

TeMA

Journal of
Land Use, Mobility and Environment

Cities need to modify and/or adapt their urban form, the distribution and location of services and learn how to handle the increasing complexity to face the most pressing challenges of this century. The scientific community is working in order to minimise negative effects on the environment, social and economic issues and people's health. The three issues of the 14th volume will collect articles concerning the topics addressed in 2020 and also the effects on the urban areas related to the spread Covid-19 pandemic.

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.



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

Vol.14 n.1 April 2021

print ISSN 1970-9889 e-ISSN 1970-9870
University of Naples Federico II

TeMA

Journal of
Land Use, Mobility and Environment

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

1 (2021)

Published by

Laboratory of Land Use Mobility and Environment
DICEA - Department of Civil, Architectural and Environmental Engineering
University of Naples "Federico II"

TeMA is realized by CAB - Center for Libraries at "Federico II" University of Naples using Open Journal System

Editor-in-chief: Rocco Papa
print ISSN 1970-9889 | on line ISSN 1970-9870
Licence: Cancelleria del Tribunale di Napoli, n° 6 of 29/01/2008

Editorial correspondence

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The cover image by Huaisi Cen | 岑怀斯 (Pinterest).

TeMA. Journal of Land Use, Mobility and Environment offers researches, applications and contributions with a unified approach to planning and mobility and publishes original inter-disciplinary papers on the interaction of transport, land use and environment. Domains include: engineering, planning, modeling, behavior, economics, geography, regional science, sociology, architecture and design, network science and complex systems.

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EDITORIAL PREFACE: TEMA JOURNAL OF LAND USE MOBILITY AND ENVIRONMENT 1(2021)

The city challenges and external agents. Methods, tools and best practices

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Cities need to modify and/or adapt their urban form, the distribution and location of services and learn how to handle the increasing complexity to face the most pressing challenges of this century. On these topics and the ones born during the last year, the scientific community is working in order to minimize adverse effects on the environment, social and economic issues and people's health.

The three issues of the 14th volume will collect articles concerning with the effects of climate change, the ageing of the population, the reduction of energy consumptions from fossil fuels, immigration flows from disadvantaged regions, innovation technology, the optimization of land use and the impacts, in the short and long period, with innovative methods, tools, techniques and practices.

For this Issue, the section "Focus" contains two contributes. The first article of the section is titled "Fostering the climate-energy transition with an integrated approach" by Anna Codemo, Sara Favargiotti, Rossano Albatici (University of Trento, Italy). The paper deals with the well-known topic of climate change and investigates the relationship between adaptation and mitigation strategies in order to evaluate the possibility of combining them in planning policies and design practices. The proposed case study is the Hammerby Siostadt district in Stockholm that could be a significant example also by considering the policies that the City of Stockholm has implemented since 1976, with the adoption of the first environmental program and the development of the policy of adaptation and mitigation.

The second article, titled "Project suggestions for post-earthquake interventions in Italy" by Maria Angela Bedini, Giovanni Marinelli (Polytechnic University of Marche, Italy), focuses on the objective resettlement in the areas of origin of the displaced population. The study aims at providing a set of practical suggestions to make it possible for the population to lead an acceptable "coexistence" with the seismic risk in the high hilly and mountainous areas. This paper also highlights some contents of the current implementation of urban plans (SUM Minimum Urban Structures), which are meant to serve as a dynamic tool for reviving fragile areas.

Two papers address the section "LUME" (Land Use, Mobility and Environment). The first, titled "Congestion toll pricing and commercial land-use: clients' and vendors' perspective", by Mahmoud Saffarzadeh, Hamid Mirzahosseini, Ebrahim Amir (Tarbiat Modares University, Iran). The paper investigates the effects of the Tehran congestion toll pricing (CTP) on commercial land uses (CLUs) by examining the clients' behaviour in these business applications concerning the price increase. In the case study of Tehran metropolis, Iran's capital, which has experienced congestion pricing for more than four decades, both clients and vendors' viewpoints were modelled using discrete choice models.

The second article, titled "Recycled aggregates in constructions. A case of Circular Economy in Sardinia (Italy)" by Ginevra Balletto, Giuseppe Borruso, Giovanni Mei, Alessandra Milesi (University of Cagliari, Italy). The paper highlights a theoretical framework for the circular economy, adapting a model of the industrial location to the construction of the Cagliari stadium. Authors build a georeferenced database of activities related to the extraction, processing, and disposal of materials related to construction due to the MEISAR Project. Findings show that the demolition and reconstruction of the Cagliari stadium for the way it was

designed will activate a circular economy process, which will develop between five sub-circular clusters of the city of Cagliari based on the use of recycled aggregates.

The section "Covid-19 vs City-19" collects one publication.

The article titled "Bicycle and urban design. A lesson from Covid-19" by Nicolò Fenu (University of Cagliari, Italy), questions: what is the role of mobility for society and the design of our cities? What is the role of sustainable mobility, of using bicycles addressing the Covid-19 emergency? During and after this emergency, the use of the bicycle can give answers addressing urban quality, liveability for spaces in our cities. The research studies the urban policies of 5 cities: Barcelona, Bogota, Brussels, Milan and Paris and analyses the measures implemented during the first lockdown, from February 2020 to May 2020.

The new Review Notes section propose four insights on the themes of the TeMA Journal.

The first research "Ecological transition: which transactions?" is by Carmen Guida and Federica Natale. This contribution aims at defining the definition and intervention domain of ecological transition. The outbreak of a novel coronavirus and consequent health, economic and social crisis leads to a new era: significant financial resources, plenty room for economic maneuvers may turn the ongoing pandemic into an opportunity, for the following years, to build more sustainable societies and environments. Within this scenario, urban areas play an essential role, as proved in the second paragraph with the support of interesting scientific publications reviewed in the Urban Planning Literature review section of Review Notes. The second research "Strategies and guidelines for urban sustainability: The impacts of the Covid-19 on energy systems" is by Federica Gaglione. The contribution highlights how the Covid-19 pandemic has a substantial impact on energy systems around the world and on all components of the urban system, for instance on the mobility system and built environment. Furthermore, the review underlines that in this pandemic scenario, the issue of energy has become the focus of discussions by the scientific community and the European Commission. In this direction, the latest documents issued by the European Commission on energy before and after the Covid-19 crisis are analysed with the aim of identifying the priorities and strategies aimed at both reducing energy consumption and improving it in the various territorial contexts.

The third research "Toward greener and pandemic-proof cities? Italian cities policy responses to Covid-19 pandemic" by Gennaro Angiello. The section provides an overview of the policies and initiatives undertaken by three major North American cities in response to the Covid-19 outbreak: New York City (US), Mexico City (MX) and Montreal (CA). Based on this overview, a cross-city analysis is employed to derive a taxonomy of urban policy measures. The article concludes with a discussion on the effectiveness of such measures in providing answers to epidemic threats in urban areas while, at the same time, improving the sustainability and resilience of urban communities.

The last research "Citizen science and urban development" is by Stefano Franco. The section tackles the issue of citizen science, a new data collection methodology for research project that generates sustainability benefits, and that is recently finding applications in urban context to solve social and environmental issues while providing useful information that can be also used to develop urban plans.