Urban indicators were calculated: building coverage ratio, density of construction, and density of housing. Schematic layouts were also made, and urban indicators calculated, for planned settlements, in addition to unplanned settlements. The results obtained by the analysis were compared, and based on the comparison, characteristics of unplanned settlements were observed.

After unplanned settlements were examined, spatial and urban plans were studied for areas where unplanned settlements were made. Cartographic representations of land area use, transportation, as well as construction methods and forms were overlaid onto schematic representations of unplanned settlements, and an examination was conducted to determine the negative characteristics that the settlements exhibited and how the plans intervened to address them.

By interpreting the planned measure through response, the negative features of unplanned settlements were highlighted as key problems. An effort was made to gather and systematize all the problem-based questions that need to be asked in order to achieve a set of measures for the improvement of an unplanned settlement.

Two groups of questions were formed. The first group focuses on exploring the negative spatial characteristic of the settlement (*morphological urbanity*), while the second addresses its functional context, considering aspects related to use or functionality (*functional urbanity*). These problem-oriented questions presented in tabular form constitute the *Settlement Urbanity Profile*. By answering them, a comprehensive set of information about the settlement is gathered, forming a structured diagnostic overview of the existing condition of the settlement.

The improvement of unplanned built settlements involves enhancing their morphological

and functional urbanity. Considering that improving morphological urbanity involves qualitatively addressing spatial deficiencies, and that enhancing functional urbanity focuses on eliminating functional shortcomings, this process can be defined as the *urban renewal of the unplanned built settlement*. The specific characteristics of morphological and functional urbanity that need improvement are prominent through *urban planning criteria for the improvement of unplanned settlements*. The research established nine criteria for improving morphological urbanity and 26 criteria for improving functional urbanity – a total of 35. However, it is assumed that this number may increase with further research on the same or similar topic such as improvement of unplanned settlements in attractive turistic areas and within planned urban zones.

By applying nine urban planning criteria for improving morphological urbanity, it is possible to examine the aspects of the negative impact of an unplanned settlement on the city, as well as the adverse influences affecting the settlement itself, in order to assess the potential for improving both the micro and macro environment of the settlement. The 26 urban planning criteria for improving functional urbanity are used to evaluate the extent to which public, social and green infrastructure is provided, enabling a settlement to fulfill its basic function (housing), as well as other functions through which residents meet their daily needs.

Although urbanistic criteria are objective and equal for all cases, the research concluded that there is no universal solution for the urban renewal of unplanned settlements. Each settlement is a case in itself, so the approach to its improvement depends on its specific contextual characteristics. The urban planning criteria guide the analysis of the settlement's existing urbanity precisely toward the negative aspects that need improvement, but the planning measures will be determined by an urban planner, in the form of an urban plan for the urban renewal of an unplanned settlement, in cooperation with the socio-political community.