# TeMA

The Times They Are a-Changin' and cities have to face challenges which may not be further postponed. The three issues of the 13th volume will collect articles concerning the challenges that cities are going to face in the immediate future, providing readings and interpretations of these phenomena and, mostly, methods, tools, technics and innovative practices (Climate proof cities, Zero consumption cities, Car Free cities, ...) oriented to gain and keep a new equilibrium between cities and new external agents.

# Journal of Land Use, Mobility and Environment

TeMA is the Journal of Land Use, Mobility and Environment and offers papers with a unified approach to planning, mobility and environmental sustainability. With ANVUR resolution of April 2020, TeMA journal and the articles published from 2016 are included in the A category of scientific journals. From 2015, the articles published on TeMA are included in the Core Collection of Web of Science. It is included in Sparc Europe Seal of Open Access Journals, and the Directory of Open Access Journals.



# TeMA Journal of Land Use, Mobility and Environment

## THE CITY CHALLENGES AND EXTERNAL AGENTS. METHODS, TOOLS AND BEST PRACTICES

1 (2020)

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The cover image is a photo of a street in the city of Naples during the COVID-19 pandemic quarantine (April 2020)

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THE CITY CHALLENGES AND EXTERNAL AGENTS. METHODS, TOOLS AND BEST PRACTICES

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TeMA Journal of Land Use Mobility and Environment 1 (2020)

#### EDITORIAL PREFACE: TEMA JOURNAL OF LAND USE MOBILITY AND ENVIRONMENT 1 (2020) THE CITY CHALLENGES AND EXTERNAL AGENTS. METHODS, TOOLS AND BEST PRACTICES

#### ROCCO PAPA

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The Times They Are a-Changin' and cities have to face challenges which may not be further postponed. In particular, six of these challenges to modify and/or adapt cities physical shape, facilities distribution and their organization as complex systems: climate changes effects, population aging, reduction of fossil-fuel energy consumptions, immigration flows from disadvantaged regions, technological innovation, and optimization of land use.

The three issues of the 13th volume will collect articles concerning the challenges that cities are going to face in the immediate future, providing readings and interpretations of these phenomena and, mostly, methods, tools, technics and innovative practices (defiantly defined as Climate proof cities, Zero consumption cities, Car Free cities, ...) oriented to gain and keep a new equilibrium between cities and new external agents.

For this issue, the section "Focus" contains one contribute. The article, titled "Accessibility Analysis for Healthcare Centers using Gravity Model and Geospatial Techniques" by Shanmathi Rekha R., Shayesta Wajid, Nisha Radhakrishnan, Samson Mathew (National Institute of Technology, India). The study is focused on the multi-specialty hospitals handling sudden trauma such as cardiac arrests, strokes, burns, accidents, and major illnesses that were considered and analyzed for the ease of access within the city. The spatial accessibility index is measured using the Modified Three-step Floating Catchment Area which incorporates emergency factors in addition to travel time in travel impedance function.

The paper addresses the section "Land Use, Mobility and Environment" are four articles.

The first article, titled "Analysis of commuting in Attica The Attica commuting network", by Maria Stefanouli, Serafeim Polyzos", by Maria Stefanouli, Serafeim Polyzos (University of Thessaly, Greece). This study analyzes the inter-regional commuting systems of the Attica Region in Greece, employing the approach of detection of complex network communities. In particular, in this paper, the administrative units of Attica are presented as a complex network, using the daily commuting as a criterion for the existence of a functional relationship and the identification of network communities (Functional Urban Areas). The conclusions reached are of special interest to urban planning and especially to Greece, as commuting in this country has not been studied yet extensively.

The second article, titled "Evaluating metropolises grow and their impact on the around villages using Object-Oriented Images. Analysis method by using Sentinel-2 and Landsat data", by Bahram Imania, Jafar Jafarzadehc (University of Mohaghegh Ardabili, Iran) and Farshid Sattarib (Universiti Teknologi Malaysia, Malaysia). This study proposed a landscape analysis, for the identification of best management strategies and as can be improved when the useful information on its changes is available over a wide period of time to assess the impact of the changes it has existed. The study tried to extract the changes in the selected villages of the Ardabil (Northwest of Iran) metropolitan area by using Landsat-7 and Sentinel-2 images.

The third article "How Italian metropolitan cities are dealing with the issue of climate change? The study cases of metropolitan cities of Bologna, Milan and Venice", by Walter Molinaro (University of Naples Federico II, Italy) deals with the issue of the role that the government of the metropolitan city can play within the environmental challenges. The proposed analysis of metropolitan cities and their planning tools has enabled the identification of virtuous case studies, which were found to be the ones of the Metropolitan Cities of Bologna, Milan, and Venice. Subsequently, the paper analyzes the actions that the three metropolitan cities developed. Precisely through this critical reading, it was possible to identify the best practices implemented.

The fourth article "Itinerario Cicloturistico Adda". A route between a variety of territories, landscapes and identities, by Fulvia Pinto and Andrea Fossati (Politecnico di Milano, Italy). The main objective of the research concerns the construction of a methodological tool to support the governance of the territory in the analysis and enhancement of the environment and the existing cycle network. The analysis and research developed through the comparison with other experiences with a focus on the intermodal dimension of mobility. The main result of the research is that it provided a homogeneous and systematic framework of the design solutions, in the knowledge that this type of project should be implemented in an incremental manner, acting in multiple directions, through coordination of action and governance.

In this circumstance, we have decided to talk about ourselves, contravening at a principle that we have always respected. We want to share with our readers the satisfaction for the confirmation of two choices that have inspired our work for the journal in these years. The first choice is related to the use of new communication and information technologies to create a scientific and international journal, aimed to collect and share the progress of the international scientific community in our disciplinary sectors, without limits due to spatial proximity, supporting open access science. Today this choice may seem obvious and unavoidable, but almost 15 years ago, when we started to develop the journal with this mission, it was a tough challenge and very insidious, especially in a country like Italy, where the promotion and the use of new technologies have always been delayed. The consolidated experience regarding the use of digital work for the editing of TeMA journal, by the use of the latest generation software and cutting-edge devices, has been extremely useful in this historical moment. So, despite the rigid lockdown related to the COVID-19 pandemic, we completed the editing process of the last issue of TeMA that we publish today on the informatic platform of the University of Naples Federico II, without changing our way of working. The second choice is related to the decision to have always considered the scientific quality as a priority of the journal before any form of compromise with other objectives more favourable to the promotion of the journal, to gain an adequate position in the scientific and editorial panorama of our scientific community. A confirmation on these choices comes from the recognition that Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR) has assigned to our Journal by inserting it in the small group (22) of journals that guarantee the maximum scientific guality of the articles published (A category of the scientific journal for our disciplinary sectors). This is an important recognition for the quality of the work of many people who have offered their skills, time, and commitment to this initiative, absolutely for free. Allow me to thank the international Editorial Board that played with authoritativeness a central role in the all phases, also during the scientific redirection of the contents of the journal. Secondly, I want to thank all the Editors that with their experience and patience have directed the authors of the articles to improve their work. I want to thank all the Authors that trusted and choose TeMA journal to check and spread the scientific advances that they have developed in these years. A final thanks to all the members of the Editorial Staff, those that are engaged in this difficult and demanding work today, but also to all those who in recent years have committed themselves to carry out this challenge and that today, for the most part, occupy roles of prestige in Italian and foreign universities or have tasks of great responsibility in public administration or private companies.