

# Summary

Among the many topics of debate in post-pandemic spatial planning and urban sciences, concepts such as the rediscovery of a variously understood *proximity* (Tricarico and De Vidovich 2021), and the accessibility of services on a reduced spatial scale that can be covered on foot or by bicycle are widely discussed, increasing interest in the neighbourhood dimension of cities. Infection containment measures adopted by world's government during the pandemic represent both a sudden upheaval in the daily lives of millions of people (Batty 2020) and an acceleration of phenomena already underway, such as the spread of remote working and the affirmation of new home services that apparently seem to reduce, for example, the need to travel and commuting.

The renewed attention to a reduced spatial dimension in the post-pandemic context seems to be linked to a broader theme of redesigning the urban environment with a view to sustainability and resilience: if overcoming the crisis seems tautologically to be proof of the resilience of cities, the ways in which they overcame it demanded a very high price in terms of psycho-physical, economic and social discomfort and unfortunately of human lives, making it necessary to understand and rethink urban dynamics in depth.

In this rethinking of the city in a post-pandemic key – an important process if we consider demographic forecasts that see the population living in urban areas strongly soaring (Rossignolo 2011) – a number of concepts and idealtypes developed in the course of the more and less recent history of urban planning have (re)emerged. While some scholars have studied in depth the impact of the pandemic on the city, wondering for example what the role of large megacities will be in relation to smaller centres in a polycentric system (Kleinman 2020), others have proposed models and solutions, such as the *15-Minute City* (Moreno et al. 2021a), the *Supermanzana* (Bambó Naya and Monclús Fraga 2019; Staricco and Vitale Brovarone 2020), the *20-Minute City* (Capasso Da Silva, King, and Lemar 2020) These models have often been somewhat re-proposed as a solution to reduce the fragility that the contemporary city demonstrated during the pandemic that *put immense strain on cities* (Hunter 2021).

This work, avoiding to introduce new elements to the already wide *taxonomy* (Melis, Lara-Hernandez, and Melis 2021) of urban models and ideal-types that architecture and spatial planning already provide, focus on the study, in the general framework of *territorial* and *urban resilience* (Brunetta et al. 2019; Meerow, Newell, and Stults 2016) of the brand new concept of *Local Resilience Unit*, to be define as *an operational framework at the "neighborhood" level that can develop planning actions along with community empowerment to make cities more responsive, resilient and able to provide a high level of livability and urban well-being* (Brunetta and Voghera 2023), dealing both with furthering the definition of the concept in the context of the "neighborhood" and proposing and testing in the city of Turin (Italy) a methodology for mapping area-targets, following an approach based on the study of accessibility basins by overlaying pedestrian isochrones against a set of daily services, and concluding with a proposal for operationalizing the Resilience Unit in terms of a transformative process of public space through co-benefit actions that can intervene on key climate

vulnerabilities and the health and livability of neighborhoods, according to the nexus between health, wellness and adaptation to climate change (Münzel et al. 2021).

The thesis is divided into sections. In the first, the concept of resilience from earliest attestations to current state-of-the-art is outlined. In the second, the concept of proximity is outlined and historical models of planning are illustrated. In the third, the impact of the Covid-19 pandemic in urban dynamics and the emergence of planning paradigms such as the Superblock/Supermanzana and the 15-Minute City are described. After describing how three European cities-Copenhagen, Barcelona, and Paris-have also coped with the pandemic through planning in section five the theory behind the Local Resilience Unit is recalled with a specific focus on its theorization in urban settings. Section six recalls the methodology developed for area-target mapping by illustrating the detail of operational steps and early tests carried out in the municipality of Novara. Section seven describes the application of the methodology in the Turin case study, while section eight provides insights and suggestions on the implementation-in the case study area-of the Local Resilience Unit. Appendices A and B provide the technical detail of the methodologies used.