# TeMA

The three issues of the 12th volume will think again about the debate on the definition and implementation of methods, tools and best practices connected to the evolution of the main scientific topics examined in depth in previous TeMA Journal volumes.

### Journal of Land Use, Mobility and Environment

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#### EDITORIAL PREFACE: TEMA JOURNAL OF LAND USE MOBILITY AND ENVIRONMENT 2 (2019) THE TIMES THEY ARE A-CHANGIN'

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According to the National Research Council of the United States, resilience is the capacity of defining and programming operations to resist and/or to recover, or to adapt, in the most proper way, as regards disruptive events, whether they be actual or merely possible (Gilbert et al., 2015). Particular attention is paid to horizontal and vertical technical cooperation within the different bodies of the public administration and to participatory processes which involve representatives and stakeholders of the local communities, enterprises of the profit and non-profit sectors, civil society groups and so on.

The "PEOPLES Resilience Framework" (PRF) (Renschler et al., 2010), where PEOPLES stands for "Population and demographics, Environmental/ecosystem services, Organized governmental services, Physical infrastructure, Lifestyle and community competence, Economic development, and Social-cultural capital," states that resilience of the urban contexts is characterized, in terms of resistance, adaptation and recovery, as the long-run conservation of adequate performances as regards population density and structure, environmental resources and ecosystem services, basic and intermediate services and infrastructure provided by the public administrations, social and economic sustainability, local development and progressive increase of the social and cultural capital. Under this perspective, the system of the "Baseline indicators for communities" (Cutter et al., 2014) identifies 49 performance indicators whose benchmarks are related to social structure, economic situation, conditions of the built environment (housing and infrastructure), institutional framework, human capital, and environmental and social quality of the urban contexts. Similarly, the "City resilience framework" (CRF) assesses the size of urban resilience by twelve objectives and 52 indicators, concerning the local governance framework and related leadership, the quality of urban life and of social welfare and relationships, the public services and infrastructure, and the state of health of the urban economy (Arup, 2014).

From this point of view, the resilience of urban fabrics not only is related to consistent use of technologies effective in hindering dangerous impacts on the quality of life of the communities or in catalyzing quick recovery from disruptive shocks, but also, and above all, is connected to the implementation of virtuous cooperative processes which involve public administrations and members and groups of the local societies. Resilience builds upon implementing public policies into spatial planning through the participation of stakeholders endowed with the proper expertise to improve substantially the quality and the effectiveness of decision-making processes through cooperation with public bodies who provide the communities with a sound and proactive commitment towards the common good.

A relevant aspect which characterizes resilient communities is their self-assessment expertise, whose an important paragon, in terms of capacity building is represented by the "Communities advancing resilience toolkit" (CART) (Pfefferbaum et al., 2013). The CART provides a guidelines handbook and a self-assessment toolkit addressed to local communities which can be used in several local planning fields (Gilbert et al., 2015). The "Community resilience system initiative" (CRSI) (CARRI, 2011) focuses on the same target, with the aim of improving public awareness concerning resilience-related themes, which should become public wealth of knowledge. The implementation of capacity building in terms of community self-assessment and

wealth of knowledge. The implementation of capacity building in terms of community self-assessment and public awareness not only drives the local societies towards resilience-oriented adaptation and recovery planning practices, but also towards implementing spatial planning based on visions embedded in a resilience-oriented public policy framework (Gilbert et al., 2015).

The CARRI's report (2011) is particularly rich in directions concerning good and best practices on urban resilience based on self-assessment of the local societies. The Annex 3 of the report analytically presents the outcomes of a partnership process between CARRI and the communities of three counties of the United States, namely, Charleston Tri-County Area (South Carolina), Gulf Coast of Mississippi and Memphis/Shelby County (Tennessee). Three action plans were implemented by partnerships involving the county administrations and CARRI, which focused on urban resilience, and were translated into concrete operations related to the urban contexts of the three counties. In the case of the Tri-County Area, the plan consisted of a complex and articulated set of operations aimed at improving the local transportation system, and, in particular, the road traffic, the railway organization and the commuting opportunities. The Gulf Coast County and CARRI studied and implemented a set of operations to mitigate the environmental damages generated by the Deepwater Horizon oil spill coming from the BP platform located in the Macondo Prospect, in the United States Exclusive Economic Zone of the Gulf of Mexico. The plan action of the Memphis/Shelby County focuses on a system of initiatives which implement urban economic development based on cooperation of locally-based small enterprises and family-run businesses. The planned operations entail a set of interventions concerning building urban resilience against seismic events.

The good practices based on CRF, CART and CRSI are highlighted by the scientifically and technically qualified, intersectoral approach to the implementation of urban resilience-oriented operations. Incremental, bottom-up processes of capacity building and self-assessment which involve the urban societies characterize the exportability of these methodologies to other international contexts.

The seven articles proposed in this issue of TeMA are drawn from studies presented at the INPUT aCAdemy 2019 Conference held in Cagliari on 24-26 June 2019, titled "Planning, nature and ecosystem services." The issue of urban resilience-oriented spatial analyses and planning practices was one of the themes treated and discussed throughout the Conference sessions, and a selection of these studies is presented through the articles of this issue of TeMA, which are consistent with the scientific and technical lines discussed in this editorial preface. The question of local transportation system, which is one of the main issues addressed by the action plan which implements the CRSI into the Tri-County Area, is treated by Santos and Moura and by Di Ludovico and Rizzi, who focus on the mobility system and preferences related to walkability with reference to the Belo Horizonte urban context and to the post-earthquake urban environment of the Italian City of L'Aquila. In the case of L'Aquila, the theme of walkability merges with the resilience-related question concerning recovery after a critical natural disaster. The spatial organization related to the urban functions concerning the Mustapha Pacha Hospital within the North African metropolitan context of Algiers, discussed by Ghida et al., and the assessment of the implementation of a green infrastructure in the Turkish Pendik District, described by Ustaoglu and Aydinoglu, propose planning tools and methodological approaches consistent with capacity building and public awareness processes. Ladu et al. assess the ongoing process of the implementation of a big project within an Italian medium-sized metropolitan area, the new soccer stadium of Cagliari, whereas Pilogallo et al. discuss the implementation of renewable energy plants into the spatial context of the Melfi area, located in the Southern Italian Region of Basilicata. Both studies are closely related to the theoretical and technical approach to urban resilience entailed by the action plan of the Memphis/Shelby County, quoted above. Finally, the strategy concerning the implementation of the sustainable development paradigm into the planning policies of medium-sized cities of the Italian regional context of Western Sicily, presented by Vinci and Cutaia, is in line with the PRF's statements.

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