TeMA

There are a number of different future-city visions being developed around the world at the moment: one of them is Smart Cities: ICT and big data availability may contribute to better understand and plan the city, improving efficiency, equity and quality of life. But these visions of utopia need an urgent reality check: this is one of the future challenges that Smart Cities have to face.

SOCIO-ECONOMIC CHANGES IN ADVANCED SOCIETIES

TeMA

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3 (2016)

Cover Image: The High Line, New York.

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SOCIO-ECONOMIC CHANGES IN ADAVANCED SOCIETIES
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Gennaro Angiello, Gerardo Carpentieri,
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Land Use, Mobility and Environment

EDITORIAL PREFACE:

THE URBAN TRANSITION CHANGES IN PROGRESS

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1 INTRODUCTION

Between 1960 and 2015, World urban population rose by about three billion. Its daily increase, in these 55 years, was about 150,000 inhabitants. In part this rise was the effect of demographic growth within the cities themselves. For the main part it was, however, the consequence of migration from the rural world; the greatest migration ever seen in the history of mankind. This urban transition started two centuries ago, after some millennia of stability of the cities' inhabitants between 5 and 10 percent of total population or very slow rise (Bairoch, 1988, p. 495; Vries De, 1984, p. 349). Then, from 1800 onward, the urban transition began in some western European countries. It was the *first wave* of modern urbanisation.

In 1900, when World urbanisation rate was about 15 percent, the bulk of the urban inhabitants lived in western Europe. From then on a *second wave* of urban transition began and involved primarily western European offshoots, that is north America and Oceania.

The pace of urban growth, however, rose especially after the Second World War, when the rate of increase of urban inhabitants overtook by about 1 percent the already fast rise in global population. While earlier high rates of urbanisation growth were only typical of rich countries, during this *third wave* the highest rates were registered by Asia and Africa (Satterthwaite, 2005). In both continents the urban growth was by far faster than the capacity of local institutions to cope with it. The environmental decay of many mega-cities around the Globe is the visible consequence (Henderson, 2002).

2 URBANISATION AND GROWTH

The great migration from rural to urban world depends, first of all, on the process of modern growth and the structural change taking place with it. Given the low elasticity of the demand of agricultural goods to income, the rise in agricultural productivity must necessarily be followed by the diversion of population from the countryside toward the cities. A flow of workers is pulled toward the cities by the urban-rural differential in wages, that is the differential between better-paid work in industry in comparison with those in agriculture. Whenever we contrast the urbanisation rate of about 200 states around the World with their levels of per capita GDP, we see that a robust relationship exists (Figure 1). The level of per capita GDP explains 58 percent of the process of urbanisation. We also see that the relationship is not linear (Henderson, 2010). The urbanisation rate suddenly increases whenever income per capita rises from the level of absolute poverty to

about 15,000 dollars (international 2005 dollars PPP), that is during the industrial phase of modern growth. From then on, with the end of the industrial growth and the development of the tertiary sector, the speed diminishes remarkably.
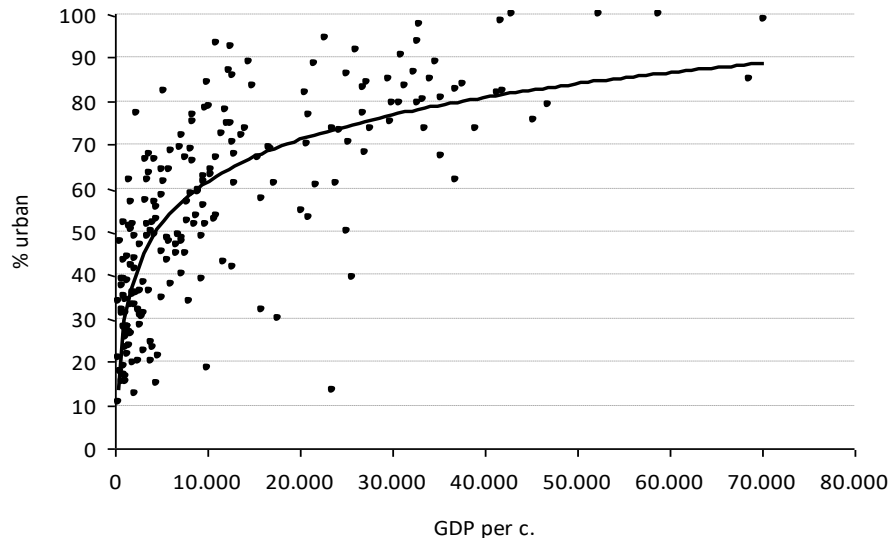
The values of the log equation are: urbanisation= – 68.383+14.079Ln(per c. GDP) (R2 = 0.58). We see in the graph that some nations registered in 2010 an urbanisation rate of 100 percent. This level is reached by particular countries such as Hong-Kong or Singapore, where city and state coincide.

Fig. 1 Urbanisation rate as a function of per capita GDP (in 2005 international dollars PPP) in 2010.

3   CONVERGENCE IN URBANISATION

Urbanisation is still in progress. In the five years from 2005 until 2010, global urban population overcame rural population. Between 2000 and 2015 the urban rate of growth was still higher than population rise by about 1 percent; such as in the earlier decades. In 2015 World urbanisation rate was 54 percent. At the time the highest urbanisation rates were still those of the high and middle income countries of the World. In Europe, northern America, Latin America and Oceania, urbanisation rates were comprised between 73 and 83 percent. Asia and Africa still lagged behind, with urban percentages of 40-45, but with rates of increase still dangerously high (Demographia, 2016; Glaeser, 2014). Urban transition involves not only developing, but also poor countries, wherever a reservoir of workforce with productivity near zero exists in the rural world. "Urbanisation without growth" is not so uncommon nowadays, especially in Africa (Fay, Opal, 2000).

The existence of urban convergence within the process of urbanisation is represented in Figure 2, where the rate of growth in urbanisation between 1960 and 2014 is a function of the level of urbanisation in 1960 (in log). We see that between the variables a robust relationship exists and that the coefficient of the independent variable is negative (as expected, whenever a process of convergence exists). The higher the urbanisation in 1960, the lower the probability of rising further. If a first comer (such as a nation on the right side of the graph) is proceeding slower, as in this case, it will be necessarily reached by the followers. Since the process of urbanisation can not overtake 100 percent, as soon as the process approaches this ceiling its intensity must necessarily slow down and finally stop.
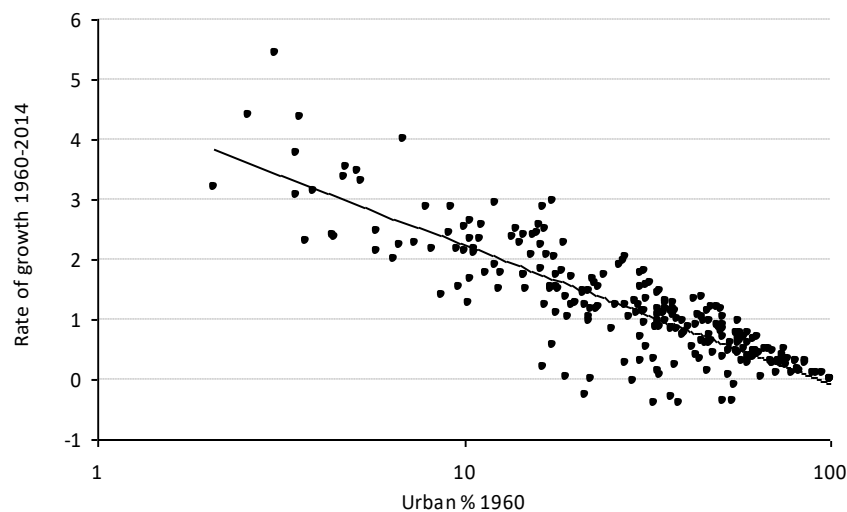
The values of the log equation are: rate = 4.5579 -1.006Ln(level)(R2 = 0.73).

Fig. 2 The inverse relationship on the World scale between the level of urbanisation in 1960 (in log on the horizonal axis)
and the yearly rate of growth of urbanisation in 1960-2014 (percent).

4   FUTURE DEVELOPMENTS

The United Nations forecast an urbanisation rate of 60 percent in 2030 and 66 percent at the middle of this century (United Nations, 2014). Trying to project farther in the future such a forecast, we could reach the conclusion that World urbanisation will be equal to 100 percent by the end of our century. World's inhabitants would be only urban at the time. Naturally the perspective is not realistic! Probably the level of urbanisation of the already advanced World economies, that is 70-80 percent, will not be overtaken by future World averages. Modern growth and modern urbanisation, two interdependent developments, have been underpinned by the great migration from the rural to the urban world. This migration has been among the main supports of the industrialising economies, allowing them to exploit the unlimited supply of labour entering every day the cities (Lewis, 1954). Progressing economies, such as China and India, are still fed by rural-urban migration. This process will still last some decades. The rural reservoir, however, is emptying! During the last two centuries the diversion from the rural to the urban world was one or the main drivers of modern growth. This long phase allowed a continuous formation of a reserve army for industry and contributed, as a consequence, to keep wages relatively low in the phase of industrial development. Present advanced countries can not rely on the reservoir of low paid workforce any longer and have to progress without; ordinarily through innovations in technology and organisation able to replace workers. In a matter of decades it will be the time of low-middle income countries such as China and India to follow the same path of the first comers in the West.

5   WITHIN THE CITIES

All these current and future global trends of urbanization determine social, economic and spatial modifications within city structure. In this perspective, studies aimed at providing solutions for reducing the adverse effects and strengthening the benefits of these changes are required in order to increase the ability of urban areas to effectively adapt to these challenges and, at the same time, improve the quality of life of their citizens.

This issue of TeMA Journal focuses on the effects of socio-economic dynamics on the city organization and way of living. In detail, the issue includes five papers present a different set of topics in this regard.

The first article, titled "Rebranding a District: the Breiðholt Project in Reykjavik" explores how the community of Breiðholt, a neighbourhood of Reykjavik, is being transformed from a disadvantaged suburb, characterised

as a 'ghetto', into a thriving community where citizens play a central role in decision-making. It presents the outcomes of a fieldwork experience, undertaken in Breiðholt as part of COST Action's Winter Training School, focused on the drivers behind, actions, and benefits of the Breiðholt Project and the Breiðholt Congress. In making recommendations for the Project and Congress, and other community-based initiatives, this paper encourages the sharing of best practices among different departments of the city, and to better utilize bridge makers (key stakeholders/community leaders) to build trust through face-to-face interactions with citizens.

The second article, titled "Harnessing the opportunities of austerity: a detailed mapping of the Greek transportation sector", focuses on the impacts of the Greek crisis and following austerity measures on the Greek transportation sector. It focuses besides, on opportunities and positive potentialities for this sector that may arise also as a result of the crisis. Hence, the paper is structured in two parts, where the first is devoted to the impacts while the second on the opportunities and positive potentialities. On the bases of the indicators taken into account, authors underline how the worst effects of the economic crisis and regulations have ended and that the transport sector in Greece has started to recover slowly considering that crisis can act as accelerator of processes and performance that can improve the transport system.

The third article, titled "The distribution of public services from the perspective of sustainable spatial equality in the Tabriz Metropolitan in Iran", aims at ranking decuple regions of Tabriz in terms of the distribution of the municipal services using three different methods (capitation, accessibility and residents' idea) and action priorities for each region have been presented. The results indicate an inequality in the distribution of the public services to the population (capitation) and the residents' accessibility and demand. The data on the public services in Tabriz are incompatible with the standard use capitation and accessibility of the services. Moreover, inequality is evident in the various regions of Tabriz in terms of the residents' capitation, accessibility and satisfaction.

The fourth article, titled "Waterfront and urban regeneration", investigates about the strength of water as driving force for redevelopment and urban regeneration of a city-port. The line of contact between the water and the city forms the waterfront, a sort of permeable urban surface where the link with water is able to conjugate different ways to live this special bond. For this reason, the waterfront can be considered a new way to watch the city, a sort of inspiration's source for its future assets. To investigate these premises are analysed the Mediterranean cities of Marseille, Valencia and Barcelona. For the city of Genoa, the research brings from a debate among different actors (University, Planning Section of the Municipality, Port Authority) and deepens some future proposals which underline the different meanings of the relationship with water in the west area of city (Prà-Voltri).

The fifth article, titled "Study of Possibility of Planning the Successful Neighborhood Center in Ostadsara Neighborhood of Rasht with an Emphasis on New Urbanism Principles", aims at evaluating and analysing the Ostadsara neighborhood in the Iran city of Rasht by assessing the concept of neighborhood and neighborhood centers and identification of inefficiency causes according to the new urbanism principles. The paper refer to historical and descriptive-analytic research methods to describe the social and environmental condition by providing data collected through accurate library researches, using documents, observation, field studies, questionnaires and interview. The authors attempt to discuss appropriate strategies and suggestions for changing the mentioned neighborhood into a desirable and prosperous one by providing, for instance an appropriate ground for attracting inhabitants' cooperation, local needs of the residents or improving the sense of place considering neighborhood's historical identity.

The section "Review Pages" defines the general framework of the issue's theme, with an updated focus on websites, publications, laws, urban practices and news and events on the subject of energy reduction consumption in the transport sector. In particular the Web section by Maria Rosa Tremiterra describes three web resources: i) the Urban Transformations portal; ii) the UCLG – CISDP website and iii) the Sustainable

Cities Platform. The Books section by Gerardo Carpentieri briefly reviews three relevant books related to the Issues' theme: i) "Urbanization and development: emerging Futures"; ii) "Socio-economic inclusion of migrant EU workers in 4 cities" and iii) "Metropolitan Areas and Smart Governance. Successful Initiatives and Critical Aspects towards Smart City". The Law section by Laura Russo keeps readers up to date with recent European and Italian strategies for the promotion of the digital culture. The Urban Practices section by Gennaro Angiello presents two relevant case studies of sustainable city logistic solutions: i) The Manchester study case and ii) the New York study case. Finally, the News and Event section by Andrea Tulisi reports on five conferences related to the Issue's theme that will be held in 2017.

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IMAGE SOURCES

Fig. 1, 2: World Bank, World Development Indicators (2016).

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"Alone we can do so little; *together* we can do so *much*"

-Helen Keller.

Hjálpumst að og göngum frá eftir okkur
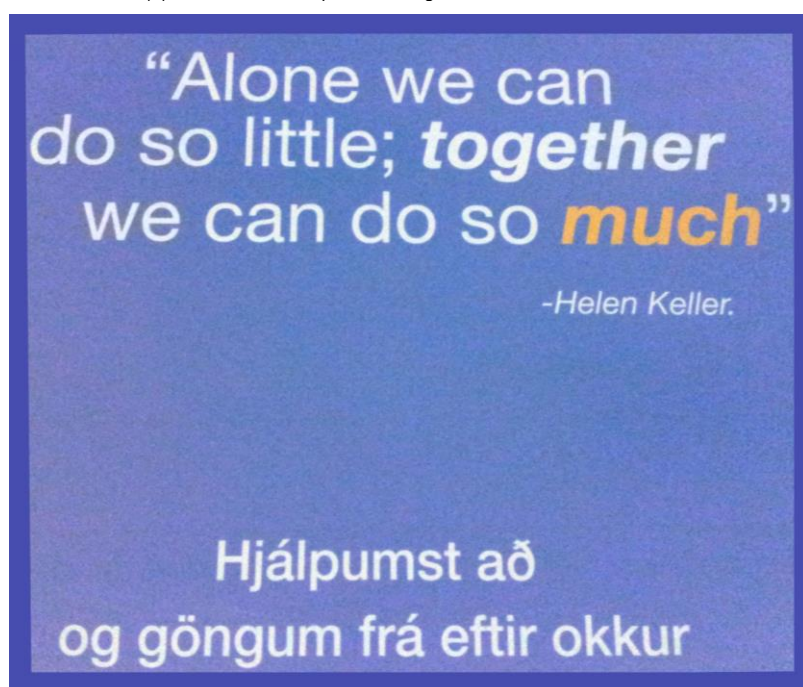
REBRANDING A DISTRICT: THE BREIÐHOLT PROJECT IN REYKJAVIK

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ABSTRACT

Cities have gained increasing attention from government, researchers, and industry. The focus upon smarter and more efficient cities is important, but incomplete. Against this backdrop, COST Action builds on a European Science Foundation exploratory workshop on the emerging theme of smart and liveable cities. COST Action's framework for People Friendly Cities in a Data Rich World acknowledges that the city is largely the product of top-down expertise, and a process in which the citizen plays a marginal role. Despite this top-down approach, citizens have had to build personal and collective biographies from the infrastructure of the city. This paper explores how the community of Breiðholt, Reykjavik, is being transformed from a disadvantaged suburb, characterised as a 'ghetto', into a thriving community where citizens play a central role in decision-making. This paper presents the outcomes of a fieldwork experience, undertaken in Breiðholt as part of COST Action's Winter Training School, focused on the drivers behind, actions, and benefits of the Breiðholt Project and the Breiðholt Congress. In making recommendations for the Project and Congress, and other community-based initiatives, this paper encourages the sharing of best practices among different departments of the city, and to better utilise bridge makers (key stakeholders/community leaders) to build trust through face-to-face interactions with citizens.

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"Alone we can do so little; *together* we can do so *much*"
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Hjálpumst að og göngum frá eftir okkur

地区再塑：
雷克雅未克BREIÐHOLT项目

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摘要

政府、科研人员和工业部门越来越关注城市状况。关注智能高效的城市很重要，但还不够全面。以此为背景，COST行动依赖于欧盟科学基金会探索研讨会，研究智能宜居城市的这一新兴课题。COST行动中信息丰富世界的人民友好城市框架认为城市主要是专业指示自上而下发展的产物，普通市民在对其发展所起的作用并不重要。但在这一自上而下的发展模式中，普通市民在城市的基础建设中留下了个和集体的印记。本文将探索雷克雅未克Breiðholt社区是如何从一个生活条件差、被视为贫民窟的郊区发展成欣欣向荣且市民在决策中发挥核心作用的社区。本文将列举在Breiðholt进行的作为COST行动冬季培训学校部分的现场工作成果，重点关注其背后驱动力、行动和Breiðholt项目以及Breiðholt议会的益处。除了为该项目及议会和其他以社区为基础的新方案提供建议，本文还鼓励城市不同部门分享最佳实践，更好地利用桥梁制造者（关键利益相关者/社区领导人），通过与市民面对面互动建立信任。

关键词：
Breiðholt，人民友好城市，地方营造，公共参与，智慧城市

1   INTRODUCTION

This paper arises from a research experience developed within the framework of COST Action TU1204 "People Friendly Cities in a Data Rich World", which started in 2013 and gathers researchers from across Europe (see COST 2012). The COST Action arose from the awareness that cities have gained increasing attention from government, researchers, and industry (see also Villanueva-Rosales et al., 2015). Many of the initiatives focus upon the efficient use of resources and carbon reduction in response to climate change, such as Europe 2020 and the European Covenant of Mayors commitment to energy efficiency. The "Smart City" concept offers a similar, if somewhat broader, vision of a more efficient city (Washburn et al., 2009). It is important for cities to be sustainable and pleasant to live in (Evans, 2002). The focus upon smarter and more efficient cities is important, but incomplete (Hollands, 2008). Against this background, COST Action builds on a European Science Foundation exploratory workshop on the emerging theme of smart and liveable cities. Supported by a European network of candidate cities, COST Action co-ordinates a transdisciplinary network of experts and non-experts that investigate the alignment of the hardware and software of a city with user needs to promote wellbeing, good health, and the sustainable use of resources, within an evolving people-centred consultation framework for economic, cultural, and political development (COST, 2012). People Friendly Cities in a Data Rich World acknowledges that the city is largely the product of top-down expertise, and a process in which the citizen plays a marginal role. Despite this top-down approach, citizens have had to build personal and collective biographies from the infrastructure of the city.

Through COST Action, a training school "Co-creating Urban spaces" was held in Reykjavik, Iceland, in March-April 2016. The school was structured with lectures from local and international experts, practitioners and academics, self-directed case study research with fieldwork in the Breiðholt district of Reykjavik (see Wilkinson, 2016 for an overview). The training school provided participants with the opportunity to explore why and how the community of Breiðholt is being transformed from a disadvantaged suburb into a thriving community. This paper presents the outcomes of one of the fieldwork experiences undertaken by the named authors, focused on the Breiðholt Project and the Breiðholt Congress. Specifically, the background and context for the development of the Breiðholt Project, the drivers behind the Project, the functionalities used and the specific outcomes are analysed herein. As regards the Breiðholt Congress, the public participation action of the Congress, its political context, and applicability are considered. Finally, recommendations are provided for further development of the Project and the Congress, both for Breiðholt and for these methods of public participation more generally.

First, to better understand the framework of the Breiðholt Project, an overview of the Icelandic socio-economic context is provided, with a focus on the economic crisis that led to political changes and to new bottom-up approaches in decision-making, and the context of immigration. Then the Breiðholt Project is presented, with a focus on the key questions that guided this research project: What were the drivers behind the decision to start the Breiðholt Project? What specific actions have been taken within the project? What are the benefits (both for citizens and the public actors involved)? Further, the Breiðholt Congress, as part of the Breiðholt Project, is analysed answering questions of: Why was the Congress initiated? What are the benefits of the Breiðholt Congress? What have been the main challenges of the Breiðholt Congress? To answer those question, both primary and secondary data collection methods were used. Primary data collection involved conducting informal interviews with key stakeholders involved in the Breiðholt Project and Congress.

Secondary data collection involved consulting a range of media and documents relating to the Project and Congress.

2   THE ICELANDIC SOCIO-ECONOMIC CONTEXT: AN OVERVIEW

The specific Icelandic socio-economic context gave a great input to the development of Breidholt project, and therefore it is here briefly described. As a matter of fact, The Breiðholt Project was developed in response to immigration issues that characterised the Breiðholt district in Reykjavik and within a political context that arose after the 2008 financial crisis. In the last decade, the interest in public engagement tools and processes expanded rapidly in Iceland, as a response to the deep economic crisis. Currently, Iceland, and the Breiðholt district in Reykjavik in particular, is facing a revival centred on participatory working between the City Council and citizens. The scientific community will find this an interesting project as it exposes new knowledge about co-creation within a district, and the development of new toolsets for addressing technological, social, cultural and economic urban challenges in an interdisciplinary, people-centred manner. Such learning can be applied to other case studies in urban, suburban and rural contexts. Below is a brief history of how Iceland found itself in the current situation.

The Icelandic financial system collapsed in October 2008, when Iceland's three major private banks were taken into government administration (see Danielsson and Zoega, 2009). The failure of the banking sector, which was several times larger than the entire Icelandic economy, along with the rapid depreciation of Icelandic currency caused an unprecedented economic and financial crisis (Vaiman et al., 2010). Unemployment tripled, and subsequently citizens held distrust towards politics. On 20th January 2009, protests intensified into riots with the use of pots and pans, leading local press to label the event the 'Kitchenware Revolution' (Baruchello, 2014). Subsequently, in February 2009, the government resigned. The traditional political parties underwent a deep crisis, and in response public participation methods and processes started to gain value and power. A parliamentary election was held in Iceland on 25th April 2009, following strong pressure from the public. The Social Democratic Alliance and the Left-Green Movement gained overall majority of seats in the Althing (Iceland's parliament). Reykjavik municipal elections were held in May 2010, and the Best Party, led by comedian Jón Gnarr, won.

Immigration in Iceland is considered a major issue, even if it cannot be compared with immigration in other European contexts where immigration fluxes are more significant, cities are more complex, and social exclusion is more widespread and rooted in communities (Skaptadóttir, 2011). In terms of national background and religious affiliations, the population of Iceland remained relatively homogeneous until around the last decade of the 20th century. In 1996, the number of immigrants accounted for approximately 2% of Iceland's population and a large percentage of these immigrants came from other Nordic countries (Skaptadóttir, 2011). The percentage of immigrants increased markedly after May 2006, when people from the new member states of the European Union no longer needed to secure work permits to enter Iceland. In 2007, the number of Poles in Iceland rose from 3221 to 5996, and 73% of these Polish citizens were men. After 2006, immigrants became a more visible part of Icelandic society. Icelanders criticised the immigrants' apparent lack of desire to learn Icelandic, despite a deficit of language courses and material available to immigrants (Skaptadottir, 2011). The collapse of Iceland's financial infrastructure and economy had negative implications for immigrants, as many were hired to work in fish factories or construction projects that were forced to make staffing cuts or to close (Skaptadottir, 2011).

2.1 THE BREIÐHOLT DISTRICT IN REYKJAVÍK

The city of Reykjavík is divided into six service districts and ten neighbourhoods. Breiðholt is one of the districts: it is located in the southern suburbs of the city and is coordinated by a local council. Breiðholt was originally a small village; from the end of World War II to 1960, the population of Reykjavik grew from 46,578 to 72,270, and in 1965 Breiðholt was mostly an outer boundary to the inhabited areas of Reykjavik.

Fig. 1 Map of the city of Reykjavik with the location of the Breiðholt district insert

During the 1960s, Reykjavík underwent an unprecedented boom, and in 1962 the city began to implement zoning plans. Due to population pressure, development plans were published for Breiðholt in 1966 in the hills east of the city, with the idea of building single-family houses and low-priced apartments mixed together (Conolly and Whelan, 2012). Breiðholt was divided into three smaller neighbourhoods. The first part (lower-Breiðholt), was established between 1966-1973, the second in 1980, and the third in 1985. In 1999, Breiðholt was the highest populated area in Reykjavik with 22,030 inhabitants, but as of 2012 the population had fallen to 20,546 (Statistics Iceland, nd).
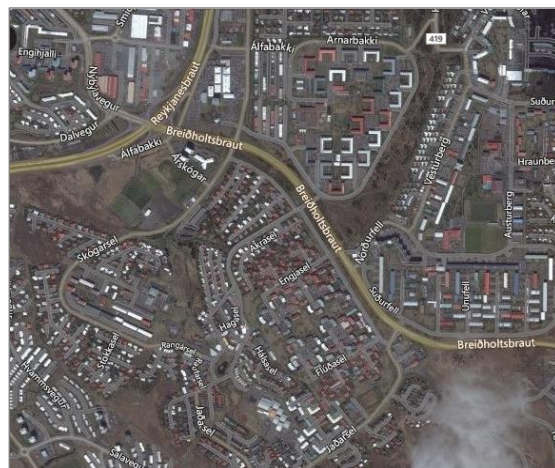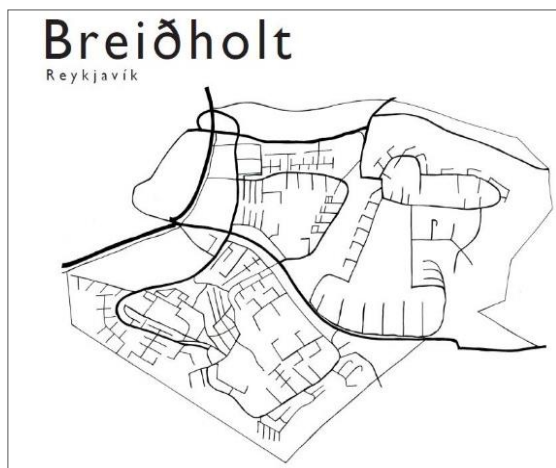
Fig. 2-3 The structure of the Breiðholt district (on the left) and arial view of the Breiðholt district (on the right)

Breiðholt is a multicultural district, and is uniquely diverse within the national context, both with regards to income dispersion and nationalities of its inhabitants. The neighbourhood has over 21,000 inhabitants (approximately 17% of Reykjavík inhabitants), of which 3,700 are immigrants (Iceland Review, 2015). Breiðholt has the highest proportion of low income households and immigrants in Reykjavik. For instance, 5% of its population emigrated from Poland; 80% of children in Ösp kindergarten do not speak Icelandic as a first language; 25% of families in one neighbourhood are immigrants, and long-term residence of families is characteristic. The age pyramid is even, and there is a mixed social and educational standing. Issues of language and social exclusion have been prevalent since the establishment of the neighbourhood in the late

70s. Unemployment in Breiðholt is higher than in the other districts and media discussions concerning Breiðholt have been predominantly negative.

3   THE BREIÐHOLT PROJECT

Reykjavik has, in recent years, placed emphasis on various projects and programs to counter stigmatisation in Breiðholt caused by negative associations, and to mitigate local challenges. One such program is the Breiðholt Project, which was decided upon by Reykjavik City Council in 2011, with the Project commencing early 2012.

Iceland is one of the most digitally connected countries (almost 98% of people have access to Internet in their homes), and various options of interaction between public bodies and citizens' groups are offered in Reykjavik to connect people together to participate in democracy, politics and civic life (e.g. the online forum Better Reykjavik and the e-deliberation platform/consultation forum Better Neighborhoods, described in Boijc et al., 2016). Within this framework, the Breiðholt Project gathers different initiatives adopted by the Breiðholt district council to improve its citizens' quality of life and to increase civic life. The Breiðholt Project widely used classic public participation and collaborative design methods (for the state of art on those topics, see the wide literature and the many case studies available, i.a., Sanoff, 2000; Slocum, 2005). But, in Breidholt, those public engagement tools were applied in a very holistic way, involving also new media and giving a great emphasis on the social aspects.

The Breiðholt Project involved broad and interdisciplinary cooperation between different city agencies in Breiðholt, and had an annual budget of approximately €70,000 (approximately €3 per inhabitant per year). The objective of the Project was to make city services within Breiðholt more holistic, focused and coordinated for added benefit to neighbourhood citizens, and to find ways to use city resources more efficiently. A local manager of Breiðholt district, Mr. Óskar D. Olafson, was appointed in 2012, and led the Breiðholt Project. The Breiðholt Project makes an interesting case study as it reveals a novel approach to public engagement in urban development, and for increasing social cohesion. It stands apart from other such case studies because it has measurable outcomes in terms of community engagement and resultant political participation. As such, much can be learnt from this case study within the scientific community.

3.1 DRIVERS BEHIND THE BREIÐHOLT PROJECT

Why go further for Breiðholt and develop a rebranding project? Breiðholt has high levels of poverty, social exclusion and immigration, and low levels of education. A change was needed because education provision was in great need of improvement. Health and social wellbeing glues society together, adapting to post-modern plurality. Furthermore, the general condition of the neighbourhood was in need of revitalisation. It was hoped that this would lead to increased shops, and therefore the creation of more jobs. In addition to this, this proposed change in Breiðholt was reflective of a dynamic shift in society towards constant place-making (see Sampson and Gifford, 2010; Pierce et al., 2011). Complementing this, it is a policy of the country to get people to work together more, in a democratic way. Three key values were at the core of the Project: Empowerment; Integration; and Innovation. Importantly, these were not only for, but also with the citizens. Within the National context of economic crisis (as described earlier, Iceland was affected by a deep economic collapse in 2008), a new democratic and bottom-up political approach arose in Iceland, and Breiðholt citizens felt: "now it's our turn to get a makeover". The plan to develop the Breiðholt Project was led by the Mayor, top officials and members of the local committee. A position was advertised for a local manager, and Mr. Óskar D. Olafson was hired to implement the plan. The city government had an open forum where they consulted people – but only in certain areas. From the meeting they took forward many ideas from citizens.

3.2 THE BREIÐHOLT PROJECT: ACTIONS

The main actions for the Breiðholt Project were to make a plan, and to ask people what image they had of their community. Focus groups were held, which were concerned with what people 'thought of' Breiðholt, and revealed that people did not hold a strong positive image of the district. Breiðholt was "rough" and was not represented positively in the media. Re-branding Breiðholt was a PR plan, where a company was hired to advise on, and to measure, the Breiðholt image. Ideas were gathered from different projects internationally. Meetings were held where city officials attempted to encourage people to "buy into" the re-branding. Although such strategies were used, many people were already motivated, as they thought it would be a positive experience to work together more. A seminar was held by Reykjavik University on System Leadership, where a project was created about children. Interviews were conducted with the aim of fostering various ideas for community projects in order to overcome different social issues.

Seminars were also held for managers, who were trained to send positive news to the media. This was then 'pushed out' onto social media. Furthermore, the Police of Reykjavik were consulted, and have since been internationally awarded for their use of Facebook (see Iceland Review, 2012), in part because they reply to every comment. Although Óskar was advised by lawyers not to use Facebook (because one 'bad' comment could lead to them being sued) he followed the advice of the Mayor and the police, and began to use a Facebook page. Facebook is now used in Breiðholt to broadcast news and represent an active media for constructive comments and information flow on various neighborhood topics. There are two pages; one is a 'like' only page. The other Facebook page is a page created by a citizen organization where people can comment and post material. That page started a couple of years ago with a few hundred members. Today it represents a communication pathway between the public bodies and their citizens with more than 5000 members, and where Breiðholt citizens can bring practical and fun ideas or suggestions that potentially can improve the quality of the neighborhood (see Bojica et al, 2016).

These pages were initially consumed with negativity, and began to regurgitate the negative image of Breiðholt at that time (e.g. negative remarks about neighborhood shortcomings). However, by not overly controlling content, and by assuming a stance of asking people to talk nicely, the Facebook page is one of the most positive engagement mediums that the Project has used. The media monitor the Facebook page and take positive (and occasionally negative) news from the page.

Fig. 4-5 The Breiðholt (on the left) an the Breiðholt Facebook Page (on the right)

A key focus of the Breiðholt Project is Gerðuberg, and the use of existing facilities and people to provide new services. Integral to this was the Culture Centre: a multifunctional facility for citizens, which hosts a library, activities for elderly people, sewing and carpentry laboratories and spaces for numerous activities organised by citizens. Through an initiative called Education Now, Icelandic courses were created, held at this building. This comprised of Icelandic and Leadership training for women. A further example is how the Kindergarten is used after hours for information-sharing surrounding bank loans and housing. The Elementary School is also used by parents to teach their children their mother tongue. An environment was created that could be

accessed independently. The courses are free, and there is an attitude of "here's the key, you can use it", which is helping people in the community to learn.

Fig. 6-7 The Culture Centre of Gerðuberg in Breiðholt (on the left) and activities to engage the immigrants in Breiðholt (on the right)

3.3 THE BREIÐHOLT PROJECT: ACTIONS

There are a number of benefits to actors. First, people have been asked 'how do you feel?', thus giving them voice. Feedback from citizens is that they have opportunities to do things that they cannot do at home, and these activities are mostly free. Óskar communicated with capitalists in the neighbourhood, and they are happy because they have been investing money into property and prices are now rising more than anticipated. Citizens are positive about the services being provided. Overall, the benefits include: empowerment; integration; and innovation – both for, and importantly with, the citizens. Staff have noticed different attitudes, both displayed in the media and in daily engagement with citizens using the different services. There is a reported increased sense of community amongst Breiðholt residents. This has been evidenced through the pleasure that people have gained through participating in the various projects; the third sector is more active within the community; and, for the first time, the local committee has created a policy for the district. Further positive outcomes include that fewer people are in need of financial support; reading skills have increased; small centres are being revived; and citizens of Breiðholt are amongst the most active in voting on neighbourhood projects. However, there is a problem: how can we better integrate immigrants into Breiðholt?

4   THE BREIÐHOLT CONGRESS

Since an initial meeting in 2011, there have been efforts to hold a bi-annual Congress in Breiðholt. The Congress is interesting to focus on, as it is an open platform for the citizens of Breiðholt to influence the development of their neighbourhood. Participants are comprised of citizens and representatives of the city policy and planning departments. The Congress has the form of an open meeting, with presentations and workshop sessions focussing on specific issues and challenges. Citizens and city officials work together in workshop groups, giving citizens first-hand access to communication with the decision-making actors of the city, as well as direct impact on strategies and action plans for their neighbourhood. Discussions between delegates focus on a number of themes, including: parents and schools; planning; environmental issues and services; and preventative grassroots work.

Breiðholt officials wanted to turn this meeting around to involve citizens – this is an old-fashioned City Council meeting, but using innovative public participation approaches, like the the world café method. The world cafè is a collaborative design process in which a café ambiance is created and participants discuss a question or

issue in small groups around the café tables (for further information on the world cafè method see, i.a., Prewitt, 2011 and The World Cafè Community Foundation, 2015). Furthermore, in the Breiðholt Congress exhibitions are displayed showcasing examples of good practice, and people are encouraged to attend and participate. The level of attendance at the Congress fluctuates, but higher turnout is typical when the Mayor/politicians are due to attend, as opposed to just managers and citizens. The outcome/results of the Congress are posted on social media, and surveys are used to test ideas and to seek input. Annually, new residents in Breiðholt receive a posted letter in English and Icelandic telling them about the services they are entitled to, and how they can get involved in the Congress.

The Breiðholt Congress does not make demands, but asks how officials can work better with residents. Initially people contributed with statements such as "we want better paths", and "we want better swimming pools". But gradually, more considered ideas were proposed. One idea was a building exclusively for the elderly. Óskar worked with people to convince them that it would be better to get people more involved – people were taught how to use Facebook, and slowly people started to see the benefits of working together. When asked what the demographic of those in attendance at the Congress is, Óskar stated that it is predominantly older males. City officials are trying to engage more people by using creative methods including: words, imagination, hands – this is in a bid to engage people with disabilities, immigrants, and young people. The Planning for Real project is an example of how children can have a say about their neighbourhood through use of this model.

5   CONCLUSION AND RECOMMENDATIONS

To improve the quality of life in our cities, nowadays it is more than ever necessary a focus on the individuals and a re-affirmation of a people-centred planning vision (e.g. in the "People Friendly City" concept developed by Busi - see, i.a., Busi, 2009; Tiboni and Rossetti, 2012), to create smart strategies for sustainable and inclusive urban environments: the Breiðholt Project is an example of a very people-focused approach.

Overall, the Breiðholt Project was successful. Integral to this success is the importance of 'people' in the process, and utilising bridge makers (key stakeholders/community leaders) to build trust through face-to-face interactions with citizens. A lesson learned is that formal and impersonal interactions between officials and citizens are unfavourably received. Further, with regards to promotion of the Congress, reaching out to people through mass marketing is impersonal and therefore unsuccessful. There is a need to more heavily utilise the invaluable resource of bridge makers and, indeed, to identify a bridge maker within each community subgroup in order to lower the barriers for participation. These designated bridge makers would self-promote within their own community. A member of the community could be trained up to be an ambassador for the Congress. The Breiðholt Congress works relatively well. However, at present it fails to engage more than 'the usual suspects'. When immigrants are in attendance at the Congress (which is seldom) and translators are used, this delays proceedings, and can cause frustration as it interrupts the natural flow of the meeting. There is a need to look at ways to better accommodate immigrants, people with disabilities, and to attract young people to the meeting. When referring to people with disabilities, it is also important to be aware of the heterogeneity of disability, i.e. not to think narrow-mindedly about the 'accessibility' of the meeting venue (e.g. wheelchair access) but also to think carefully about the atmosphere, environment and space that the meeting is held in, and how this may need to be altered for a range of different psychosocial needs. Following the observations and the case study analysed in Breiðholt, and also considering the interactions with different stakeholders, we propose the following recommendations for the further development of both the Breiðholt Project and the Breiðholt Congress initiatives.

Breiðholt project Recommendations:

—   more shared knowledge among different departments of the city (sharing best practices);

- work on the physical structure of Breiðholt (e.g. improve walkability; the family centre is not central, so create paths to increase accessibility and clearly mark pathways) - neighborhoods plans are being drafted for Breiðholt, so now is the time to act;
- attract people to Breiðholt (e.g. creating new services/art/attractions). This will help to eradicate the image of Breiðholt as a 'ghetto';
- recruit more immigrants onto the staff team.

Breiðholt Congress Recommendations:
- seek feedback from citizens on the way that the Congress is currently run (e.g. format, location, timing), and also how citizens would like to be involved (be as participatory as possible);
- survey those that do not currently attend: what are their reasons for non-participation?;
- drawing on this feedback, alter the format of the Congress so that more people can get involved e.g. immigrants, people with disabilities, and young people (e.g. the Congress could be video-streamed online);
- circulate a summary of the Congress in a number of languages (although Icelandic, English and Polish translations have been used before, this fails to include a large proportion of Breiðholt residents), and also in Braille (for those visually impaired);
- better utilise bridge makers (encourage more participation within individual groups).

Furthermore, we recommend that other scholars working in a range of disciplines, including planning and urban design, should review the recommendations we make here for Breiðholt, and consider how they can be applied to other developments/regenerations/territorial contexts.

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IMAGE SOURCES

Fig. 1: Map from the city of Reykjavik website www.reykjavik.is

Fig. 2: Map taken from the www.icelandicartmaps.com website

Fig. 3: Aerial view taken from Google Map

Fig. 4: Logo from the city of Reykjavik website www.reykjavik.is

Fig. 5: Picture taken from the Facebook page of the Breiðholt community

Fig. 6: Authors' own

Fig. 7: Picture taken from a presentation by Dr. Oskar Olafson

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HARNESSING THE OPPORTUNITIES OF AUSTERITY:

A DETAILED MAPPING OF THE GREEK TRANSPORTATION SECTOR

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ABSTRACT

Since 2009, shortly after the global economic crisis of 2008, Greece has entered into a deep recession phase. The multifaceted presence of austerity is experienced in an increasing number of sectors of the country. The Greek transportation sector is not immune to this state of affairs. The ongoing crisis has had a significant impact on its economic (investment, employment, exports-imports turnover) as well as its operational (transportation intensity, throughput, performance) aspects and capabilities. In this paper, a detailed mapping of these impacts is presented, correlating transport-related characteristics, trends and estimations with the respective economic ones. The paper presents analyses of the Greek passenger and freight transportation sectors, following a data-driven approach. Findings show a substantial decrease of activities overall. Paradoxically, however, austerity can also be said to offer opportunities, such as the development of innovative, cost-effective and outward-looking business schemes, for handling transportation-related issues. In the face of these opportunities, authorities and stakeholders have recently turned their attention to ways of harnessing them as they may arise. The paper conducts a detailed analysis of these efforts to discover prospects for development in the midst of austerity, and highlights the steps currently being taken in this direction.

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利用紧缩机会：

希腊运输部门详细映射

摘要

2008年全球经济危机发生后不久，2009年起，希腊就进入了深度衰退阶段。其国内越来越多部门经历着这一多面向的紧缩。希腊运输部门也未能免受其扰。这一持续发酵的危机对其经济（投资、就业、进出口成交量）及其社会运转（运输强度、生产量、绩效等）方面以及国家实力有着重大影响。本文将一一列举这些影响的具体表现，将运输相关特征、趋势和评估与各自经济方面特征、趋势和评估进行关联。本文在多个方面运用数据驱动的方法，然后具体分析希腊客货运输。结果表明，活动整体大幅度下滑。而矛盾在于，经济紧缩也可以说为解决运输相关问题提供了机会，如创新、成本高效和外向型商业体系。面临这些机遇，当局和利益相关者近来将注意转向如何在发展的同时有效控制它们。本文详细分析这些为在经济紧缩状态下寻求发展前景所做的尝试，强调近来在此方向采取的措施。

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1 INTRODUCTION

Mediterranean economies, and consequently their societies too, are growingly experiencing the impacts of the ongoing economic recession. Greece, a protagonist of this global crisis, is only now starting to crawl back into development. Having only signed its first International Monetary Fund (IMF), European Commission (EC) and European Central Bank (ECB) Memorandum in the dawn of the current decade, and unlike other European member states, which are either exiting or nearing an exit from such commitments, Greece is still trying to achieve an economic recovery.

This multifaceted presence of austerity has not left the transportation sector uninfluenced. Various economic aspects of the sector have been lately stagnating due to the lack of influx of resources, while others owing to the chain-effect often experience such conditions: as transportation (and in this sense, mobility too) is more of a means to an end, rather than an end in itself, it is unavoidably subject to recession-related impacts originating from other economic fields.

Motivated by a series of recent scientific publications (Schneider et al., 2010; Tsekeris, 2013; Ferreira and Couto, 2015), the objective of this paper is to explicitly map the impacts of the currently ongoing austerity on transportation-related activities in Greece, by correlating transportation and mobility characteristics, trends and estimations, with the respective economic ones. Furthermore, it aims to identify the aspects of the economic crisis that have positively affected mobility in Greece, both at the urban and regional level, and the economic opportunities that have arisen via the transportation sector during the recession period. The paper initially presents the results of a detailed literature review, in order to form a consolidated knowledge base on how the economic recession has overall affected Greece, by analyzing key indicators, such as un/employment rates, GDP fluctuations and tourist sector activities. With this in mind, the paper attempts to frame the austerity picture in the Greek transportation sector by laying out an in-depth analysis of qualitative and quantitative related indexes, which it then discusses. From this analysis, the paper draws a number of conclusions on the crisis' overall impact on the field of transportation.

The remainder of the paper is organized as follows: Section 2 presents the Greek economic crisis in numbers, followed by Section 3 that reviews pertinent sources on transportation-related characteristics influenced by the economic recession. Section 4 discusses potential positive prospects following from these conditions and Section 5 concludes on the conducted research and proposes future research directions.

2 DATA ON THE GREEK ECONOMIC CRISIS

The Greek economic system has experienced a series of fluctuations in the last decade, yet the country has reached the brink of bankruptcy on numerous occasions. The effects of the economic recession are strongly reflected in all related figures and indicators published by national public sources, as well as private organizations and respective working groups. Indicatively, data regarding the Greek Gross Domestic Product (GDP) and the national debt and deficit evolution since 1963, depicted in Figure 1, map the situation as it currently stands. The GDP shows a declining tendency from 2009 onwards, while public debt (as a percentage of GDP), after 2011, shows a significant reduction. However, according to financial data of 2014 (Trading Economics, 2014), this reduction does not last long, as there is an upward trend until today. Concerning the trend analysis of the deficit (as a percentage of GDP), there was a negligible deficit for Greece until the late 1980s, which has since been primarily tending upwards (World Bank, 2014; ELSTAT, 2014; EUROSTAT, 2014; Masourakis, 2011; Chalikias, 2013). It is interesting to highlight that the significant increase of the debt started

right after the Athens 2004 Summer Olympic Games, while the effect on the GPD appeared after 2008. The largest deficit of the modern era appeared in 2009, but in 2013 this value was already positive.
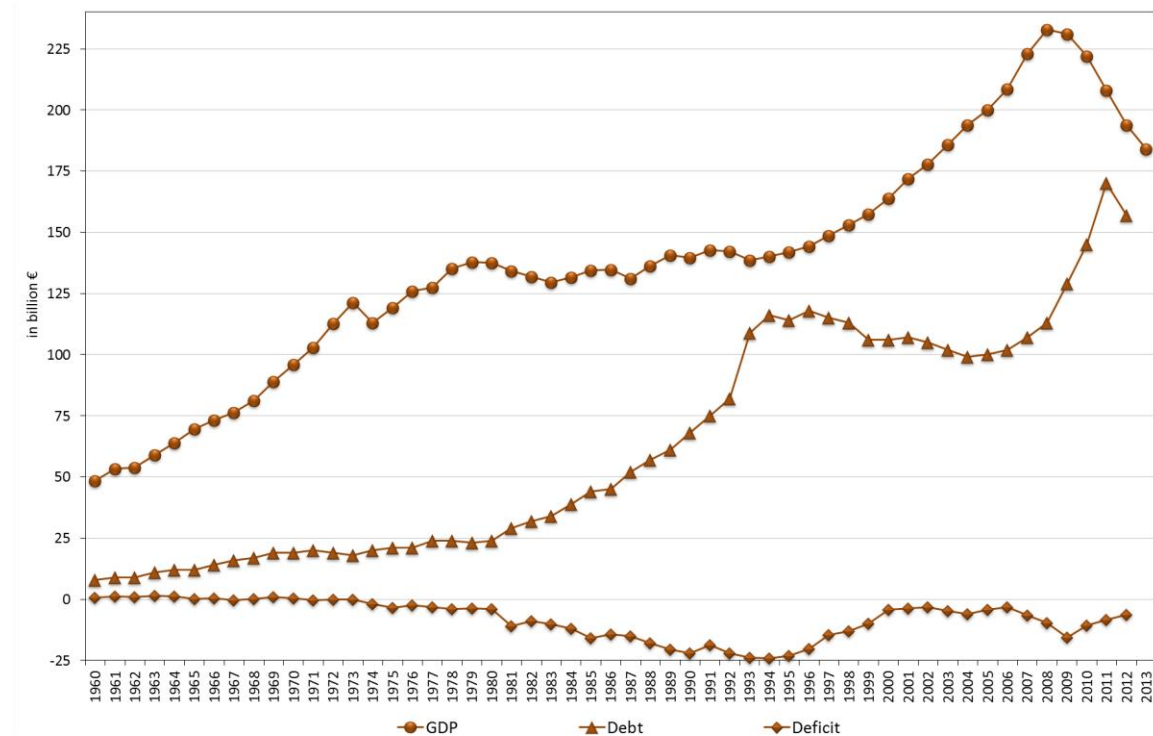
Fig. 1 GDP, debt and deficit in Greece

Concerning the national exports and imports, there is a direct correlation with the domestic economic crisis, due to the contribution of the latter to the trade balance.

Trade balance of goods has traditionally been negative in Greece, because of the excessive amount of imports, which has always been a cause of worry for the economy (Bank of Greece, 2014). Positive results appeared only in recent years, mostly due to the increase of shipping and tourism activities (Gibson et al., 2012). Numerical data on trade of goods is presented in Figure 2.
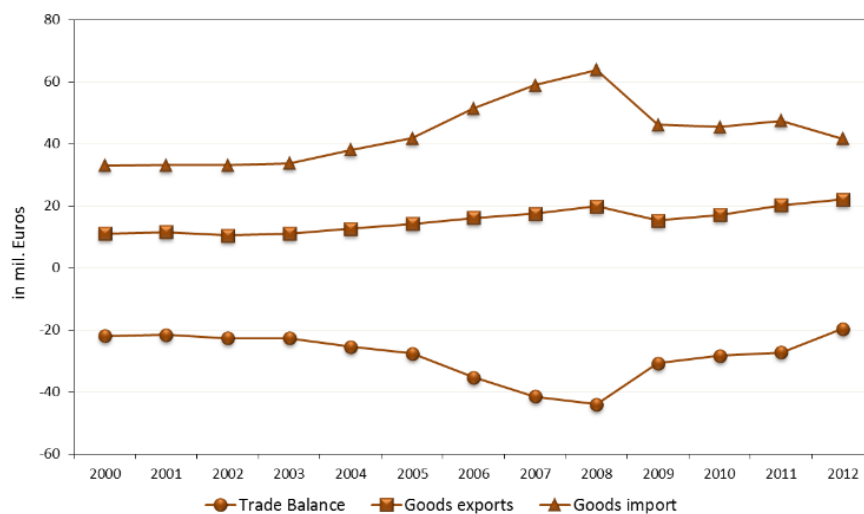
Fig. 2 Trade balance of goods in Greece

As expected under such conditions, the employment of citizens has been strongly hit in the last years, resulting in an overall reduction of financially productive activities in various sectors. Figure 3 presents the employment – unemployment ratio and Figure 4 shows the evolution of the unemployment rate since 2009. As observed, unemployment has constantly increased since 2009, from approximately 500000 unemployed citizens to approximately 1.5 million, while, as expected, employment has been gradually falling (Trading Economics, ELSTAT, 2014; Cholezas, 2013). The negative development of the Greek economy in both GDP and unemployment during the years 2008 and 2013 resembles a depression.
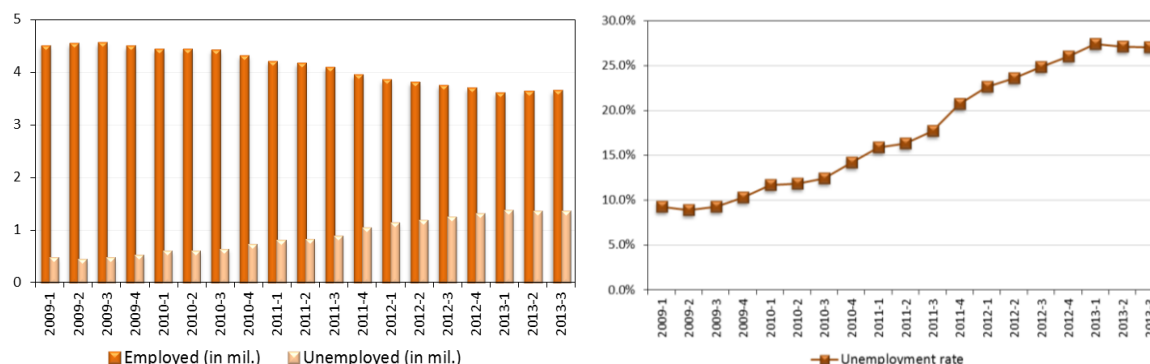
Fig. 3-4 Employed – unemployed in Greece (on the left) and Unemployment rate in Greece (on the right)

Tourism is undoubtedly one of the most important sectors of the Greek economy. It contributes significantly to the country's GDP and employs (directly and indirectly) approximately 35% of the national workforce (Rerres et al., 2013). The next figures show data related to the evolution of the country's tourism. Clearly, the ongoing economic turmoil could not leave touristic activities intact in Greece. As depicted in Figure 5, the contribution of travel and tourism to the national GDP presents a peak just after 2004 (due to the international attention the country garnered in response to the 2004 Olympic Games hosted in Athens), while the decreasing trend from 2006 onwards is also observed in the four EU countries (Figure 6) ranked as top tourist destinations. This decreasing trend picks up again in 2011, showing that Greece has regained the attention of international travelers (Association of Greek Tourism Enterprises (SETE), 2014; Masourakis, 2011; Gulbahar, 2011).
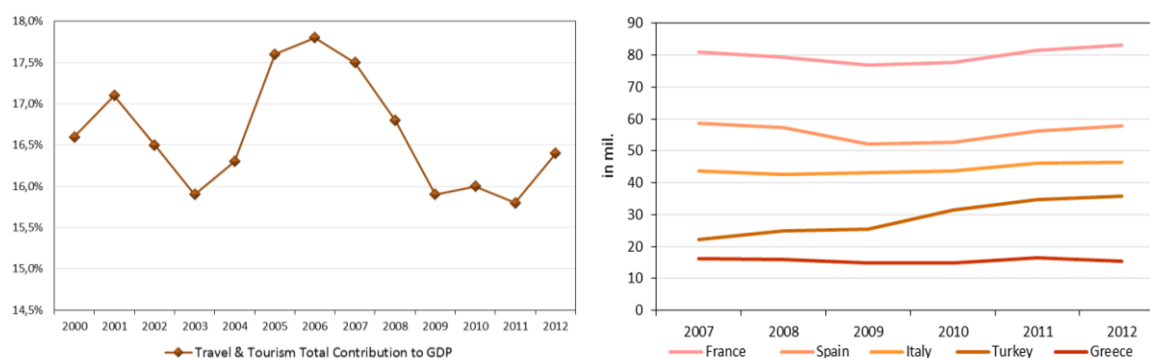
Fig. 5-6 Travel and tourism contribution to GDP (on the left) and International tourist arrivals (on the right)

3   IMPACTS OF ECONOMIC CRISIS ON THE TRANSPORTATION SECTOR

The financial crisis has had significant impacts on many sectors of the country's economy. Passenger and freight transportation have both been strongly affected. This section summarizes the main repercussions of the economic crisis in Greek transportation following a data-driven approach.

3.1 TRANSPORT MARKET INDICATORS

First and foremost, the economic recession has greatly reduced the transport expenditures, due to the decrease of the average income over the past years. Figure 7 shows the household expenditure on transport compared to the average per capita income for the years 2000 to 2011. As shown, a reduction in income leads to a decrease in total household expenditure on transport. Thus, in the case of Greece, the drop of average annual income from € 21000 to € 12500 simultaneously causes a drop in transport expenditure from € 830 to € 300 per year (Chita and Zervas, 2013).
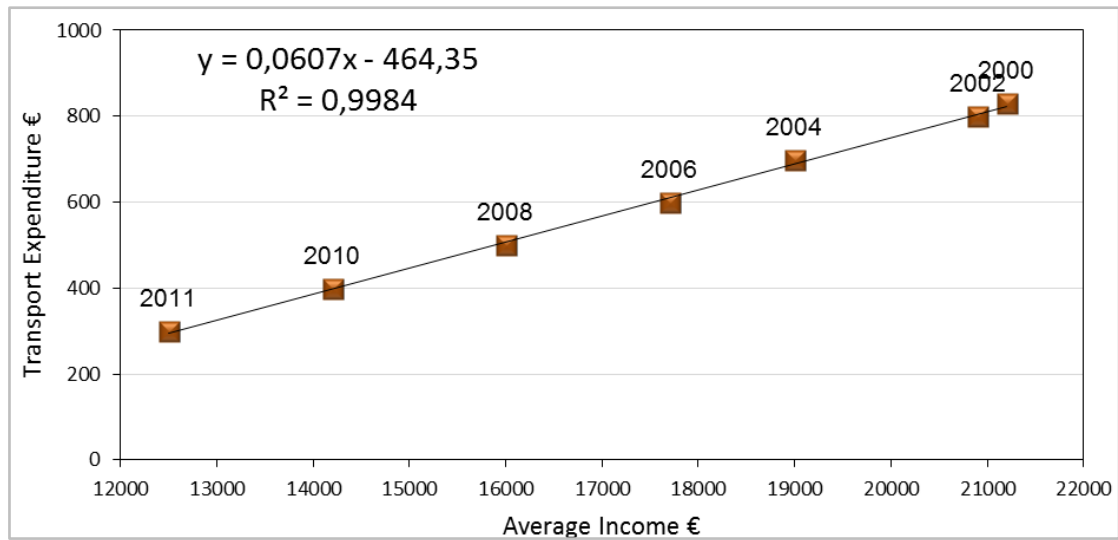
Fig. 7 Relation between annual expenditure on transport and the average per capita income

Additionally, expenditures in transport directly relate to energy consumption and fuel price, two indicators also affected by the economic recession. According to EUROSTAT, fuel prices remained in high levels throughout the years of austerity and this resulted in an overall decrease of energy consumption (EUROSTAT, 2014). Figure 8 depicts energy fuel consumption in the transport sector between 2000 and 2011, using as a unit of measurement one million tons of oil equivalents. It appears that there is an uptrend in energy fuel consumption until 2009. This 28% increase, exceeding 9 million tons of oil equivalents, is attributed to population growth and the general economic growth of the country until then. After 2009, the indicator plummets by 17% due to the economic recession, reaching just over 7.5 million tons.
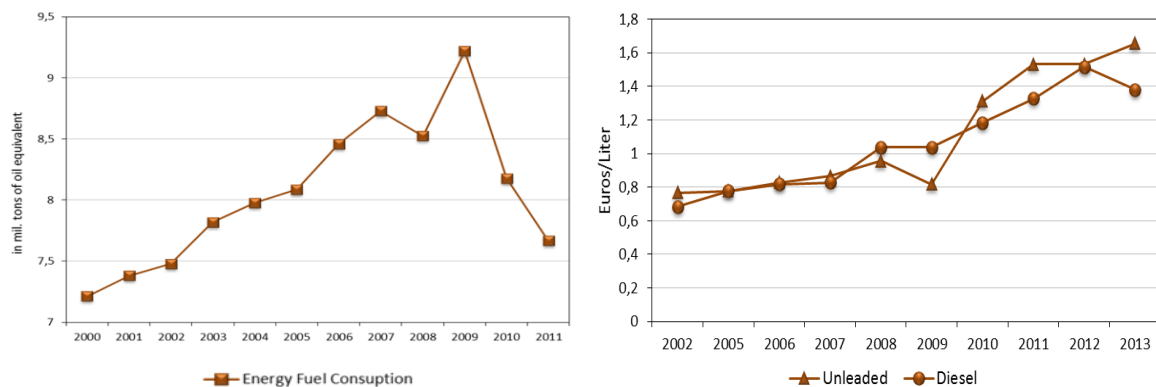
Fig. 8-9 Energy fuel consumption in the transport sector in Greece (on the left) and Fuel price in Greece (on the right)

Figure 9 illustrates the course of fuel price from 2002 until 2013. During these years, both diesel and unleaded have increased in terms of price, while the economic crisis led to a decrease in the extensive use of cars, and consumers turned to the purchase of diesel vehicles (HITE, 2014). As observed, diesel price in 2012 was reduced, while unleaded continues its ascendant course from 2009. This is largely attributed to the owners of fuel service stations, whose union opted for an increase in the price of unleaded following decreased demand, while, at the same time, the appearance of new types of vehicles, such as autogas and hybrid vehicles, led to a decrease in diesel price (Ministry of Development, 2014; EUROSTAT, 2014).

Greece's transportation turnovers present competitiveness up to the crisis period, when a decrease is noted in all modes of transport. Figure 10 concerns the turnover of several activities, with the year 2005 serving as base index year. The turnover of all modes of transport and related activities consistently decreased since the beginning of the economic crisis, with air transport being the least impacted thanks to its flexibility, fast travel options and the increase of air transport passengers carried into Greece (Trading Economics, 2014; Ministry of Development, 2014).
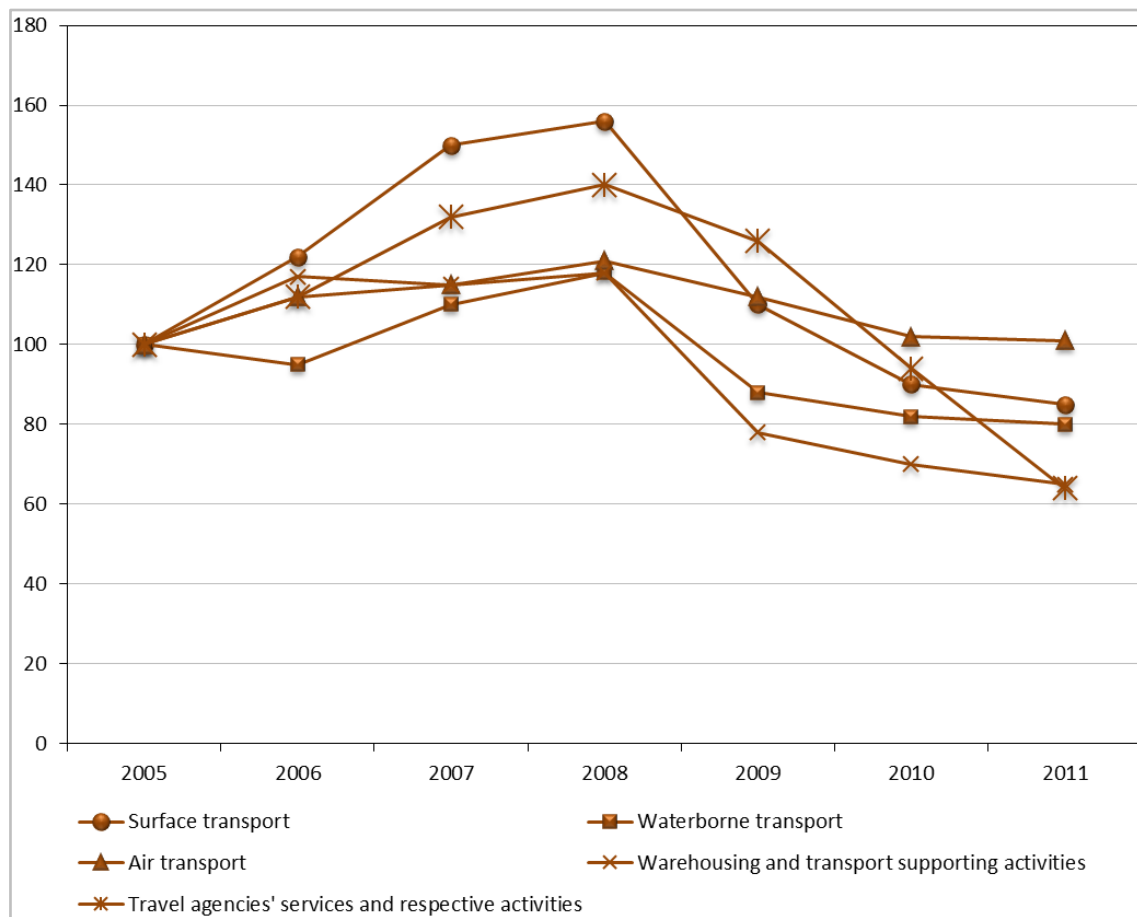
Fig. 10 Transportation activities turnover Index in Greece

3.2 PASSENGER TRANSPORT

Greece is a tourism center; therefore regular transport services for passenger mobility are required, in order to cover a high level of demand. The following diagrams showcase the low number of kilometers travelled by passengers and the reduction of traffic flow, especially private car traffic. Combined with high fuel costs and the increase in alternative means of transport, these diagrams illustrate users' reduced travel due to the ongoing economic crisis. Figure 11 presents the passenger kilometers travelled per citizen by road and rail

transport for four countries, including Greece, for the time period 2001-2010. As shown, Denmark, the Netherlands and Belgium far exceed Greece. The passenger kilometers per citizen in these countries are within a range of 10000 to 14000, while Greece is found stable at 4000. Figure 12 shows the average traffic flow in the region of Attica, where Athens, the capital of Greece, is situated, on a quarterly basis between 2006 and 2013. Within this time period, a 30% reduction of urban traffic volumes is observed (ELSTAT, 2014; EUROSTAT, 2014; HIT Portal, 2014).
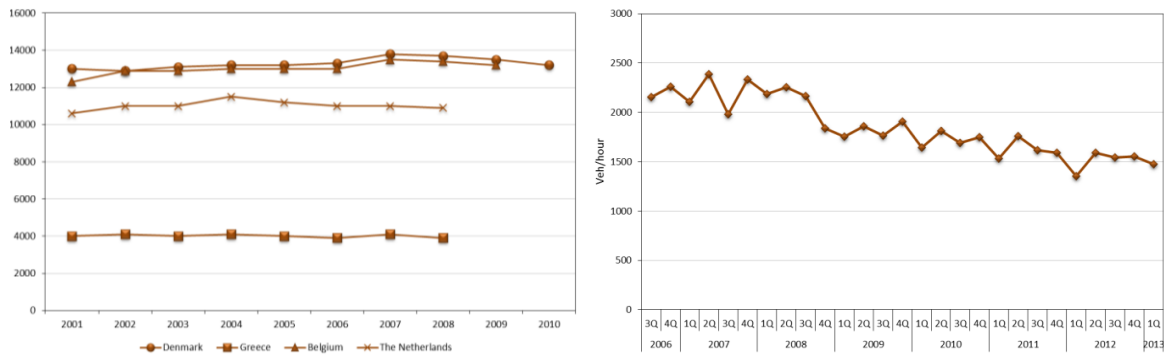
**Fig. 11-12 Passenger kilometers travelled by road and rail transport per citizen (on the left)
and Average traffic volume in Attica Q1 (on the right)**

Public transport is another sector that is strongly experiencing the consequences of the economic crisis. According to Thessaloniki's Integrated Transport Authority, the crisis has brought an increase of public transport operating costs mostly due to the 50% increase of fuel price, as well as the increase of direct taxes and value added taxes, while the state has concurrently reduced its subsidies because passenger mobility has overall decreased (Papaioannou and Konstantinidou, 2011).
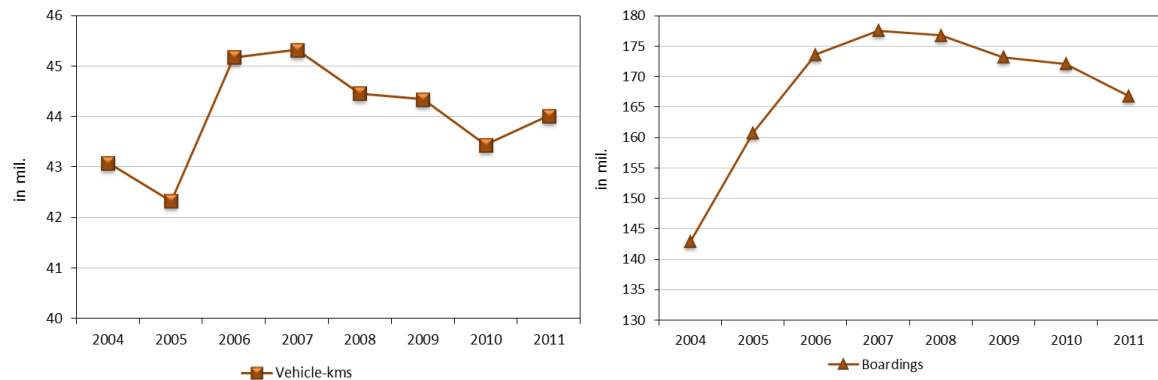
Fig. 13-14 Vehicle-kilometers in Thessaloniki (on the left) and Public transport boardings in Thessaloniki (on the right)

Figure 13 shows the vehicle kilometers traveled in Thessaloniki, the second largest city of the country, and Figure 14 shows the total annual boardings for the years 2004 to 2011. There is an observed downward trend since 2006 in vehicle-kilometers travelled, as a result of the crisis, since overall reduced economic activities and reduced demand for travel resulted to less trips, thus vehicle-kilometers. From 2010 onwards, however, a significant uptrend is noted, reaching 44 million in 2011. In addition, a continuous increase of boardings is observed between 2004 and 2007 (approximately 35 million), while, due to the economic crisis, a reduction of about 10 million is observed between 2009 and 2011 (Thessaloniki's Integrated Transport Authority - THEPTA, 2012; OASA, 2014).

Furthermore, the high unemployment rates, combined with a reduction of income, have led to a decrease in the number of registrations of new cars (Chita and Zervas, 2013; Association of Motor Vehicle Importers Representatives, 2014). Figure 15 concerns the authorizations for the circulation of cars in the period 2000-2013 at monthly intervals. As seen, until 2008, there was a consistent influx of registered vehicles, with an average of approximately 22500 authorizations. However, from 2009 onwards, a reduction of 73% is observed, due to private vehicle owners choosing to return their registration plates to the state owing to their inability to cope with the maintenance and registration expenses. Since 2012, the number of car registrations is stably below 5000. Figure 16 shows the new registrations of private cars compared to the average per capita income from 1995 until 2008. Initially, there was an increase in per capita income by the year 1999, resulting in a large number of new passenger cars registered. Between 1999 and 2008, new car sales remained stable at around 270000 per year, suggesting a saturation of the private vehicle market. After 2008, the country's economic crisis led to a sharp drop in income. The consequence was a great reduction in the number of new registrations of private cars, which totaled only 58000 in 2008, representing a decrease of approximately 80% (Chita and Zervas, 2013; Athanassiou and Tsouma, 2013; Association of Motor Vehicle Importers Representatives, 2014).
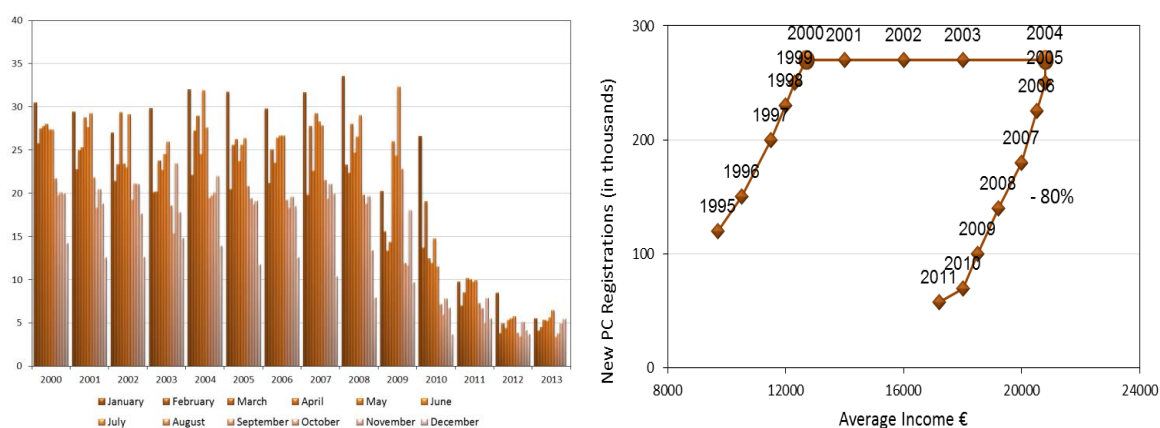
Fig. 15-16 Car Registrations in thousands (on the left) and Association between new registrations of private cars and average per capita income (on the right)

3.3 FREIGHT AND LOGISTICS TRANSPORTATION

The country's economic recession has significantly reduced the activities in logistics and freight transportation as well. Between the years 1998 and 2008, the transport logistics sector in Greece had increased by 20% on average (in terms of personnel occupied, vehicle fleet and operations), while in 2008-2009 and 2009-2010 it decreased by 6 and 7%, respectively (ICAP 2013). In 2009-2010, 39% of the logistics companies reported financial losses in their annual turnover, while 25% had a significantly lower profit than the previous year (Hellenic Statistical Authority, 2011). Table 1 summarizes the turnover reduction of each transport sector in Greece between 2008 and 2010.

	2008 - 2009	2009 - 2010
Land transport	-31.5%	-18.1%
Waterway transport	-22.8%	-8.5%
Air transport	-12.6%	-3.3%
Warehousing activities and transportation support activities	-33.3%	-10.9%

Tab. 1 Turnover of each transport sector in Greece

The economic crisis raised many issues in this sector, including the drop in import and export trading, lack of freight centers, illegal truck traffic from other countries that reduces domestic carryings, low standard infrastructures and high cost of equipment, which prevents the freight companies from investing. However, in the last years, the situation appears to be improving, due to investments in freight transport, such as the new international highways connecting the country with Europe and the privatization of Piraeus port container terminal, both of which contribute to strengthened freight flows in Greece, as observed in the following figures (Imerisia, 2011).

Figure 17 shows the gross weight of foreign cargo, loaded and unloaded, in the Greek seaports between 2005 and 2012 (cargo loaded: from 50.8 to 55.6 million tons - cargo unloaded: from 25.6 to 37.6 million tons). Before the beginning of the economic crisis, a decrease appears on both counts (ELSTAT, 2014; EUROSTAT, 2014). However, from 2011, an uptrend is observed, which is attributed to the collaboration of the Greek government with major private companies in the field (Liz Alderman, 2012). This trend is mainly due to the fact that the 50% share of the Piraeus port, the most important port in the country, has been leased to COSCO, which multiplied by three the cargo volume in only two years.
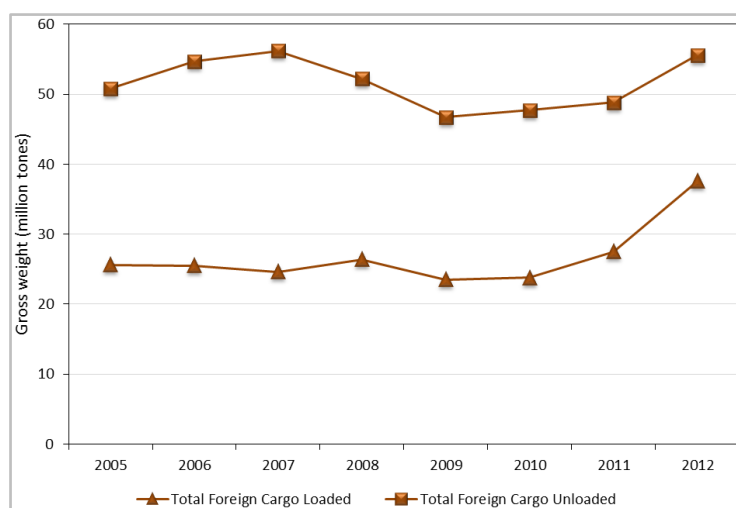
Fig. 17 Gross Weight of Foreign cargo at Greek seaports

Figures 18 and 19 present data about the total number and gross weight of containerized foreign cargo (loaded and unloaded) at Greek seaports in the period 2005-2012. These figures show that the economic crisis has had a significant impact on reducing the amounts of cargo between 2008 and 2010, whereas in 2011 and 2012 the number of containers is increasing.
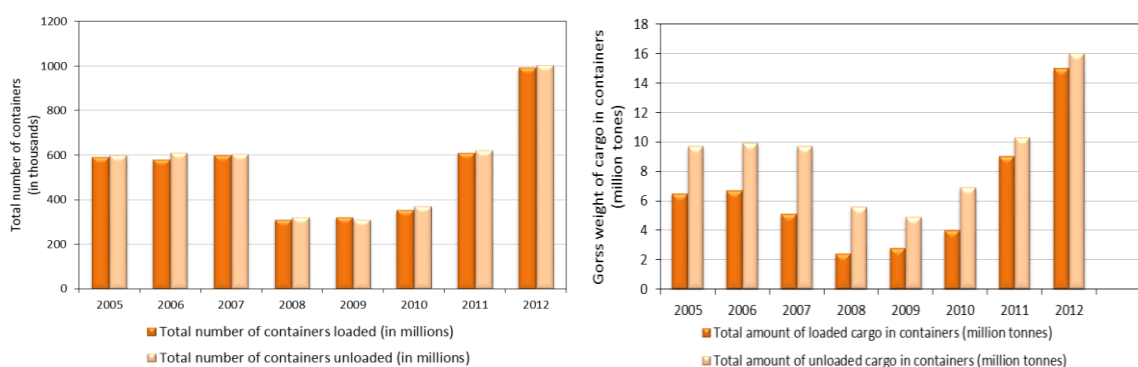
Fig. 18-19 Total number of containerized foreign cargo at Greek seaports (on the left)

and Gross weight of containerized foreign cargo at Greek seaports (on the right)
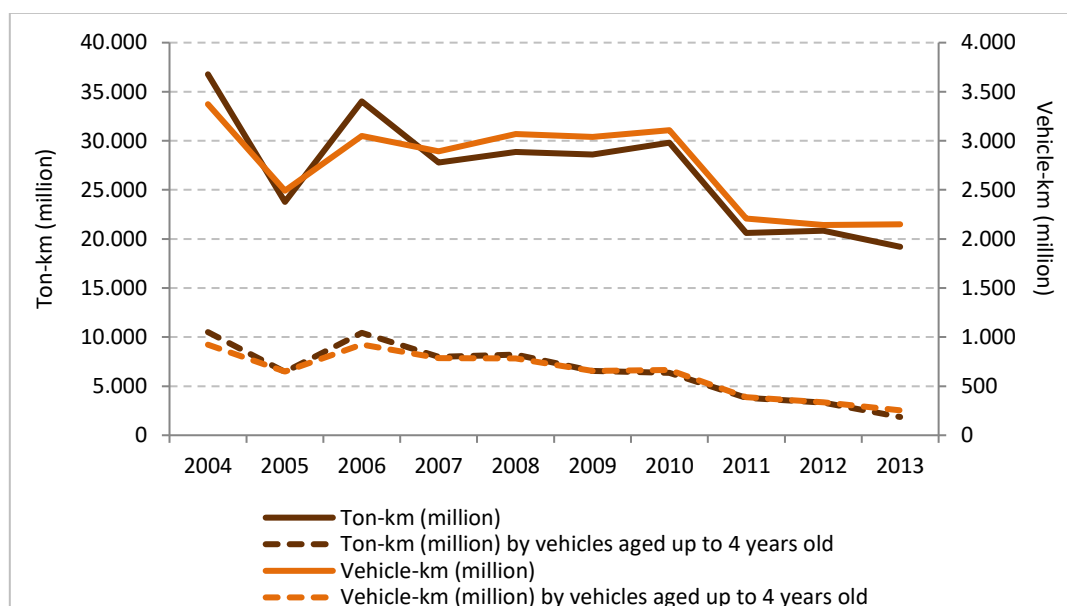
Fig. 20 Total road freight transport output by all vehicles and by vehicles aged up to 4 years

Significant reduction is also observed in the total (national and international) road freight transport, in relation to the measures of ton-km and vehicle-km (Figure 20). Between 2004-2013, the overall decrease in ton-km amounted to -47.8% (from 37 billion to 19 billion) and in vehicle-km to -36.2% (from 3.4 billion to 2.2 billion), respectively. These reductions amounted to -35.6% in ton-km and -30.8% in veh-km during 2010-2013, with relative stabilization trends after 2011. The declining road traffic for both passengers and freight is associated with less toll revenues for highway operators, which, in conjunction with the severe national budget constraints and the fluidity problems of the Greek economy, led to halting the process of completion of the national highway system.

Even larger was the reduction in both ton-km and vehicle-km travelled by vehicles aged up to 4 years-old during 2004-2013 (-82.3% and -72.5%, respectively). These results demonstrate the gradual aging of the domestic commercial vehicle fleet as well as the weakness of its renewal, exacerbating the negative road transport externalities to the environment, energy consumption, safety and pavement conditions. The negative impact of economic crisis is also evident on the relative reduction (by -10.4% in ton-km and -2.3% in vehicle-km) of the share of national road freight transport to the total (national and international) road freight transport during 2004-2013 (Figure 21). This trend reflects a (small) turn of businesses towards sales in foreign markets, particularly due to the declining domestic demand.

At the same time, a significant increase of the share of national road freight transport by private-use vehicles is observed during 2004-2013, which amounts to 86% in transported tons, 126.3% in ton-km and 92.7% in vehicle-km, although the temporary reduction of this share between 2010-2012 (Figure 22). Namely, the economic crisis has not yet led to an actual adjustment of firms' behavior toward public-use road haulage and 3PLs, in order to find more cost-effective ways to lower their operational (delivery and storage) costs. These findings show that the crisis has not allowed the public road haulage to benefit from the (as of 2010) liberalization act aimed to treat existing inefficiencies and enhance competition in the specific sector. It is indicatively noted that, in 2013, the average share of national road freight transport by private-use vehicles in

EU-27 was 33.5%, in terms of the transported tons, 17.6%, in terms of the ton-km, and 25.5%, in terms of the veh-km, compared to the corresponding much larger shares of 82.9%, 49.9% and 64% in Greece.
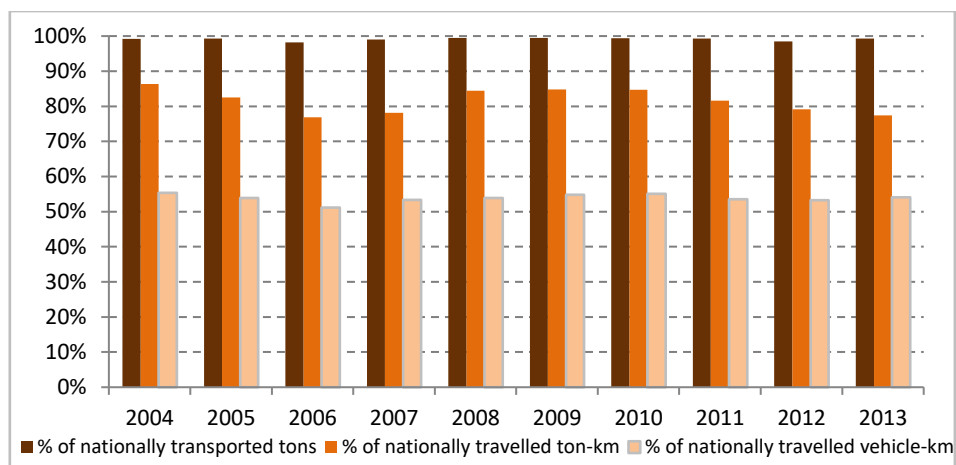
Fig. 21 Evolution of the Greek national road freight transport as a share of the total Greek (national and international) road freight transport
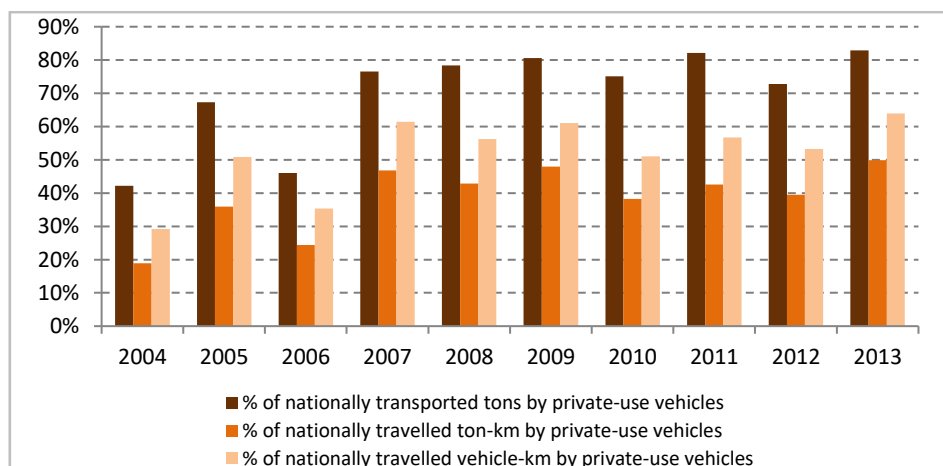
Fig. 22 Evolution of the Greek national road freight transport by private-use vehicles as a share of the corresponding transport by all vehicles
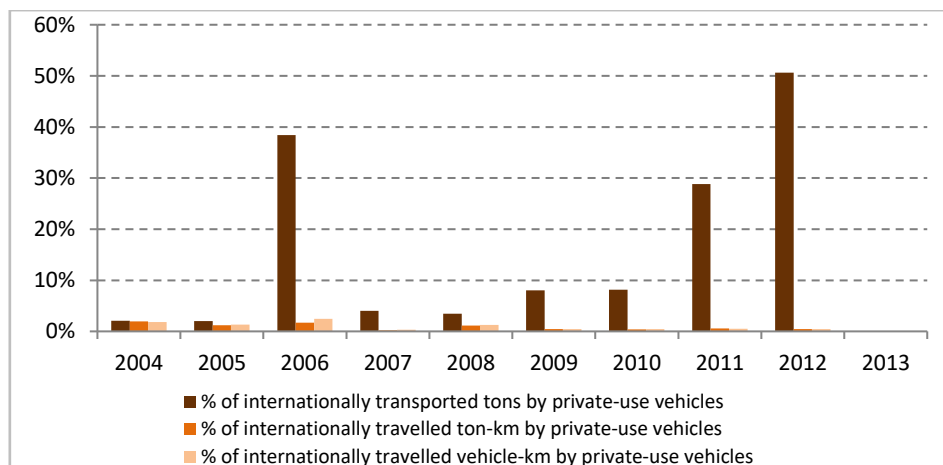
Fig. 23 Evolution of the Greek international road freight transport by private-use vehicles as a share of the corresponding transport by all vehicles

In addition, it is stressed that the number of public-use commercial truck vehicles has substantially remained the same after the public road haulage liberalization in 2010. This fact, in conjunction with the small reduction of the private-use commercial truck vehicle fleet size (since 2012), has resulted in the aging of the total commercial truck vehicle fleet, as illustrated in Figure 20. The significant cost of public-use truck vehicle purchase and license holding, which should correspond to emissions category Euro V, in combination with the high operating costs and taxation, have discouraged the renewal or development of new fleets and the access of new firms in the domestic market.

Regarding the international road freight transport, the cargo transported by private-use truck vehicles rapidly increased (by 528.7%) during 2009-2012 (Figure 23). However, the other two transport output measures (ton-km and vehicle-km) present different trends, as the corresponding shares were reduced below 1% after 2009 and remained almost unchanged thereafter. These trends possibly reveal the firms' preferences toward private-use truck vehicles for servicing relatively closer (neighboring or less distant) foreign markets, to which freight demand (mostly for heavy goods) has increased, compared to more distant foreign markets, which are largely served by public-use truck vehicles. Moreover, there is a remarkable increase of the combined (road-maritime) transport of freight moved from the Greek ports (mostly, those of Patras and Igoumenitsa) towards Western Europe during the crisis period. According to Tsekeris (2016a), within the period 2009-2012, the share of the amount of cargo exported by combined road-sea transport operations, in relation to the total amount of cargo exported by road, was increased from 61.5% to 65.3%, while the corresponding share of the inland distance travelled was increased from 51.9% to 56.4%.

4   OPPORTUNITIES

In Chinese, the word crisis consists of two sino-characters; the first refers to threat (or danger), while the second represents opportunity. When a system collapses, there is an opportunity to renovate oneself, finding new solutions, products and markets. This situation has been observed in several countries in the context of austerity and sustainability, for instance, through the introduction of Demand Responsive Transportation (DRT) systems (Gomes et al., 2015) and free-floating car-sharing systems (Seign et al., 2015). This is also the case for the transportation sector in Greece. The innovation of the Greek market is a fundamental asset and one of the most significant opportunities of the country. This effort can be quantified in terms of European Research Council (ERC) grants, one of the most competitive funding schemes of Europe, whose number in comparison to the population in Greece is similar to economies like France or Germany. The only negative aspect is that half of those grants are awarded to Greek researchers from abroad, which means that, if Greece is able to keep its researchers, these figures will significantly increase. As a result of the economic crisis in the private sector, which was evidently shown in the analysis of impacts on passenger transport in subsection 3.2, new and promising business concepts have been developed and applied in Greece, such as car-sharing platforms and mobile applications supporting passenger transport, which have flourished rapidly during the recession times of the last years. As an indicative example, the travel demand decrease in the taxi sector has paved the way for smarter business models, such as the taxi booking applications based on smart devices, which largely replaced conventional dispatching companies by more innovative and traveler-oriented solutions. The positive aspect is that these small and innovative companies have remained in Greece instead of going abroad.

Not all austerity-related consequences are necessarily of a negative nature. There had been a lot of efforts to reduce traffic congestion in Greece before the crisis - from policy measures, such as no-driving days based on vehicle's license plate numbers, to technological efforts, such as the operation of modern Traffic Management

Centers in large metropolitan areas. Remarkably, however, the crisis has addressed congestion in a far better way, albeit at the expense of citizens' wellbeing. Private vehicle circulation reduction has become a reality for the wrong reasons (less disposable income and more unemployment), but it has nevertheless contributed to the development of more livable urban environments, with less traffic also resulting in less pollution, as observed in other cases (Schneider et al., 2010). As a result of austerity, the mobility needs of a large portion of the Greek population have been reduced to the basics. Ideally, what begun as a consequence of a ruinous financial situation may set in motion a positive transport behavioral change; that of a shift from use of private cars to public transport.

Lack of financial resources has also led transportation research and innovation efforts to develop innovative, cheaper and more sustainable ways for improved and more efficient mobility planning and management, utilizing new technologies. Expensive conventional traffic measurement equipment is being gradually replaced by more flexible and low-cost traffic data sensors, such as Bluetooth detectors and Floating Car Data systems, which allow larger area coverage at a much lower cost, through the participation of the users themselves. Another promising effort is related to the use of open data for applications in the transport domain (CERTH-HIT Open Data Hub, 2015; Open Geospatial Portal, 2015), a movement the importance of which is also recognized and supported through relevant policies and actions in other countries (Las Casas et al 2014). As a consequence of such efforts, not only did end users become active participants of mobility services, but all implicated stakeholders have increased their collaboration, in order to provide better mobility services by combining their data sources and systems. The positive results of such collaborations can be demonstrated in the example of city of Thessaloniki, where the Regional Authority, the Thessaloniki Integrated Transport Authority and the Municipality have been collaborating during the last 6 years in various mobility-related projects for providing innovative services to travelers, such as environmentally friendly or least cost routing (Mitsakis et al., 2013; Morfoulaki et al., 2015). These efforts put Thessaloniki in the list of European smart cities regarding the transport domain. At a national level, associations driven by similar motives and goals have been established, in an effort to make use of their full potential (Tsekeris et al., 2013).

Finally, one of the most significant prospects for the transportation sector arising from the financial crisis is the development of new transport investment roadmaps of actions that need to be taken, depending on a pre-defined timeplan. These actions aim to achieve specific targets regarding the enhancement of the transportation business sector, the increase of goods exported to foreign countries and the modal shift to more efficient and environmentally friendly modes. An immediate policy measure has been the liberalization of various sectors, most of them related to the transport sector (e.g., rail freight services, public road haulage, taxi and van services, cruising), which improved or is expected to promote significantly their efficiency and productivity, despite that, in some cases, such as the public road haulage, the deep crisis has not hitherto unleashed the potential benefits (subsection 3.3). Another important plan refers to the design and operation of a country-wide logistics hub network to help develop the role of Greece as an emerging international trade hub between South-East Asia and Central Europe. The location of freight distribution centres and logistics facilities is currently unplanned and highly scattered across the country, a fact which intensifies the impact of crisis on freight transport and logistics sector (subsection 3.3). A network including a few large logistics parks of national scope (in Athens and Thessaloniki) and several others of regional or local scope would exploit economies of scale and density, reduce transport costs and facilitate both domestic and international trade (Tsekeris, 2016b). In the same context, the ongoing process of the concession of key transport and logistics facilities and services (e.g., the port of Thessaloniki, the National Railway Organization etc.) to private-sector

strategic operators would considerably favor new investments, technology transfer and the country's connectivity in the regional and global supply chain networks.

5   CONCLUSIONS

This paper presented a detailed investigation of the impacts of austerity until 2013 in the Greek transportation sector. Economic and mobility indicators have been correlated in an effort to quantify the extent to which the economic crisis has affected transportation-related activities, covering both the passenger and freight and logistics areas. The data analysis has revealed a clear decreasing tendency in the turnover of the transport sector and of related activities, such as warehousing or acquisition of new vehicles. The reduction accounted on average for 40-50% in only three years, while operating cost (fuel price) increased continuously during these years. A strong relation between the average income and the transport expenditure has also been observed, which indicates the importance of the transport sector activities in the daily life and activities of the population. Most transportation-related indicators analyzed herein remained stable after the significant fall they experienced in 2008-2009.

However, a series of indicators present increasing tendencies during the last years, which demonstrate that the worst effects of the economic crisis and regulations have ended and that the transport sector in Greece has started to recover slowly. This fact is not a passive result due to time passing by; on the contrary, it has been strongly supported by reformations in the transport sector, as seen from the political, organizational and technical points of view. A few examples are the more efficient use of resources with control according to output measurements/end results and the introduction of more competition from the private sector. The active participation of all the stakeholders involved in the transport sector made it possible to take advantage of the opportunities that appeared during the crisis for creating new policy documents, roadmaps and passenger/freight master plans as well as reducing deficiencies, increasing the performance of the current transport systems or creating new, high value added and efficient ones, such as combined transport operations, urban/green logistics and innovative transport technologies.

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IMAGE SOURCES

Fig. 1, 7, 11, 12: Elstat, Eurostat

Fig. 2, 3, 4: Elstat

Fig. 5, 6: Sete

Fig. 8, 9: Eurostat

Fig. 10: Ministry of Development

Fig. 13, 14: Thepta

Fig. 15: Ministry of Transport, Infrastructure and Networks

Fig. 16: elaborated by the authors

Fig. 17, 18, 19: elaborated by the authors from Elstat and Eurostat data

Fig. 20: elaborated by the authors from Elstat data

Fig. 21, 22, 23: elaborated by the authors from Eurostat data

Table 1: Icap, Elstat

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ABSTRACT

One of the most prominent consequences of rapid urbanization has recently been the disintegrated distribution of municipal services which predisposes inequality in citizens' benefiting from these services. Therefore, the city planners and managers' main goal must be to achieve the ideal of 'equality of opportunities' to help different groups of urban population have access to public services and eliminate conflicts in the provision of opportunities. In the present descriptive-analytical study, after specifying the indicators, ten regions of Tabriz are ranked in terms of the distribution of municipal services using three different methods (per capita land use, accessibility and residents' idea) and action priorities are presented for each region. The results of this study show that Tabriz has an inappropriate spatial distribution of public services and the population is incompatible with the distribution of services. Region 8 is in a good condition compared to the other while region 7 and 9 has a poor distribution of public services.

THE DISTRIBUTION OF PUBLIC SERVICES FROM THE PERSPECTIVE OF SPATIAL EQUALITY

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摘要

近期，快速城市化的突出结果之一就是逐渐分解了容易导致市民享受公共服务利益不平等的市政服务分布。因此，城市规划者和管理者的主要目标应该是实现理想化的"机会平等"，让城市不同群体有机会享受公共服务，消减因机会分配导致的矛盾纠纷。本文采用描述分析方法，首先明确规定指标，然后使用三种不同方法（按人头算、按可达性和居民意见）以十个为单位划分大不里士行政区，并为每个区域指出优先行动。研究结果显示大不里士公共服务空间分布不合理，人口密集度与公共服务的分配并不相配。比较而言，第8区公共服务分配的状况良好而第7区和第9区的状况相对则较差

可持续空间平等角度看待伊朗大不里士市的公共服务分配问题

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关键词：
空间平等，服务分配，可及性，可持续性，大不里士，伊朗

1   INTRODUCTION

According to data of the United States Department of Economic and Social Affairs, in 2007 for the first time in human history, 50% of the entire global population lived in urban areas, while only a century ago this figure stood at 13%, and it is now predicted to reach 69% by 2050 (Barresi and Pultrone, 2013, 62). In other word, World urban areas occupy 4% of the Earth's land area, growing on average twice as fast as their population, and 65% of all land surface will have become urbanized by 2030 (Gargiulo and Zucaro, 2015, 82). Urban growth had a great impact on public service management and compelled managers to be increasingly agile atadopting practical solutions to unforeseen problems, such as Residents' inequality and lack of visual balance in different regions of a city.

This problem is by no means a new phenomenon over the world; while in developing countries, spatial difference of the cities has been intensified due to socioeconomic contrasts, inequality and imbalance in municipal services (Abdi Daneshpoor, 1999, 37). One of the most important issues in the study of spatial equity of urban public facilities allocation is to improve in the quality of the urban environment (Omer, 2006). Specifically, geographic scale is an integral component in the research on spatial equity. As a result, a growing body of work has begun to identify the conflict between the local scale, the level where an environmental problem is experienced and is of grassroots interest, and the broader geographic scale, the level at which the discourse of spatial equity can be politically addressed.

Besides the geographic scale is an important planning issues of spatial equity, another is most studies usually focuses on only one type of public facility allocation and ignores the relationship between other public facilities, it cannot reveal the inter/intra effects of overall public facilities on urban residents (Liao et al, 2009). There has been scant attention paid to the different geographic scale effect of facility service distances and spatial access to facilities opportunities on comprehensive public facilities about spatial equity drawn from previous studies and public facility policies. Consequently, the aim of spatial equity research is to ascertain whether the distribution of public services is equitable and correlates with observed socio-economic spatial patterns (Talen and Anselin, 1998). As any geographical analysis of spatial equity in this context relies on a measure of access to services, it is important to gain an understanding of the sensitivity of the conclusions from conceptualization and measurement of accessibility. Typically, access is loosely defined on the basis of a simple count of facilities or services by some geographical unit, without regard to factors such as spatial externalities, the structure of the transportation network and choice behavior of travellers, the frictional effect of distance, properties of the supply side, and measurement issues related to the large-scale of analysis (Liao et al, 2009). Such lack of attention to the regional facility level and neighborhood facility level are to make different benefit result with the aggregate data.

Spatial structure of a city is made up of elements interacting with each other and instability of each element will affect the whole structure. The most important factor causing inequality is the lack of access to public services because it affects people's living quality and well-being both directly and indirectly (Lotfi & Koohsari, 2009, 133). The concept of accessibility is a broad concept through various aspects including physical, psychological, economic and financial accessibilities which can be dependent on per capita land use and transport network (Dadashpoor & Rostami, 2011, 7). In fact, accessibility is the ability of residents to have a good access to activities, resources, services and similar cases. Public services should be readily available to the people regardless of their place, limitations and financial resources or physical abilities (Kaphle, 2006, 2). However, the unfair distribution of services among different regions of cities in our country has affected the spatial distribution of population in urban regions. In Tabriz, like most of metropolises in Iran, there are remarkable spatial inequalities in various regions in terms of benefiting from public services. In the past, Tabriz was famous as city of gardens due to its beautiful gardens; but during the land reforms, some of villagers unfortunately sold their farms and gardens and migrated to the outskirts of cities. This issue had a significant

impact on destruction of gardens surrounding Tabriz and formation of slums in the suburbs. Consequently, irregular and rapid urbanization and marginalization caused social, economic, political and cultural problems and created a duality throughout the city in terms of the spatial distribution of municipal services. In the context of this duality, the city was divided into two parts as beneficiary and non-beneficiary of municipal services. Such prospect is inappropriate to achieve the spatial equality as one of the core concepts of sustainable urban development. Therefore, focus on various urban regions in Tabriz in terms of benefiting from municipal services, regarding spatial equality and identification of its strengths and weaknesses, can be very helpful in future urban development plans and policies and elimination of inequalities in access to urban services.

2 IMPORTANCE OF RESEARCH

Public service management comprises interdisciplinary knowledge of economics, sociology, organizational theory and law, which should be integrated with characteristic elements of the public sec-tor as motivation, bureaucracy and govern (Juliani and de Oliveira, 2016, 1034). This management must create spatial of equality. Despite the importance and necessity of considering the issue of spatial equality in the distribution of public services in developed countries, unfortunately, few studies have been done on this subject in our country, which mostly focused on its economic aspects and neglected its spatial aspect while inequality may happen economically and spatially. Therefore, it is essential to do a study for eliminating spatial inequalities considering the distribution of public services.

3 OBJECTIVES OF RESEARCH

— Studying the distribution of services in different regions of Tabriz;
— ranking different regions of Tabriz in terms of the distribution of public services considering the residents' idea, accessibility and population living in those regions;
— presenting strategies in order to achieve spatial equality in the distribution of public services.

4 LITERATUER REVIEW

There have been a few studies on spatial equality of access to urban services and facilities which have mostly focused on the concept of per capita land use. Nevertheless, some studies done in this regard are reviewed in the following.

In a study in America, Talen and Anselin (1998) examined the distribution of services such as neighborhood parks and playgrounds. Their study on spatial equality was demand-oriented and they used the accessibility indicator to analyze the distribution of municipal services.

Tsou et al (2005) tried to offer an integrated indicator of spatial equality through an integrated assessment of the distribution of urban public services within a city in Taiwan.

Martínez (2009) explored urban spatial inequality in an article (Application of GIS indicators for representation of urban inequalities in Rosario, Argentina) and compared them with other similar inequities such as social, income, and gender exclusions. Then, he evaluated living quality in physical and socioeconomic environments and analyzed the distribution of opportunities to access physical, social and virtual infrastructures in his case study using GIS software and identified the benefiting and non-benefiting regions.

Rostaee et al evaluated spatial equality in the distribution of municipal services in Tabriz through a descriptive-analytical study. Determining the indicators, municipal regions of Tabriz were consequently ranked using fuzzy TOPSIS model and planning preferences were then provided regarding each indicator for each region. The results showed that Tabriz has an inappropriate spatial equality in the distribution of these services.

Dadashpoor and Rostami investigated an integrated indicator for measuring spatial equality in the distribution of urban public services in Yasooj through a descriptive-analytical study (Assessment of integrated spatial equality of urban public services based on population distribution, accessibility and efficiency in the city). This indicator was analyzed based on population distribution, accessibility and efficiency of services using Yasooj City spatial data. The inhabitants' access to public services was determined through accessibility network analysis, hierarchical analysis model and local spatial autocorrelation model. Gini coefficient was used to analyze inequality of access to urban services and Moran coefficient was applied to analyze significance of the distribution pattern in the city. The results of Gini coefficient indicated an inequality in the inhabitants' access to urban services and the results of Moran coefficient demonstrated a significant inequality in the distribution of services among urban blocks.

5   RESEARCH QUESTIONS AND HYPOTHESES

The research questions in the present study are as follows:

- are public services compatible with resident population in different regions of Tabriz?
- are Public services distributed equally in all regions of Tabriz?
- which public services are mostly demanded according to the people inhabiting in different regions of Tabriz?
- how do different regions of Tabriz benefit from public services compared to each other?

According to the questions above, this study is to prove the following hypotheses:

- first hypothesis: it seems that public services are distributed unequally and unfairly within the city;
- second hypothesis: it seems that public services are incompatible with resident population in different regions of Tabriz.

6   METHODOLOGY

In this study, a descriptive-analytical method was used. Geographical scope of the research was Tabriz city and the statistical population included all regions in the city. The required information has been obtained by field and library research. In this study, per capita land use, accessibility of the services and people's ideas were used to evaluate spatial equality of the distribution of public services; finally, the regions were ranked using hierarchical analysis considering whole indicators and compared to each other in terms of their benefiting from services and then, recommendations were made to distribute public services in accordance with spatial equality. Public services examined in this study included education, sports facilities, parks, libraries, banks, health care, firefighting services, mosques, cultural services, urban furniture and facilities, public transport, safety, asphalt quality, street lighting at night, etc.

7   THEORETICAL FOUNDATIONS, CONCEPTS ANA PERSPECTIVE

7.1 URBAN SPACE

Urban space is defined as "a part of public open spaces which is a manifestation of social life; where citizens attend there. An urban space is the scene of communal living or "a place where social boundaries can be broken and unpredicted transactions may happen while people are together in a new social environment" (Lynch, 1972; Pakzad, 2006, 81).

7.2 URBAN PUBLIC SERVISES

Urban public services are generally defined as economic activities with communal benefits in terms of initiatives by public institutions. These services are found under supervision of public institutions, although their support and maintenance may also be assigned to the private sector. Public services are distributed widely and affect people's daily life directly; In fact, land uses which people deal with on a daily basis are considered as public services. Various specific authorities are responsible for such services like education, green spaces, sports facilities, health care, cultural and religious services. These services entirely have spatial functions. Location of centers providing services, accessibility, access network, spatial connection with other services, scale of supporting institutions, per capita land uses, etc. are all spatial characteristics of public services (Savas, 1978, 800).

7.3 DISTRIBUTION OF PUBLIC SERVICES IN AN URBAN SPACE

A relative urban space is a public good and must be used equally and fairly (Shakooyi, 1994). However, irregular and rapid urbanization have created a duality in spatial distribution of municipal services within urban context of metropolises in Iran as well as social, economic, political and cultural problems. In the context of such duality, the city divides into two regions of benefiting and non-benefiting from municipal services. An inappropriate spatial distribution predisposes social inequality. Cost of access to public services, inappropriate spatial locating, costs of being in the vicinity of pollutant units, etc. lead to socioeconomic and spatial inequality among urban population. Furthermore, economic value of land is influenced by the spatial distribution of services so that in benefiting urban spaces, land price increases remarkably compared to non-benefiting regions and state dealers and land owners thus have to compete in an unfair context. As David Harvey has noted, it is not possible to have a perfect competition market from the perspective of spatial equality (Harvey, 1997); hence locating public services leads to spatial corruption and create advantages for population of benefiting areas.

7.4 SPATIAL EQUALITY

The concept of urban equality is considerable from many aspects including social, spatial, geographical, and environmental equalities but it must be noted that any changes in the spatial organization will directly affect economic and social affairs and income distribution in a society; certainly, different mechanisms and programs will have a conflicting impact on establishment or non-establishment of equality. The most important point in the present study is to express spatial aspect of equality. Urban equality must be responsible for the following statements:

− allocating facilities and services appropriately and proportionately;
− using potential and actual capacities in the city;
− filling the gap between the rich and poor people in the city;
− preventing from creation of slums.

One of the most important factors in urban planning is appropriate distribution of spaces and services or in general terms, the spatial equality. Therefore, urban land uses and services are prominent factors that can provide spatial, social and economic equality through meeting the population demands, increasing public benefits and considering individual qualification. Consequently, demographic imbalance, which is rooted in urban inter- or ultra-migrations and excessive concentration of land uses in certain regions, can cause economic and social inequality in urban spaces.

7.5. SPATIAL EQUALITY APPROACH IN THE DISTRIBUTION OF URBAN PUBLIC SERVISES

Spatial equality relates social equality and the space. As a result, equality and inequality both emerge in the space. Spatial equality or inequality emphasize on geographical or spatial aspects of equality and include a fair and equitable distribution of resources and opportunities in the social space (Soja, 2009, 2).

Accordingly, two emphasized pillars of spatial equality are living conditions (both social and physical environments) and the distribution of opportunities (access to social, physical and virtual infrastructures) (Martinez, 2009, 390). However, facilities and services inevitably cause unequal access throughout the city since they are located separately while people use them as continuous spaces. In other words, regardless of location of the facilities, there are always people who are closer to them compared to others.

Krapton and Vis suggest three principles regarding fairness of planning for the distribution of services:

- before any distribution of services, all people must have an equal opportunity;
- any deviation will be supported if the most disadvantaged people benefit from it;
- there must be always a minimum level of quality and quantity of the distribution of services and individual accessibility so that the individuals and services should be higher than it (Dadashpoor & Rostami, 2011, 36).

8   RESEARCH CONTEXT

Tabriz city is the fifth largest metropolis in the country with a population of one million and five hundred thousand and has an area of approximately 11,811 square kilometers as capital of East Azerbaijan province. This city has ten municipal regions with region 6 as the largest and region 8 as the smallest. Region 4 has the greatest population while region 2 is the least populated. Increasing population growth in Tabriz metropolis especially in marginal regions, which mainly include region 1 and 10, and inhibition of low-income people in region 6 and 7 ,on the other hand, suggest attention and assessment of the distribution of municipal services from the perspective of social equality in urban regions of Tabriz metropolis.
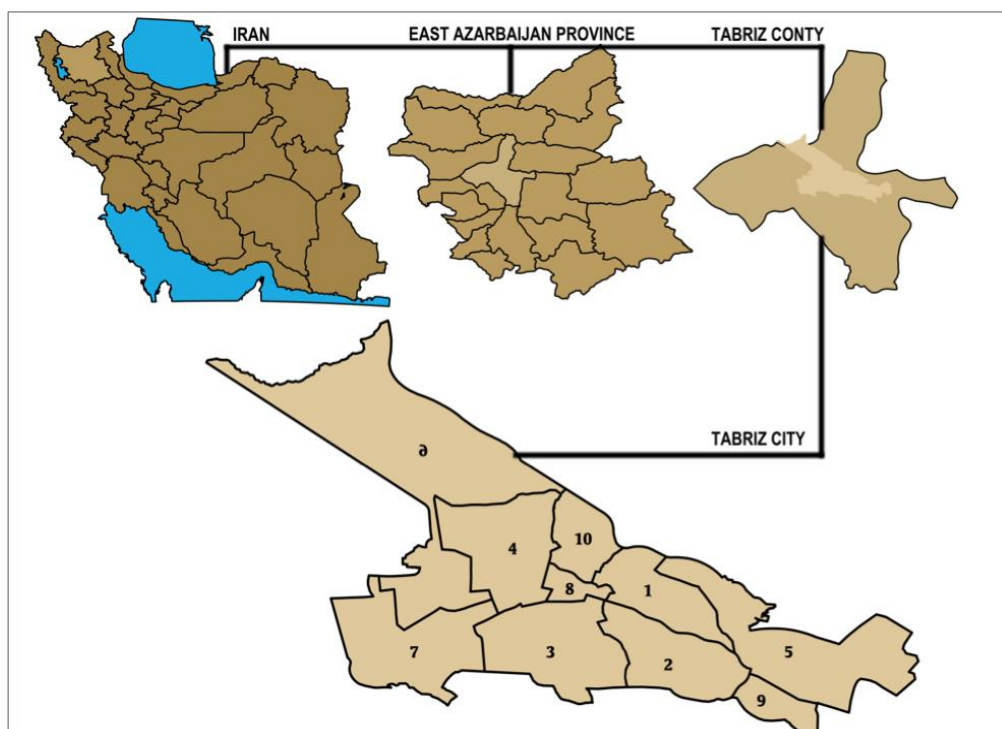
Fig. 1 Geographical position of Tabriz

REGION	AREA (m)	POPULATION
1	14966508	276779
2	17549680	210076
3	13545676	344067
4	17060809	431547
5	22828022	89233
6	5806121	115315
7	12270309	170287
8	3858665	62425
9	6045194	1654
10	9305598	275443

Tab.1 Area and population of ten municipal regions in Tabriz

9 RESEARCH FINDINGS

A few studies have been carried out on spatial equality in the distribution of urban services so far, mainly focused on one of the concepts and criteria of per capita land use, accessibility and residents' demands and neglected two other criteria. Therefore, the present study was aimed to consider all three criteria to investigate the spatial distribution of public services from the perspective of spatial equality so that it could achieve more accurate and realistic results.

9.1 PER CAPITA LAN USE

In this method, research indicators (education, health care, sports facilities, religious services, and green space) were investigated in ten regions of Tabriz; so that per capita value of the indicators was calculated in each region and a hierarchical analysis model was finally presented (binary comparison) to rank the regions in terms of per capita land use.

USE	STANDARD CAPITATION (m^2)
Educational services	$2 \leq capitation \leq 5$
Medical services	$1 \leq capitation \leq 2.5$
Sports facilities	$1.2 \leq capitation \leq 2$
Landscape	$capitation \geq 8$
Religious services	$0.5 \leq capitation \leq 0.75$

Tab.2 Standard per capita land use (approved by Supreme Council for Planning and Architecture)

Use capitation	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
Educational services	0.87	1.27	0.9	1.02	3.04	3.09	0.85	2.76	8.24	0.63
Medical services	0.3	1.22	0.6	0.15	0.01	0.3	0.03	0.39	0.27	0.37
Sports	0.36	0.73	0.34	0.6	0.9	1.64	0.62	0.17	0.55	0.19
Landscape	2.87	9.33	1.32	1.37	9.64	14.09	5.05	9.9	0	0.89
Religious services	0.15	0.05	0.08	0.09	0.01	0.13	0.02	1.69	0.12	0.83

Tab.3 Per capita land use in each region
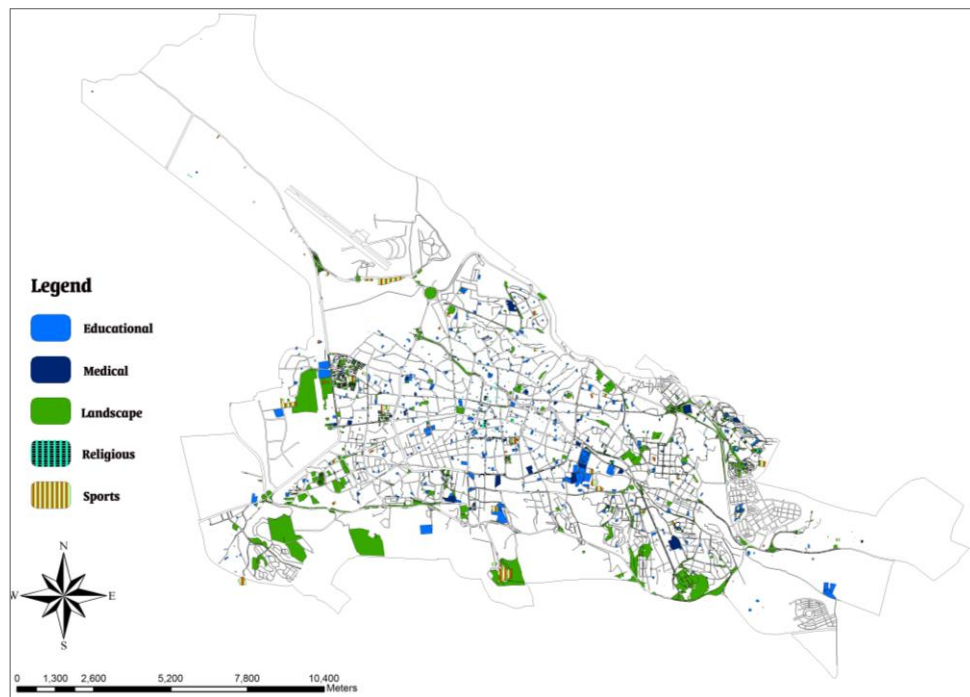
Fig.2 The hierarchical model based on per capita land use
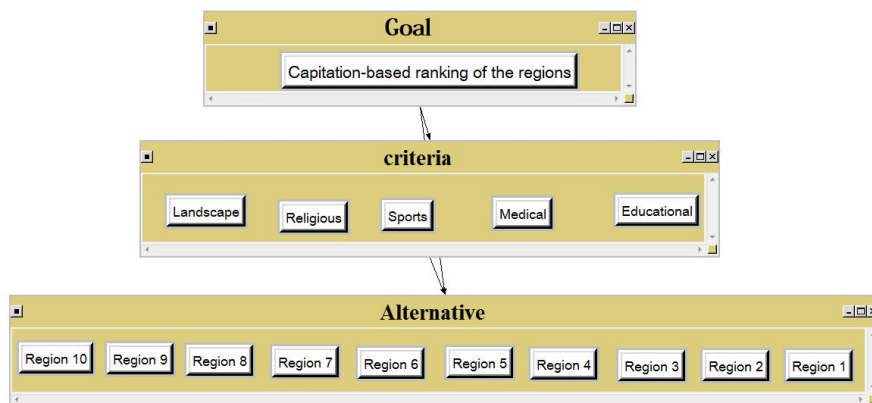
Fig.3 The hierarchical model based on per capita land use
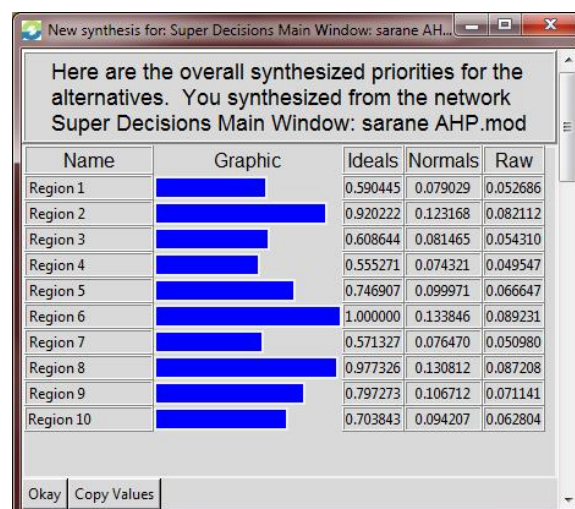
Fig. 4 Ranking of the regions based on per capita values

In the hierarchical model mentioned above, ten regions of Tabriz were ranked based on a binary comparison of per capita value of the indicators by Super Decision Software. To lessen the percentage of errors, the regions were rated through direct data entry by introducing per capita percentages. According to the software output, the regions are ranked as follows:

Rank	1	2	3	4	5	6	7	8	9	10
Region	6	8	2	9	5	10	3	1	7	4

Tab. 4 Ranking of the regions based on per capita values

9.2 ACCESSIBILITY

In this method, three indicators have been considered to evaluate access to the services (education, health care, sports facilities, religious services and green space): benefiting, relatively-benefiting and non-benefiting indicators. To evaluate accessibility, Multiple Ring Buffer function was used by ARC GIS Software and range of the distribution of services was calculated in ten regions based on standard accessibility.
Standard accessibility for studied services was presented in the following.

Use	Accessibility		
	Benefiting		Benefiting
Primary school	400	800	1200
Guidance school	800	1200	6000
High school	1200	2000	8000
Clinic	1000	2500	15000
Hospital	750	1500	11000
Sports	800	1000	4000
Landscape	700	900	3000
Religious services	600	800	2500

Tab. 5 Accessibility standards (Resource: Tabriz detailed plan, per capita urban land uses by Dr. Habibi)
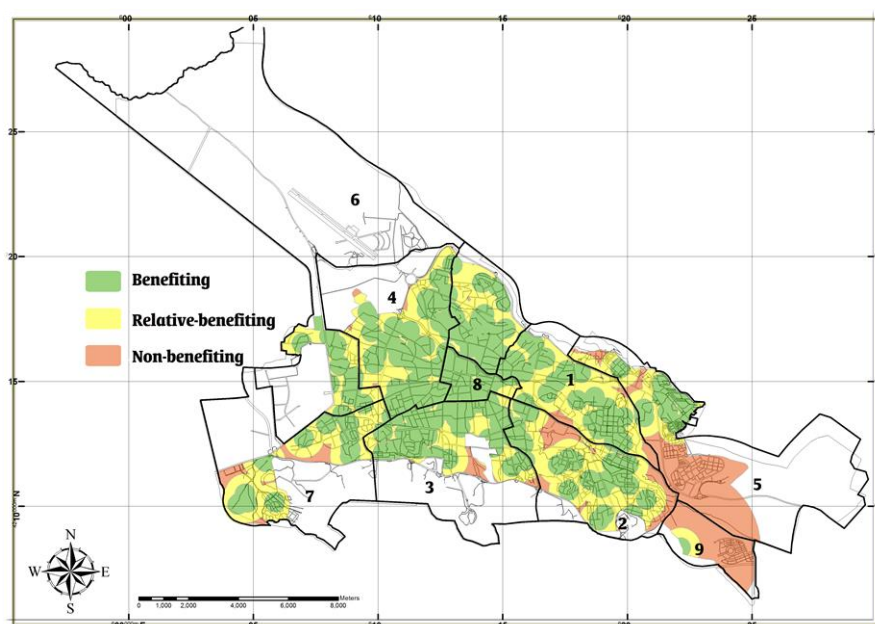
Fig. 5 An example of accessibility standard: Primary school
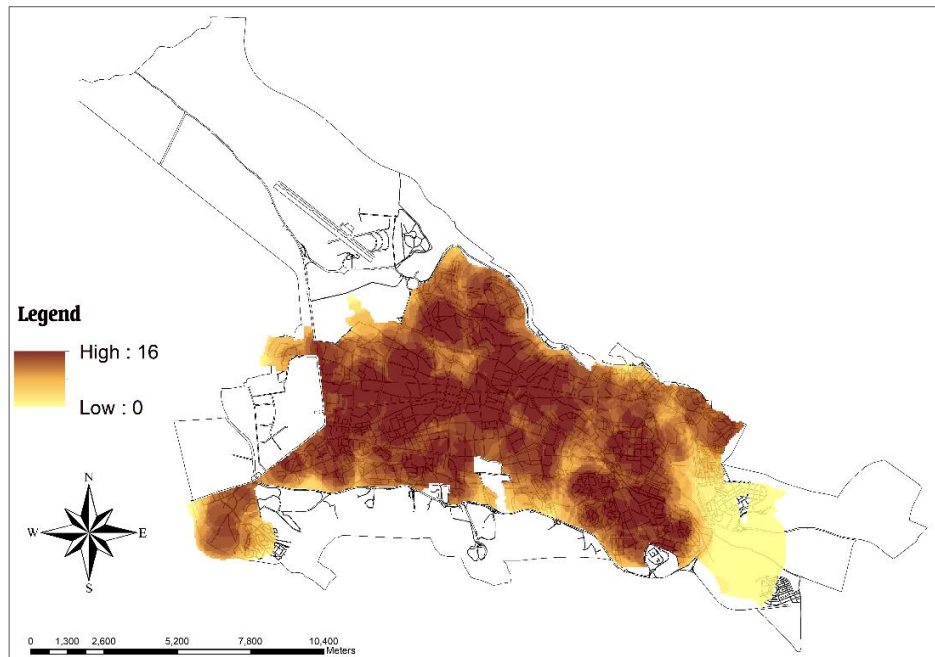
Fig. 6 An integrated model of spatial equality based on accessibility

Use/ Accessibility percentage	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
Primary school	58.1	44.57	67.7	69.06	21.56	61.49	38.43	90.77	3.73	69.58
Guidance school	77.85	74.8	89.2	98.4	27.55	72.46	77.29	100	24.29	99.81
High school	98.7	89.33	97.17	85.6	32.23	98	92.52	100	46.74	91.15
Hospital	46.5	50.9	36.14	62.33	0	46.11	1.67	76.56	0	36.75
Clinic	60.23	69.12	60.4	73.26	19.8	74.35	65.05	93.17	1.78	55.62
Sports	88.97	70.42	66.15	77.35	35.75	79.33	74.98	87.91	0	83.67
Landscape	82.85	77.25	52.22	50.49	33.16	66.61	74.51	64.61	14.4	60.38
Religious services	89.35	67.83	94.73	98.68	26.49	94.4	72.36	100	11.09	98.35

Tab. 6 Accessibility percentage in each region
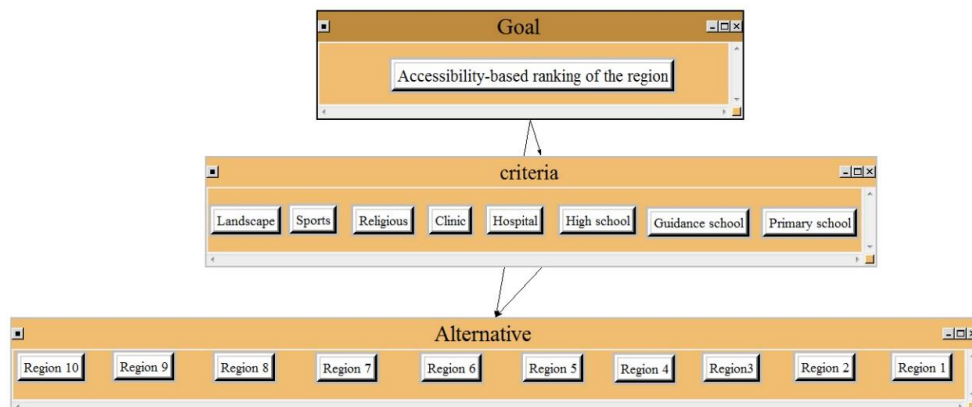
Fig. 7 The hierarchical model based on Accessibility

New synthesis for: Super Decisions Main Window: shoeae da...				
Here are the overall synthesized priorities for the alternatives. You synthesized from the network Super Decisions Main Window: shoeae dastersi AHP.mod				
Name	Graphic	Ideals	Normals	Raw
Region 1		0.892331	0.110521	0.073681
Region 2		0.851290	0.105438	0.070292
Region 4		0.909989	0.112708	0.075139
Region 5		0.553941	0.068609	0.045739
Region 6		0.883799	0.109464	0.072976
Region 7		0.780877	0.096717	0.064478
Region 8		1.000000	0.123856	0.082571
Region 9		0.473675	0.058668	0.039112
Region 10		0.876629	0.108576	0.072384
Region3		0.851338	0.105444	0.070296

Okay | Copy Values

Fig. 8 Ranking of the region based on Accessibility

Rank	1	2	3	4	5	6	7	8	9	10
Region	8	4	1	6	10	3	2	7	5	9

Tab. 7 Ranking of the region based on accessibility

In the hierarchical model mentioned above, a binary comparison of ten regions was done based on accessibility. To lessen the percentage of errors, regions were rated through direct weighting or entering per capita percentages.

An important point was that comparison of the results obtained from hierarchical models based on per capita land uses and accessibility showed a significant change in ranking of most regions. For example, region 4 was ranked as last place per capita land use hierarchical model while it got second place based on accessibility hierarchical model; it was due to high concentration of population in region 4 where despite a relatively fair distribution of the services, it got last place in hierarchical model based on per capita land use. Therefore, similar to the present study which has considered all factors, more than one criteria and methods must be considered in studying the distribution of public services from the perspective of spatial equality.

9.3 RESIDENTS' IDEAS

Public services must meet the residents' demands. The residents may require various services such as transport, offices, education, and green space; thus, residents' needs and type of services should be concerned more accurately. As discussed through main context of the paper, three criteria (the residents' idea, accessibility, per capita land use) are first used simultaneously to assess spatial equality in the distribution of public services in this paper. Given that bottom-up or demand-based and neighborhood-based planning has been noticed in recent urban planning, the article highly emphasizes on people's ideas and needs to implement plans and investigates it as an indicator of spatial equality assessment.

In this method, spatial equality in the distribution of services was evaluated relied on the residents' ideas and demands and benefiting from services (education, sports facilities, parks, banks, health care, firefighting services, mosques, cultural services, urban furniture, public transport, safety, asphalt quality, street lighting at night) and their distribution were assessed in five levels (excellent, good, moderate, bad and very bad) in regional scale. Following that, benefiting percentage of each region was calculated and regions were ranked by SPSS Software.

Use/ Satisfaction percentage	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
Primary school	63.9	71.26	82.84	76.3	78.18	75.46	79.92	70.9	75.99	74.74
Guidance school	56.52	66.24	74.02	67.94	76.44	70.48	69.56	67.24	75.99	67.36
High school	58.22	68.36	70.14	67.94	76.44	73.92	65.86	72.32	75.99	67.9
Medical services	68.62	76.32	83.84	80.5	78.26	80.08	74	76.88	75.99	72.24
Sports	47.42	54.18	65.48	57.54	60.06	53.9	65.86	47.8	67.98	54.18
Landscape	59.48	79.57	64.22	70	87.26	77	74	60.02	60	57.82
Religious services	88.24	78.76	87.28	80.82	69.16	81.62	82.22	85.16	87.99	84.68
Asphalt quality	56.08	63.4	63	64.1	76.44	64.68	67.08	58.06	51.99	52.72
Firefighting	64.42	60.04	65.12	60.44	63.7	50.82	54.52	69.08	54.33	64.16
Primary school	63.9	71.26	82.84	76.3	78.18	75.46	79.92	70.9	75.99	74.74
Guidance school	56.52	66.24	74.02	67.94	76.44	70.48	69.56	67.24	75.99	67.36
High school	58.22	68.36	70.14	67.94	76.44	73.92	65.86	72.32	75.99	67.9
Medical services	68.62	76.32	83.84	80.5	78.26	80.08	74	76.88	75.99	72.24
Sports	47.42	54.18	65.48	57.54	60.06	53.9	65.86	47.8	67.98	54.18

Tab. 8 Residents' satisfaction percentage of accessibility to services in each region

In the following, a hierarchical model was used similar to analyses based on per capita land use and accessibility, and a binary comparison of the regions was done; and according to the residents' ideas, ten regions of Tabriz were ranked based on benefiting from public services.
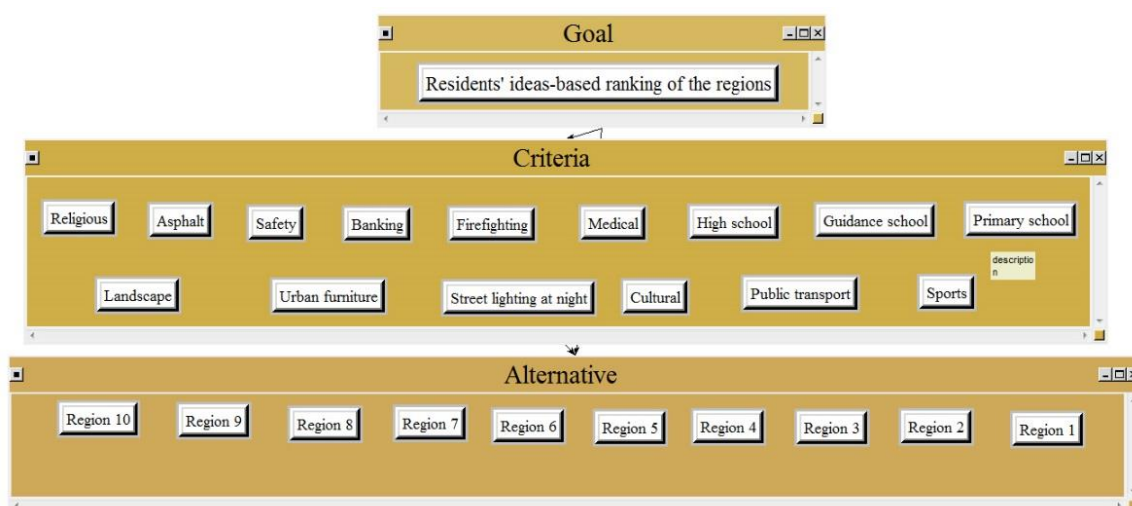
Fig 9. The hierarchical model based on the residents' ideas
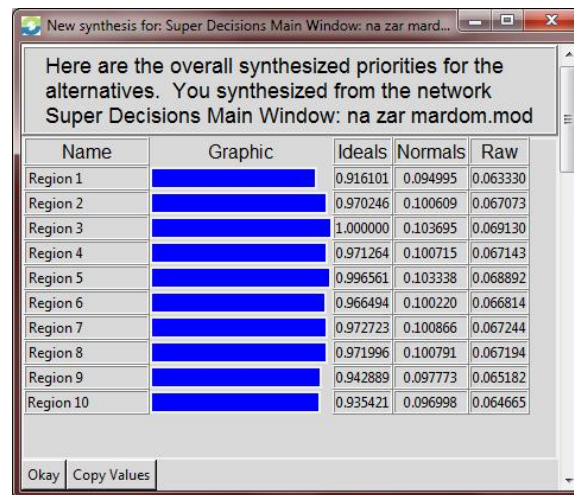
Fig. 10 ranking of the regions based on the residents' ideas

Rank	1	2	3	4	5	6	7	8	9	10
Region	3	5	7	8	4	2	6	9	10	1

Tab. 9 Ranking of the regions based on the residents' ideas

9.4 GENERAL ANALYSIS

According to what mentioned, relying on just one method does not lead to realistic results. It was observed that some regions were in the last place in terms of per capita land use while they were in the first place in terms of accessibility and the residents' ideas. Thus, to achieve accurate and realistic results affected by whole criteria, all aspects must be considered in a research study. Therefore, in the present study, three methods mentioned above were integrated by a hierarchical analysis model to rank ten regions of Tabriz through an accurate comparison.
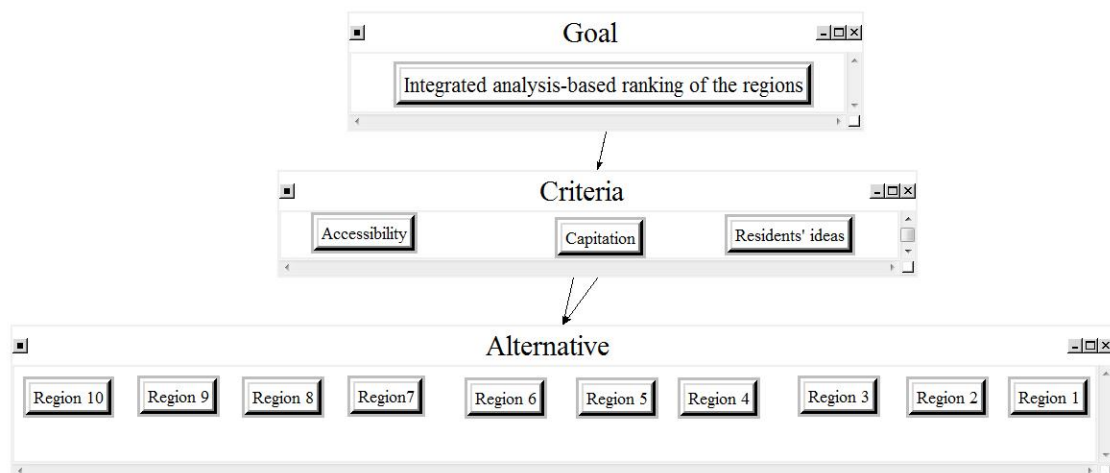
Fig. 11 The hierarchical model based on an integrated analysis

In general analysis, the same weight was considered for the criteria (residents' ideas, per capita land use, accessibility) and the options were weighted in respect of each criterion based on their ratings in hierarchical analyses.
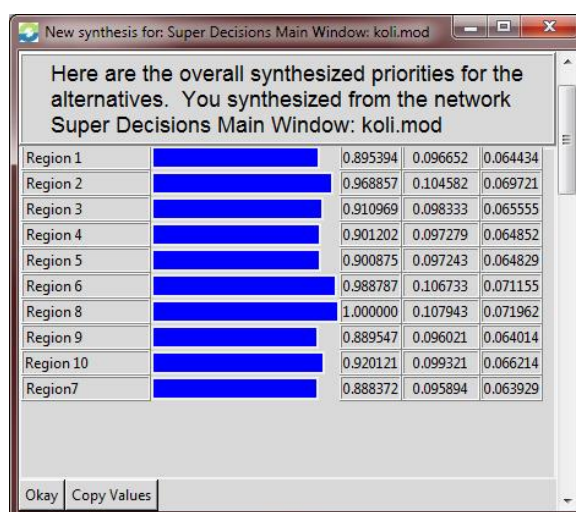
Fig. 12 Ranking of the regions based on an integrated analysis

The overall rating of whole regions taking into account all the criteria is as follows:

Rank	1	2	3	4	5	6	7	8	9	10
Region	8	6	2	10	3	4	5	1	9	7

Tab. 10 Ranking of the regions based on an integrated analysis

10 CONCLUSIONS AND RECOMMENDATIONS

Main objective of this study is to investigate the distribution of services in ten regions of Tabriz and rank them based on accessibility to public services. This study analyzed and evaluated spatial equality in the distribution of public services using various data and sources of Tabriz and three methods of per capita land use, accessibility and the residents' ideas. The proportion of the distribution of public services to the urban population and equality and fairness of the distribution of services based on accessibility, people's satisfaction as well as spatial distribution pattern in Tabriz has led to two main hypotheses: public services were distributed inappropriately within the city and public services were incompatible with the resident population in different regions of Tabriz. The results indicated an inequality in the distribution of public services compared to the population (per capita land use) and the residents' accessibility and demands. The data on public services in Tabriz were incompatible with standard per capita land use and accessibility to the services. Moreover, inequality was evident in various regions of Tabriz in terms of per capita land uses, accessibility and residents' satisfaction.

Given that most of the regions were ranked differently through various analysis methods, e. g. region 4 which was in the last place in terms of per capita land use and in the second place in terms of accessibility, the three criteria were integrated in the hierarchical model in which the gap between the regions was lessened due to overlap of the criteria. However, this did not mean equality in these regions since the data and diagrams of three methods implied an inequality and lack of service distribution based on spatial equality in the regions. Region 4 has gained the least benefit in terms of per capita land use; region 9 has gained the least benefit in terms of accessibility; and region 1 has gained the least benefit in terms of the residents' ideas. In integrated hierarchical method, region 7 has gained the least benefit.

According to the research findings, following recommendations are proposed to benefit citizens by a fair distribution of municipal services.

10.1 TYPICAL RECOMMENDATIONS

−   Considering the success of participatory approach in planning, it was proposed to include citizen's ideas in whole steps of implementing municipal service projects;

−   providing participation requirements by municipalities and related organizations;

−   involving people before, during and after implementing public service projects and urban plans;

−   investigating and responding to urban services requirements based on their priorities by the municipality and other organizations related to municipal services;

−   creating a local council in each region to involve people and meet their needs.

10.2 TOPICAL RECOMMENDATIONS

−   Increasing per capita share of education in region 1,2,3,4,7 and 10;

−   increasing per capita share of health care in all regions except region 2;

−   increasing per capita share of sports facilities in all regions except region 6;

−   increasing per capita share of religion services in all regions except region 8 and 10;

−   increasing per capita share of parks and green space in region 1, 3, 4, 7, 8, 9 and 10.

An important point is that fair distribution, level of requirement and the current and future population of the city must be considered in locating and budgeting public services so that the resident's accessibility to the services would be appropriate to their demands and needs.

10.3 PRIORITIZINIG THE REGIONS IN TERMS OF THEIR NEED TO PUBLIC SERVISES ACCORDING TO THE RESIDENT'S IDEAS

Region 1: Increasing per capita share of banks and widening paths.

Region 2: Increasing per capita share of sports facilities.

Region 3: Increasing per capita share of parks and green space.

Region 4: Increasing per capita share of sports facilities and improving quality of asphalt pavement.

Region 5: Increasing per capita share of sports facilities.

Region 6: Increasing per capita share of cultural services and improving quality of asphalt pavement.

Region 7: Increasing urban furniture.

Region 8: Improving safety (speed bumps, overpasses and crosswalks).

Region 9: Increasing per capita share of offices and green space.

Region 10: Increasing per capita share of offices and green space.

Priority	1	2	3	4	5	6	7	8	9	10
Region	7	9	1	5	4	3	10	2	6	8

Tab. 11 Prioritizing of the regions based on an integrated analysis

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IMAGE SOURCES

Images, tables and schemes have been elaborated by the author

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TeMA

WATERFRONT AND URBAN REGENERATION

NEW CHALLENGES FOR GENOA

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ABSTRACT

The purpose of this paper is to understand if the strength of water is so important like in the past and to see like this element can be the driving force for redevelopment and urban regeneration of a city- port. The waterfront represents those parts of a city develop from the contact with the water until to involve the inner parts, it is a sort of permeable urban surface where the link with water is able to conjugate the different ways to live this special bond. This view permits to look at the waterfront, not only as a simple urban area well defined, but it is a new method to watch the city that draws the inspiration from the water for its future assets, without to forget its identity.

Genoa represents an example of Mediterranean city (such as Marseille, Valencia and Barcelona).

Our research brings from a debate among the different actors (University, Planning Section of the Municipality, Port Authority) to an elaboration of some future proposals which underline the different meanings of the relationship with water in the west of Genoa, Prà-Voltri's area: from walking on different levels, above and below the channel specially designed, the opportunity to live (as in previous years) the beach for swimming, recreational and sporting appearance in a new Channel, in the continuation of activities in the existing Prà Channel. These elaborations are designed to determine the functions that the new Channel could take becoming in turn an urban redevelopment tool: the influence of the Channel, in fact, it should reach the city center reconnecting to historical paths and the promenade to become an integral part of the everyday life.

KEYWORDS:
Waterfront; regeneration; Genoa port-city

TeMA

有关土地使用、交通和环境的杂志

滨水区与城市复兴

摘要

本文旨在分析水的作用是否依然和以前一样重要，并分析水元素能否成为推动港口城市重建和城市再生的动力。滨水区指的是城市中依托于水发展起来的地区，并不断向内部地区延伸。它是一种城市透水表面，城市与水的联系可通过各种不同途径与这一特殊纽带相连。此观点提供了审视滨水区的新角度，它不仅是简单的界限分明的城市区块，更是一种审视这座城市的新方法，由水获得灵感，以水作为其未来资产，同时不忘其根。热那亚是地中海城市（如马赛、瓦罗西亚和巴塞罗那）的典型代表。本研究先讨论不同参与者（大学、城市规划部门、港务管理局等）之间的矛盾争论，然后详细分析部分未来提议，其强调了热那亚西部 Prà-Voltri 地区与水的关系的不同含义：不同水平上的通行、特殊设计的通道上部和下部、打造可以游泳的（和往年一样）沙滩、新通道的娱乐和体育活动、现有 Prà 通道活动的延续。这些细化计划用于确定新通道可能承担的角色功能，进而成为促进城市再发展的工具：实际上，通道应通达至城市中心，使存在已久的道路与海滨步行大道相连，使其成为日常生活的有机组成部分。

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关键词：
滨水区，复兴，热那亚，港口城市

1   THE WATERFRONT AND THE WATER ELEMENT

Nowadays, we used to consider the water as a common resource but it has been, from past until today, a fundamentally element for the human activities and we can realize this when we put in relationship water with the urban surround.

The origin of the first civilizations is conditioned by the water available and the keep it for agriculture. This was the first transformation of the natural landscape.

With technological progress, the populations were able to control the nature elements including water which became an emblem of wealth and prosperity.

The urban settlements which were born around water fonts are made of different features, this is simply visible even in our actual cities. Through time, water becomes always so important to be also a symbol of the society, an instrument to read the way of life. "Today fluidity and liquidity are relevant metaphors when seeking to understand the nature of current circumstances and in many respects represents a new phase in the history of modern times" (Bauman, 2000).

"The fluidity of the city is both a condition and an ideology. This is a condition reflected in the flows of desire for urban waterfronts, in the flows of global capital, and in the flexibility of urban palling regulation. It is an ideology reflected in the state slogan "in the move" and in the architectural images of dynamism and fluidity" (Dovey, 2005).

The purpose of this paper is to understand if the strength of water is so important like in the past and to see like this element can be the driving force for redevelopment and urban regeneration of a city-port. The regeneration of urban waterfronts is one of the key urban design and planning stories of the late twentieth century" (Dovey, 2005). In this paper a specific focus is proposed about the port city of Genoa. Some punctual interventions able to regenerate the waterfront are already done but today some areas still need of specific studies in order to elaborate a masterplan capable to face the entire waterfront and bring the city toward an efficient urban regeneration. About this theme, at the second paragraph some examples of urban and waterfront regeneration are reported mainly around the Mediterranean cities so as to identify the good practices and apply them to the city of Genoa. The third paragraph reports the case of Genoa, here, a particularly focus examines the western waterfront of the city and analyzes the existing channel in the district of Prà. This research proposes the continuation of the present channel as well as the development of a new one able to become an engine for the regeneration of this part of the waterfront. This approach places the water at the core of the regenerative action and represents an innovative solution. In our vision "the waterfront is not only the part of the city surrounded by the sea or a river, but it is a new attitude of the city that interacts with the liquidity, powerful contemporary category" (Carta, Ronsivalle, 2016).

Initially the focus is about on cities which are located on the sea coasts, in particular on the Mediterranean, well represented by the term of contamination.

The Mediterranean Sea has developed a fundamental role to spread the cultures which were born on its coasts, this thanks to the climate conditions, quite water, foreseeable wind, teeming with fish. These reasons put the Mediterranean Sea in the center of the world for many centuries, it has defined the perception of the space and of the continents. Myths and legends are an emblem of the Mediterranean's role and its cultural power that defined it such as a common land.

The Mediterranean coast makes feel a surprising unity, cities and cultures seem so similar and it is impossible to distinguish a nation by another one. The landscape from the sea shows recurring urban models, environmental features such as climate, vegetation and territorial characteristics.

After the post-war period, with the growth of industrialization, the historic and cultural identity of the Mediterranean is afflicted by a crisis which obligates the world to face up to the new model called globalization. In this phase, the traditional relationship with the water had to change. The lands, which confront themselves

with the sea, were exploited in favor of economic reasons. The suitable parts of the territory, first of all those nearest to the sea, are alienated in agreement of world business growth.

Here a new key to translate the challenge of the urban territory born: the waterfront.

"Rising to the challenge of the urban waterfront as "spark of urban regeneration" demands targeted efforts to create the sensation of a waterfront not so much as a physical location but more in the form of a liquid aspect of the city: the Fluid City's identity" (Carta, 2012). In fact "fluid city is fundamentally about a city becoming "unsettled". We generally approach cities as "settlements", a sites or places where forms and identities have become stabilized. While I have a good deal of respect for settled notions of place identity, the focus here is on understanding urban change as a confluence of flows of different forces, both global and local" (Dovey, 2005).

The waterfront represents those parts of a city develop from the contact with the water until to involve the inner parts, it is a sort of permeable urban surface where the link with water is able to conjugate the different ways to live this special bond. This view permits to look at the waterfront not only as a simple urban area well defined, but it is a new method to watch the city that draws the inspiration from the water for its future assets, without to forget its identity.

The urban identity actually forms an important theme around a context signed by loss of historic memory and urban transformations. The Mediterranean cities, in them difference, inherit from water the feature of fleeting. They are complex realities, rich of stratification and cultural phenomena difficult to analyze and define. Here the social dynamics are fundamental but their understanding is strictly connected to their fluidity. "Liquidity provides us with an important interpretative key to understand many aspects of the contemporary city, to plan its relationship with the dynamism and to lead the rapid speed of its transformations" (Carta, Ronsivalle, 2016). The latter reflects the essence of a Mediterranean city but it was in conflict with the functionalism of the modern urban planning that limits the spaces depending on specify and fixed models. The dare of our cities is the care of the common life, in according to the contemporary model of city planning in favor of qualitative values thanks which the public space can positively grow.

2   THE WATERFRONTS IN THE INTERNATIONAL PANORAMA

"Urban waterfronts are today one of the most prolific variants of creative cities: dense and hybrid locations where resources, opportunities, aspirations and ambitions of cities are translated into visions, new relations and projects. The creative port city is capable of reactivating new urban metabolism, of generating new architectural forms, of producing new landscapes and, through the permanent flow of urban culture, of fueling the great relational networks, making them more dynamic, communicative and competitive" (Carta, Ronsivalle, 2016).

Following, four cases study are chosen to understand the regenerative strength of waterfronts and how they are able to involve the entire city. These cases help us to describe the different types of requalification, they give us suggestions and tools to foresee how much a urban redevelopment can be successful and at the same time they underline the critical effects due to the urban transformation following the great events. Among the case studies, Marseille, Valencia, Barcelona are the main interprets of a fast process of development due to great public events. Instead the fourth case, Bilbao, is a different reality. Bilbao is a different case because it is close to the Ocean and it invested in the architecture and tertiary sector to resolve its problems of chronic decline.

"For many years, municipalities and regional governments pursue the way of mega-events (Olympic Games and Expo in the first place) to acquire a new image, reposition itself internationally, diversify its tourist and cultural offer. Sometimes these events are unnecessary, often they are only an intermediate result which let

on the field abandoned structures (too much expensive and difficult to reuse), due to errors and illusions" (Guala, 2015).

From these cases appears as "the waterfront has also been a primary scene of experimentation in architecture, planning and urban governance" (Dovey, 2005).

Nowadays too much times the regenerative strength of the waterfront is deaden because the inaccessibility and decline of the urban areas which transform themselves in break points with the rest of the city, a sort of no man's land between water and urban ground.

This decline is much more negative if the city traditionally identifies itself through the water. The relationship with this element assumes different faces but, at the same time, it shows important kind of similitude such as the requirement to recover a rational continuity along the littoral in way to optimize cohabitation between city and its harbor.

The modern waterfronts are potentially focal points able to drive the development of entire parts of a city and the goal is to put together the many actors involved and their different disciplinary sectors. It is necessary to weave a dense network of contacts to conjugate urban projects, economic strategies in order to defend the cultural and social heritage. It is an hard working to make in practice as we can see a lot of projects remain in stand-by.

2.1 MARSEILLE

"I know the harbor at Marseille well and it is a truly grand space. This project is a great opportunity to enhance it using very simple means, to improve it with small, discreet pavilions for events, for markets, for special occasions. Our approach has been to work with the climate, to create shade, but at the same time to respect the space of the Harbor, just making it better" (Foster, 2012).

Marseille (see fig.1, the blue indicates the areas object of regeneration and the fuchsia underlines the punctual structures) has a strong connection with the sea. Its proximity to Italy makes the city very similar to the Ligurian cities. In particular Marseilles shares with Genoa the linear development along the sea coast built in the time for about 10km of extension with an historic core called Vieux Port. This area, at most closed to the open sea, became indissolubly part of the city thanks to an interested urban integration. The dock is a dynamic business center for the fish market, in fact the most of the darsena hosts a lot of fishermen who are the protagonists of this space together with sailing boats, yachts and motorboats. The Vieux Port so is an hybrid area placed between land and water where the city finds its real essence. The urban asset we can see today originates from the great investments employed thanks to designation of Marseille as European Culture Capital 2013.

Here the goal of the regeneration was to re-emerge the compromised relationship between city and sea. Following this reason the most of financial resources were used for the Vieux Port and its surrounding. In this paper is reported this important urban regeneration because it represents a positive example but who contains some critical sides. Marseille is a model to understand how waterfronts are considered as public spaces where every citizen is a owner so everyone is linked to it, also the simple walker feels the duty to express a personal opinion about this part of the city.

The urban project considers, among the main actions, the expansion of the pedestrian areas working through the alteration of the equilibrium between the public and the private spaces.

The docks have become a simple pedestrian area close to the water without those historic activities of the fishermen who worked before on these docks. The project[1] inserts a new installation that has became the real core of the Vieux Port, the Ombriere.

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[1]   The competition-winning masterplan is designed by London atelier Foster + Partners in 2011-2013. It engaged a large area of about 100.000 m^2.

1- Veles y ventes, 2- Pavillions of the America's Cup, 3- Ciudad de Las Artes y Las Ciencias

1- Ombriere, 2- City hall, 3- Fort St.Jean, 4- Ville Mediterranee, 5- MuCEM, 6- Palaice du Pharo, 7- Fort St. Nicolas, 8- Cathedral

Fig. 1-2 Marseille waterfront (on the left) and Valencia waterfront (on the right)

Initially it was thought as a platform roof under which to host the traditional fish market but soon it has become a symbol of the Port and the main attraction thanks to its reflectance surface like a mirror. Who passes under the Ombriere is naturally tempted to look up to observe the entire area flipped.

This feature of the Ombiere makes it clear that it is a device which does not research a dialog with the water because it is self-referential.

Another element of forethought is the absence of benches, green spaces and shadow zones, this fact shows that the design choice interprets the Vieux Port as a transition area. So the darsena, only apparently, connects the city with the sea but really the new urban asset does not permit the historic way to interface with the water and the fishing activities, the docks has become a simple passage who seems a wall that divides water and ground.

2.2 VALENCIA

"The temporary mega events are at the fundamental of the most interesting cases of waterfront redevelopments. In the international contest mostly in Europe, the mega events and their effects on the long period have transformed the water-cities as indisputable protagonist of the urban planning and government" (Giovinazzi, 2009).

Today Valencia (see fig. 2, the blue indicates the areas object of regeneration and the fuchsia underlines the punctual structures) is a symbol of a redevelopment process that has been renewed, dealing with the requalification of maritime and cultural heritage of the city. Valencia's new face is constructed through the restauration of its identity, finding a resource in the coastal strip and opportunities for development in economic, environmental and cultural terms. The city lives a cycle of urban transformation which permitted a gradual expansion of approaching the coast. This important evolution is based on the restauration of the ancient port of Valencia in order to cultural and touristic purpose with different application in the relationship between water and city. The year 2007 is a turning point thanks to the nomination of Valencia as the host city of the 32nd edition of the America's Cup. Here, the regeneration of waterfront begins from an international sportive event which becomes part of a wider redevelopment project to mend the relationship between Valencia and its littoral. The port of Valencia is the example of a structure that can be designed again thanks to the economic support justified by an international event that transforms Valencia in one of the most popular city of Spain. Formerly the city was subject to an important change of its urban asset that interested the Turia river.

"The growth of the city and its gradual expansion towards the sea, following the transformation of the old docks, and the diversion of the River Turia are critical for the recovery of its fluvial and maritime features ... In the sixties, the river was diverted and this let the river bed dried up. Its tortuous path, crossed the whole city so this important operation permitted to have an extraordinary element of re-stitching, rehabilitation and integration of the different urban parts" (Campisano and Mason, 1983) (Gaja Díaz, 1993).

This operation left a huge space that went around the historic neighborhoods of the city. This void early become one of the most important part of the urban asset enriched by green spaces, cycle paths, sportive and leisure structures, so the "Jardin de Turia" was born and it influenced the surrounding until to revitalize the historic center. This green park modified the entire urban order increasing the social sharing and building a new imagine of the city with more than one hundred ha.

The Jardin is a sort of "greenfront" around which the modern quarters meet the traditional ones till reaching the waterfront. About the harbor of Valencia, in the 80's, it fell in crisis due to the diffusion of the logistic system of containers and the bigger ships that need deeper seabed and larger spaces. Slowly the mercantile activities moved to other parts located outside so the littoral was ready to host the regeneration of the waterfront.

2.3 BARCELONA

"The waterfront of Barcelona is characterized as an inserted node within an international network which plays a highly important role. Importance conferred by the territory that surrounds it, the complexity that is developed in a restricted area and the different functions that tend to expand more and more to develop a certain degree of competitiveness" (Ridolfi, Valdelvira, 2011). Consider Barcelona (see fig. 3, the blue indicates the areas object of regeneration and the fuchsia underlines the punctual structures) as an excellent example of the requalification of a city is a fact almost discounted. The Catalan capital city used the Olympic events (1992) to consolidate the regeneration strategy starting from the 80's with capillary and diffuse actions on the entire city. The process continues during the following years and in 2004 it ended with the Universal Forum of Cultures sponsored by UNESCO, this moment remarks the ending the long process of urban change.

Initially "the urban regeneration policies, implemented in the city of Barcelona in the last two decades, have led to the disappearance of a large part of the industrial heritage" (Montaner, Alvarez, Muxi, Casanovas, 2014).
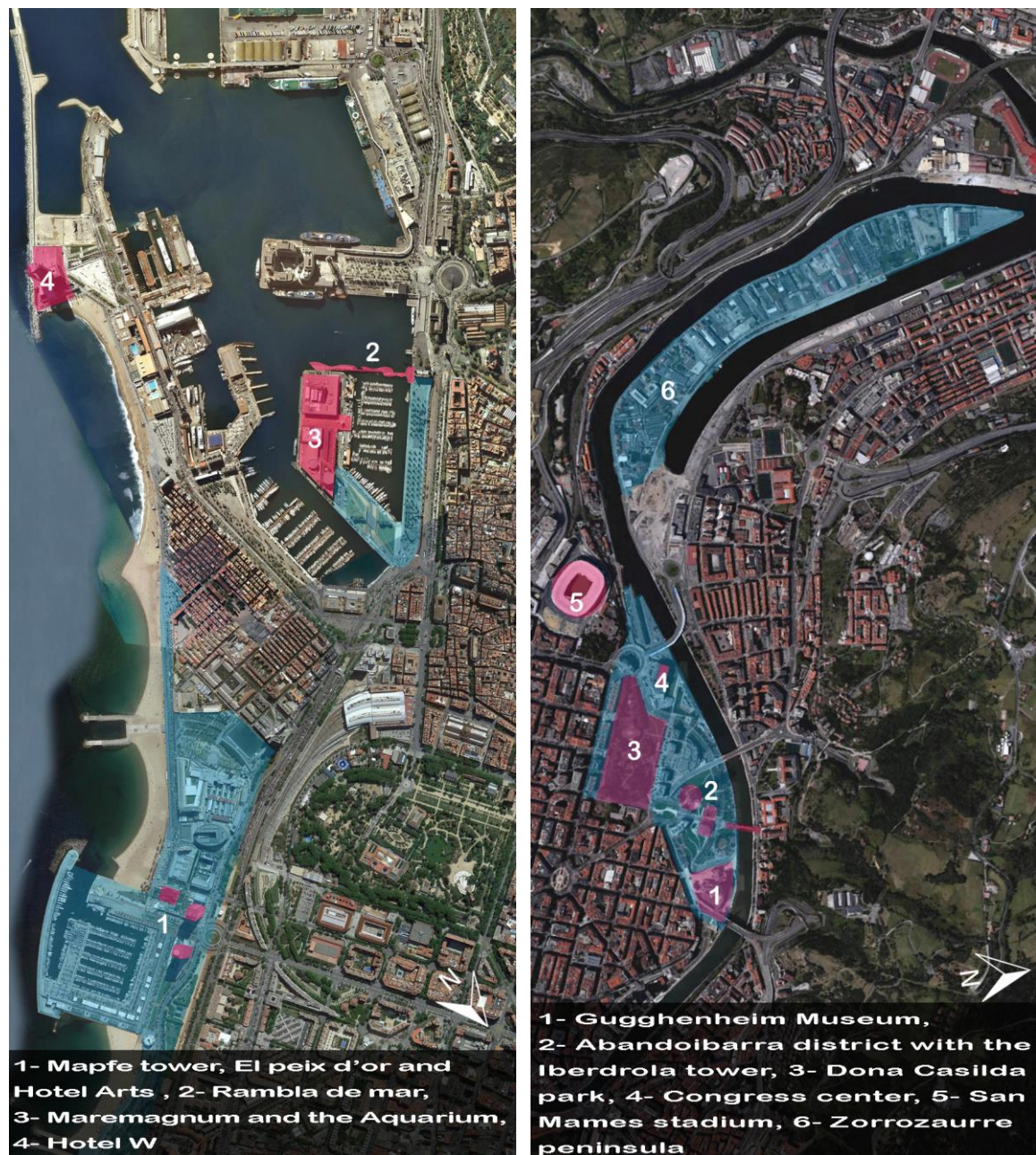
Fig. 3-4 Barcelona waterfront (on the left) and Bilbao waterfront (on the right)

In 1992 Barcelona takes the opportunity to modernize the sportive settlements across the waterfront, a lot of new infrastructures are built both in the central areas and in the suburbs. The zones concerned are many (Montjuc, Diagonal, …). The quarter of Barceloneta, close to the best beaches of the city, is involved in important urban designs. Differently from other cities, the strategy of Barcelona is global: it aims to spread many actions on the whole territory balancing the cultural development, the touristic attractions, the private business and the public wellness. These projects are based on the restoring of the touristic accommodations, the expansion of the marketing, the touristic monitoring and the increasing of the museums and cultural offers.

This plan shows a city which is able to transform itself and it knows to use its fame and visibility for an international placement.

Finally in 2004 the Forum tackles a series of urban designs in the Poble Nou quarter involving the Besos river mouth till the closer municipality of Sant Andria. In this way the planning of the city is completed and touches the eastern suburbs till the western parts where the traditional maritime activities remain more integrated than before.

2.4 BILBAO

"At every instant, there is more than the eye can see, more than the ear can hear, a setting or view waiting to be explored. Nothing is experienced by itself, but always in relation to its surroundings, the sequences of events leading up to it, the memory of past experiences" (Lynch, 1960).

Bilbao (see fig. 4, the blue indicates the areas object of regeneration and the fuchsia underlines the punctual structures) represents a considerable case study in terms of relationship between water and urban land. It is not geographically a Mediterranean city but it is reported in this paper because represents a reality which has always coexisted with the Nervion River that links the city with the Ocean.

Here, the regeneration action starts from 90's along the river banks used, in the past, for productive activities, then abounded because the crisis in the sector. This moment leaves on the ground entire degraded areas so the city decides to invest on culture as the engine of the urban development. This choice was not induced by a specify mega-event like the other cities see before, but it is founded on the realization of the Guggenheim museum.

This building is part of a wiser urban planning with the ambitions to begin the transformation from the river banks to the rest of the city.

It is a political choice which wants to change the urban model to initiate an economic changing to face the heavy crisis that involved the Basque country from the second post-war period. The redevelopment strategy aims to the improvement of the urban wellness (accessibility, mobility, environmental quality) and it also includes a social plan for the community giving a great role to the culture and the social identity in order to build a new image of Bilbao. It was a politic and cultural change began with some oppositions from the local communities still tied to the old industrial city model because they feared that the change appears as only a urban restyling.

After the first contact with the Guggenheim Foundation (1991), Bilbao decides for a breakthrough architectural icons which able to become a landmark, a symbol for the city. Thanks to the great success of the museum the whole neighborhood was involved: the banks were modified to host new cycle paths and promenades, a lot of modern structures were built for sport, leisure, and mobility. The transport network was enhanced till the Ocean and the coastal settlements and the historic center was restored. The regeneration of Bilbao is completed in just a little more than 10 years and the city is wholly renewed.

3   THE CASE OF GENOA - THE WESTERN WATERFRONT

Among the Mediterranean sea, cities such as Genoa, Marseille, Valencia and Barcelona, represent a good example of how a city develops an in-depht urban transformation strategy that includes the relation between sea and his surface. The development experience of Genoa is tied to the great events which were been an important stepping stone. The main opportunities are located along that thin strip of land that in some case connects and in other one divides the port from the city. The actions to unify these two entity were different. Many of the interventions lasted until nowadays are concentrated over the Porto Antico (Old Port), leaving principally to the western parts of the city to sustain the heavy burden of the industrial and logistic system,

with their consequences. As it is realized in other industrial cities, also the Ligurian main city is living a phase of reflection about its economic, social and urban asset.

Thanks to different initiatives2, Genoa has faced the recovery of its waterfront, particularly with important projects located at the Porto Antico able to involved the inner historic center. In 2004 a masterplan called Affresco - The Framework (Piano, 2004), provided an overview around the future strategy to applied on Genoa. Renzo Piano's view encourage the develop of several projects a lot and everyone aims to review completely the relation of the city with the sea in order to make Genoa ready to face the future challenges. It was the first time that the creation of a large linear urban park is proposed, which runs along the entire waterfront from east to west, and connects the city to the sea.

"The promotion of the city, as is the catalyst of the energies of all local stakeholders, municipal administrations, businesses, citizens, can play an active role in support of urban regeneration policies, aimed at enhancing the potential of the system local, collective identity and its internal cohesion" (Gastaldi, 2012).

"The 2004, the year of Genoa European City of Culture, was a turning point in the revival and consolidation of the city's role in the panorama of tourist and cultural flows at the national and European levels" (Gabrielli, 2005). One of the merits that must be recognized to the Affresco is to animate a lengthy debate within the city: it has demonstrated how the city and the port, in Genoa, are inextricably linked. The port of Genoa is the hub of an extensive economic system that goes beyond the boundaries of the city itself and around which revolves an induced of considerable proportions. This implies that it should be able to adapt itself following the development forecasts in order to improve and increase the commercial traffic.
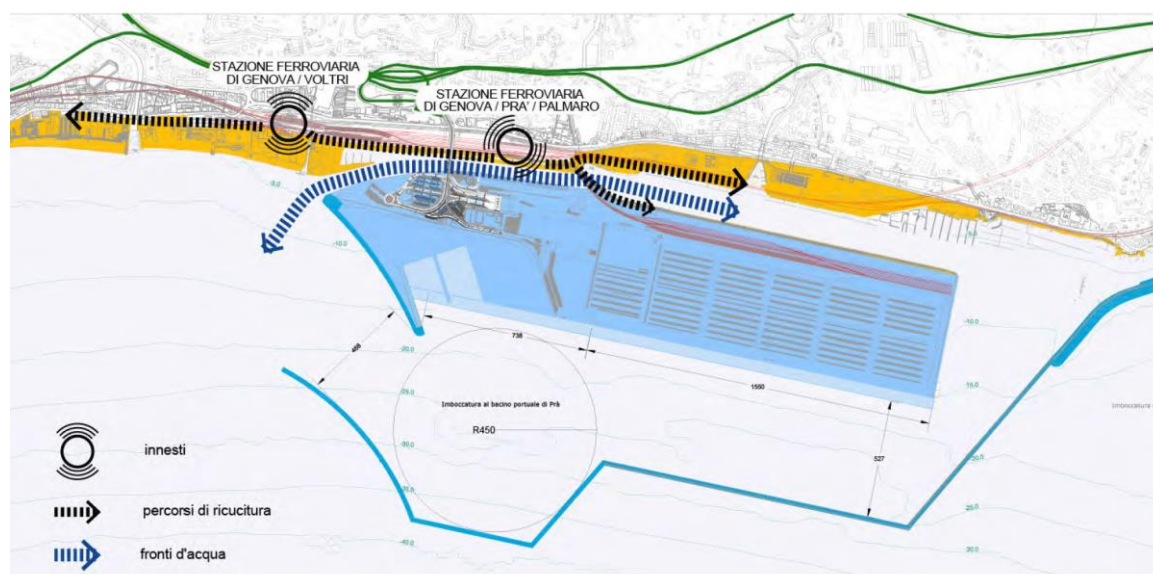
Fig. 5 Port Master Plan 2015

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2   Columbus Celebration of 1992, the G8 in 2001 and GeNova (New Genoa) Capital of Culture 2004 are great events that spread an important public debate in the city and several urban transformations lead by public governance that permit to rediscover the importance of its waterfront. In particularly in the 1992, 500th anniversary from the discovery of America, represents the beginning of the regeneration of the urban waterfront with the introduction of new buildings in order to relaunch Genoa in the international touristic contest. In 2001, the event of G8 has brought to new actions in order to improve the historic center and the Old Port. The event of GeNova 2004 - European Capital of Culture has promoted the enhancement of the artistic heritage, with restoration works of the historical and cultural heritage. In addition a series of Urban Projects have been the occasions for social, economic and infrastructural interventions. Actually the new occasion for Genoa is represented by the Blueprint designed by the Renzo Piano Building Workshop, which affronts a specific part of the Genoese waterfront, in order to combine together tourism and industrial activities (ship repairing industry).

In about 15 years, after the approval of the Port Master Plan and in consideration of the forthcoming conclusion of the works contained in it, the Port Authority of Genoa is drafting the proposal for the new Regulation Plan. The main measures foreseen in this territorial area want to be a balanced development of urban and operational functions. From the point of view of the port, the objectives are focused on strengthening the existing container terminal by modifying the current works of protection, along with an extension towards the sea such as to allow greater operational capacity and the optimization of the berths of the terminal in relation to the phenomenon of the naval gigantism.

In this contest the Voltri-Prà area is the unique in which there are some spaces to implement, therefore able to host the great contemporary ships.

The development of the new Port Regulation Plan definitely presents a breakthrough in this regard. From several years, there is a coordinated planning between the Port and the Municipality but it is the first time that the Port Authority spends a large amount of resources in favor of the Urban Port[3].

The Coastal and port area of Genoa Voltri-Prà and the Porto Antico have a parallel development[4]. The constant increase of the port economy, the continued growth required for new areas of expansion and the greatest transformations can be realized.

It all began in 1969 when the landfill at Voltri started. The work going on until 1988, when the fill outlines the perimeter of the current terminal container and the littoral of Prà is forever demolished. In 1994 began the commercial traffic and the port can be said inaugurated. It is important to note, however, that thanks to this fact the Port of Genoa is able to compete with other Mediterranean and Atlantic ports reality, flourishing in the European market. This international position must be maintained for the wellness of Genoa so in prevision of an inevitable new expansion of the docks, in 2012 different future plan scenarios are born. Three of these visions relate precisely to the area Voltri-Prà. The scenario Voltri Isola becomes the favorite area thanks to its innovative idea to subtract ground and not only add it. At this time the analysis, planning and design of this new unique area is fundamentally in order to create an interest area placed between city and port able to fully exploit all the opportunities.

To mend the relationship between city and its littoral we must have a project based on an analytic studio in order to determinate all the parameters which are involved in this territory.

In this situation "waterfront regeneration needs to be disruptive: a paradigm shift and a deeper innovation of methods and tools must be set up in order to act in the changing times we live (Carta, Ronsivalle, 2016)".

"… It is pointless trying to decide whether Zenobia is to be classified among happy cities or among the unhappy. It makes no sense to divide cities into these two species but into another two: those that through the years and changes continue to give their form to desires, and those in which desires either erase the city or are erased by it" (Calvino, 1979).

The scenario Voltri Isola foresees the realization of a new water channel able to divide definitively the container terminal from the mainland. The channel has not only a protective function but it has to become a device that can involve the rest of the city. A so large design must contain more meanings and functions to become a tool

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3   Area foreseen by the new proposal of the PRP Port Master Plan that includes the city-port interaction areas where to place nautical activities and connected to the Port, along with a urban activities such as commercial, administrative, cultural, research, public and private services, declinable in a perspective of port synergy. The aim is to redevelop new parts of the waterfront.

4   The urban layout of this area has many similarities with most other coastal districts of Genoa, a recognizable historic center and outlined by morphology and human structures that were added over the years. In 1926 the different cities, including Voltri and Prà, are merged in the Great Genoa, losing its autonomy to become part of a larger design. Starting from the metropolitan center peri-urban areas have been urbanized. The shape and the proximity to the sea, typical of this area, oblige the passage of major infrastructure (such as highway or railway line) in the immediate vicinity of the town, sometimes inside and sometimes between the town and the sea, going to affect on the relationship with it. Having saturated the only low-lying parts near the beaches, because of population growth, suburban suburbs are born in the hills.

for the urban requalification. The channel links the Prà's littoral with the Voltri's littoral, two coasts never in contact until now. This two realities have different features but both share some problems about degradation and disorganization.

About the urban area the differences are more manifest. In Prà the efforts of the years are clear and they permitted to realize a buffer zone protecting the city from the great infrastructures through the Dapelo park and a palm grove which runs on the banks of the terminal.

The areas placed in Voltri, close to the port, suffer the neglect state of art and they host some maritime industrial structures. The mutual attention, between Municipality and Port Authority, represent an inversion trend especially in favor of the city which gets some benefits thanks to the realization of the water channel including the urban environment.

The ambitious project is so important for the Municipality than expensive for the Port Authority, in fact the channel will divide nearly 1.5km of logistic activities. It is necessary to identify and optimize the connecting points to the road, motorway and rail network in order to minimize the impact on the new path of water.

The relationships with the water are different; everyone has a different connection with it: for a worker in the port it is an economic factor, for a fisherman it is a font of sustainment and passion, for the citizens it is a place of leisure. All these functions cannot exist in Voltri-Prà without the sea.

We must analyze and consider the importance and the role which the channel will assume here, through the examination the portion of the channel that today already exists in front of Prà. Along the channel everyone finds a relaxing moment and this underline how the water is the main actor of this place. It is necessary to interpret the water like the real engine for urban regeneration and for its efficiency in time. The thinking to the design of the new channel is motive to reflect in order to consider the future users. The actions, over a precious place like this, have to evaluate of all that local factors able to be the better tools for the regeneration of this area. With this regard, in the present paper we have identified few thoughts around the elements considered most sensitive concerning the size of the channel, the form of the paths, the thresholds and the visuals.

3.1 THE SIZING

The channel excavation causes a variation of altitudes that in reference to the observer's position implies some reasoning. The strip of land that works like the border of the channel will have a minimum width to be modeled. The urban side along the railway line represents a limit fixed elevation, this causes an expansion of the surface in contact with it to be able to degrade until the water portion without being perceived as an obstacle. Similar reasoning should be done about the port side that is not accessible to the public but only to insiders, second the prediction.

The port shore, by its nature is variable in time and in shape. It may be composed of stacked containers or sheds for the distripark. To soothe the impact procured by heavy activity, a green band with protective function can be used, creating a screen which will interface with the users first (see fig. 6).

Fig. 6 Sections: a, b, c

With this goal it is necessary to set some limitations in high equipment and buildings that will arise in this area. In order to individuate the limit in high we process in identifying the critical conditions that can verify in the channel, for example the human eye is vertical field can be designed thanks to the navigable limit through which is possible to define the height limits in about 12m (see fig. 7).
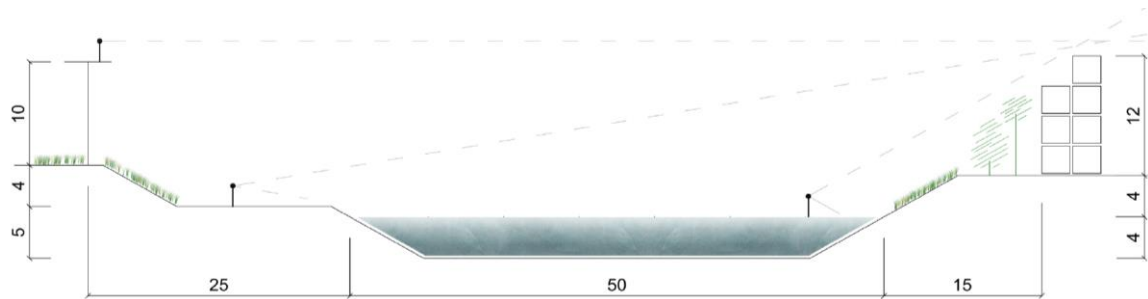
Fig. 7 Planned section of the Channel

On the opposite bank all accommodation for leisure and recreation reside.

We propose a bank with a promenade more dynamic and variable, not only in geometrical definition but mainly in functional and formal terms. The features of this promenade are designed in order to create a new way to relationship with water. It will possible with specify devices able to generate different experiences along the walking. This experiences can be also used to produce variations about the dimensional perceptions of the channel. Like a road seems smaller if you look it from a higher floor respect, the same road looked from the ground floor, so the channel has to take in advantage the different altimetry between the water and walker floor.

The Figure 8 (d) represents the basic situation diffuse now along the existing channel in Prà.

To vary the perception it is possible to make higher or lower the visual axis of the pedestrian. Walk on a floor lower (fig. 8.e) than the sea level allows to enjoy the water while a panoramic view (fig. 8-f) allows to enjoy the panorama and understand the entire plan articulation of the channel.

Fig. 8 Sections: d, e, f

3.2 THE THRESHOLDS

Beyond of the viewer's position respect the water it is necessary to consider the interaction with this element. The relationship with water is variable and the secret of its attraction strength lies on its dynamism and impossibility to contain it. The involvement of the water along the promenade implies to interact with it and to understand the potential features than can have a promenade of this kind. For this reason we have to sketch some drafts to illustrate possible ideal sections along the promenade. For example why the walking edge must be fixed and not free to change by time second the tide like an organism that increases or reduces its surface. In Genoa between the high and low tide there is a spread of about 50cm (fig. 9-g). Another fascinating feature of water is replaced in its capacity to seep in through the soil and emerge in surface (fig. 9-h). From this consideration, the concept of threshold rises and accompanies the pedestrian along whole the promenade and it changes the shape and inclination in order to modify the perceptions. A clear and deep

threshold does not encourage the walkers to get close to the water (fig. 9-i) while a degrading threshold permits to perceive the sea bottom then makes easily and more spontaneous to get near to its limits (fig. 9-l). The figures m and n show the promenade detaches itself from the ground to continue above the water, anchored with the channel bottom or made by floating structures in order to eliminate every kind of intermediates between pedestrian and water or to insert relevant intermediates like vegetation (fig. 9-o).

The vegetation is one of the elements that better works as an intermediary between the observer, the water and the surrounding. It can rule the prospective visuals, disguises the context and shows the right direction to look. Also the plants like the water are variable in time. The trees grow second the seasons and increase or decrease their foliage density and constantly change their color and their odor. It is very interesting to plan the vegetation system but, at the same time, it is complex because we must to consider it is an alive element second an own natural cycle. The channel, as well as underlined before, is placed between two rigid constraints: the railway and the container terminal.

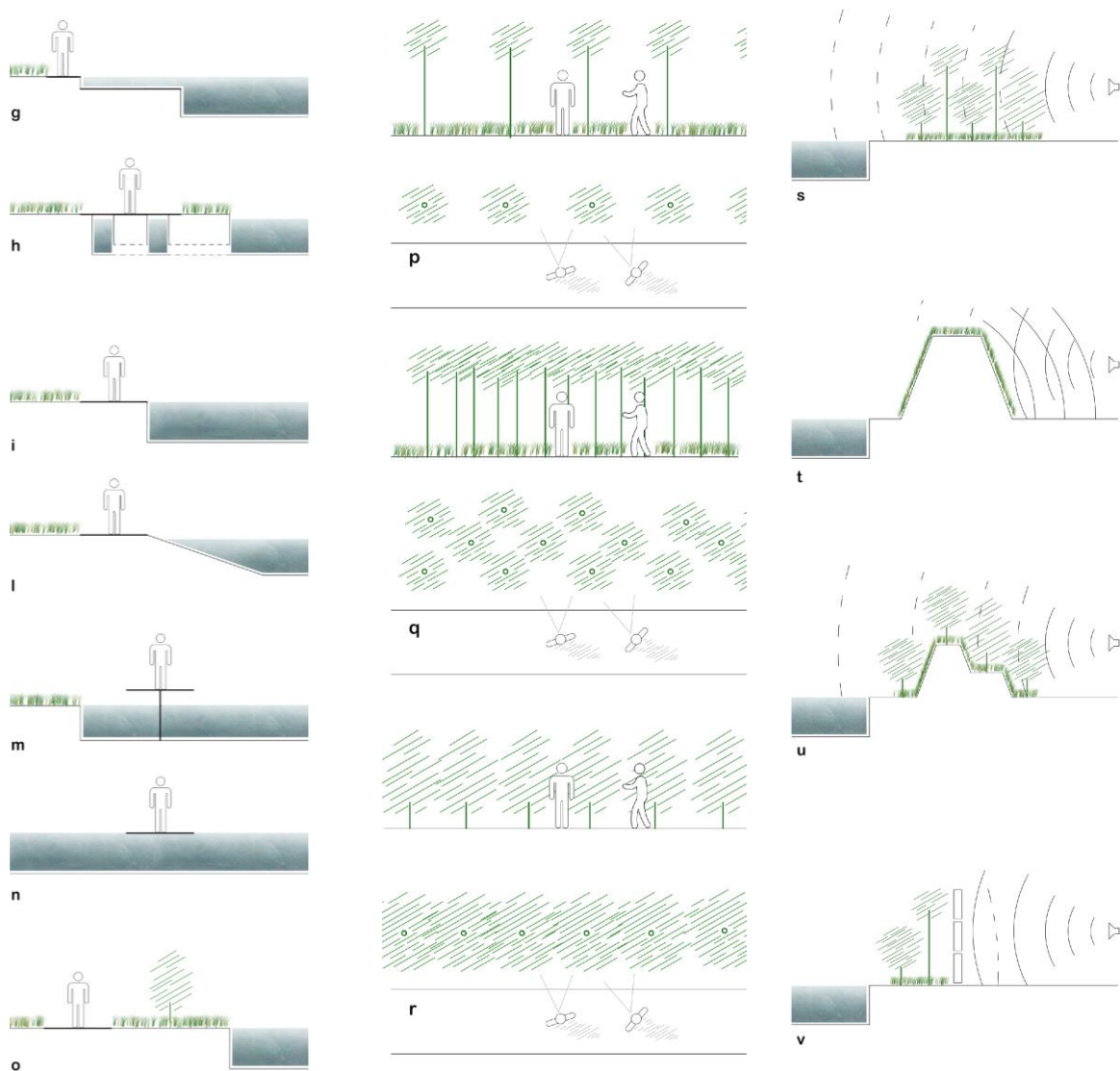
Fig. 9 Sections: g-v

Without adequate protection measures against this two important constraints the risk is to build an unlivable channel. To face this important theme, we have done some considerations about the state of art of the existing

channel in Prà. Here, on the port bank, there is a protective band formed by a linear tall palm grove. The palms are rigidly placed along a line and in the separation between them there are some hedges of low quality, in fact they are felt by the pedestrians like a temporal and occasional solution only to hide the port view. If we analyze the palm groove in perceptional terms it is too much high and dispersive to work like a protective shield for the view and the noise of the terminal. The acoustic problems are very relevant and it has justified the inserting of massive dunes of soil (9m of height) in order to stop the sounding waves and the acoustic pollution. This strategy, without a deep reflection, not resolve the problem and create other ones. In the new channel we think to insert different plants along the various thresholds and paths in order to work like a simple filter or supporting for the walkers (fig. 9-p).

The density foliage and their location can be used to shade the most critical areas only through the regulating the kind of the trees like the figures q and r show. The inserting of the dunes vegetation is efficient but they must be controlled in their extension to respect aesthetic canons without oversized structures. The pollution control by the vegetation systems is made thanks to the foliage and the kind of soil. The foliage work for the absorbing and transforming of the sound waves. The leafs, the branches and the trunk are able to deflect the sound energy of the high frequency thanks to their thickness, dimensions, and surface shape. The soil, instead, has some reducing and reflecting effects on the noise caused by the tangential sound waves. Good results are obtainable with soft soil vegetation that absorbs the waves while sandy soil reflects only. The structure is very important and they are classified second the kind in: vegetation curtains, structures with vegetation covering and reinforced earth.

The vegetation curtains (fig. 9-s) is a fence composed by a brushwood layer placed in linear way. The efficiency of this system stands in the choice of the plant essence used, evergreen trees not shorter than 15m are suggested. These curtains need relevant surfaces that are very difficult to find into the channel so the possible alternative can be the using of structures with vegetation covering and reinforced earth (fig. 9-t and 9-u). This solution is the most efficient both for acoustic reasons and for aesthetic terms in fact it causes a minimum impact for the context and becomes a green ribbon which runs along the channel. The reinforced earth also needs few space and maintenance. An alternative solution that we have thought is to insert made to order acoustic custom panels with the shape and the color of containers to be used to increase the acoustic benefit of the vegetation curtains (fig. 9-v).

4   THE WATERFRONT REGENERATION AS THE ENGINE OF THE URBAN REQUALIFICATION

As the International examples reported in paragraph 2 and the case study of Genoa described and detailed in paragraphs 3-4 show, "the policies about requalification of the waterfront have become the new boundary of the urban regeneration, from the planning until the critical reflecting on the future of cities, into an environment ever more dynamics and competitive. More experiences tend to present it as a place of public policy, an opportunity to compete not only with the new transformation of the city conditions, but also to compete with the most innovative tools for planning and urban design" (Savino, 2010).

In this contest our research brings from a debate among the different actors (University, planning Section of the Municipality, Port Authority) to an elaboration of some future proposals about the urban waterfront. There are several available tools and organizations that have to plan and manage the different areas in a city. For example it is possible to think of the two tools, Urban Plan elaborated by Municipality and the Port Master Plan developed by the Port Authority, different tools characterized by different purposes and interests that often do not communicate with each other but instead should interact to achieve urban projects of waterfront regeneration "addressed as a structural/strategic element on the city as a whole" (Alemany, Bruttomesso, 2011).

The research has been able to create a synergy among the different actors who have faced a specific area, in particularly the Genoa western Waterfront, which today represents an interesting resource for the city of Genoa. In particular, the idea elaborated for the redevelopment of the waterfront has been the creation of a new channel, Voltri Channel, in continuation of the existing Prà Channel.

The project resulted from this research has been defined with the aim to respond to the different meanings of the relationship with water. This is clear in fig.10: from walking on different levels, above and below the channel specifically designed until the opportunity to have available (as in previous years) the beach for swimming and some recreational spaces for leisure and sporting activities.

Fig. 10 Rendering of the planned Channel

In addition, the vision elaborated shows how the waterfront regeneration represents the engine of the urban requalification that is capable to create connections and improvements not only for the benefit of the areas bordering the sea but also for the neighboring inland areas.

The elaborations are designed to determine the functions that the new Channel could take in order to become itself an urban redevelopment tool. The influence of the Channel, in fact, should reach the city center reconnecting to historical paths and the promenade to become an integral part of the everyday life.

Only in this way the Channel ensures that the urban waterfront becomes "a new frontier of the city with opportunities for significant aesthetic, economic, social and environmental benefits" (Dovey, 2005).

That is the right way to make possible to reach a correct governance of urban waterfront "capable of intercepting and transforming the entire city and not be restricted purely to areas along coast" (Carta, Ronsivalle, 2016).

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IMAGE SOURCES

All the images are elaborations by the authors, except for the figure 5 from Port Master Plan of Port Authority of Genoa.

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PLANNING ACCORDING TO NEW URBANISM:

THE OSTADSARA NEIGHBORHOOD CASE STUDY

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ABSTRACT

The modern urbanism activities have led to rupture of previous spatial structure of neighborhoods and destruction of their identity. The New Urbanism Movement, as one of the successful models in urbanization field attempts to revive this lost national-social identity through the project of returning to traditional structure of neighborhoods by applying modern urbanization models and methods. The current paper aims at evaluation and analysis of "the Ostadsara neighborhood's organization based on new urbanism principles" and representation of solutions for planning a successful neighborhood center considering these principles. In this regard, various methods including library method, observation, photography, questionnaire and interview with users of the environment were utilized. The results from identification and assessment of weaknesses and strengths and specification and analysis of potential threats and opportunities shows the possibility of applying walkability, connectivity and integration, improvement of public transportation, improvement of architecture quality and urban design, maintenance and improvement of public and green open spaces, maintenance and strengthening the structure of traditional neighborhood units and using cooperation of Ostadsara neighborhood's inhabitants. Finally, the current study will represent appropriate strategies for changing the mentioned neighborhood into a desirable and prosperous one.

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有关土地使用、交通和环境的杂志

新城市主义原则下规划拉什特OSTADSARA社区成功社区中心可能性的研究

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摘要

现代城市主义活动导致了以往社区空间结构发生断裂，摧毁了其身份特征。被视为最成功的城市化发展模式之一的新城市主义运动，试图将现代城市化模式和方法与传统社区结构相结合，为这一几近消失的国家-社会身份注入新的活力。本文旨在评估与分析"基于新城市主义原则的Ostadsara社区结构"并根据这些原则分析规划成功社区中心的方案。对此，本文将运用库方法、观察、拍照记录、问卷调查和使用者访问等多种方法。结合SPSS软件、优缺点辨识和评估和潜在威胁和机遇描述和分析，调查问卷分析结果显示：套用步行条件的可能性、连接以及合并、公共交通改善、建筑质量和城市设计改进、公共区域和绿色开放区域得以维护与改善、传统社区单位得以维护和加强。同时Ostadsara社区居民有所协作。最后，本文将提出如何将上述社区规划为理想和繁荣的社区的相应策略。

1   INTRODUCTION

Neighborhood is considered as one of the components of developmental hierarchy of the cities which is actually a major element of identity of the cities as a classical component. Each neighborhood has a center which is usually the location of various service levels and as the main point of neighborhood's development, provides the possibility of people's trafficking and gathering and also is turned into a center for information exchange, presenting appropriate solutions for neighborhood's issues and a center for improving public relations and communications. Before the industrial revolution and the increasing growth of cities, the urban neighborhoods had gradual and slow growth and responded the almost fixed needs of their inhabitants while maintaining their social, natural and physical values. Modern urbanization was a product of the modern age, CIAM Conference and Athen's Charter which by placing it in the agenda, a kind of accurate zoning was established in the cities and neighborhoods. Functional zoning destroyed the vitality and life of the cities and neighborhoods and made the inhabitants unfamiliar with each other (Rafieian et al., 2011, 1). It was at this time that numerous disorders generated in neighborhoods and needs of the inhabitants remained unanswered. With emergence of the new urbanism movement in the 80s and 90s of the 20th century, a kind of new attitude toward urbanization and its issues was formed to solve the problems generated from exhaustion and deterioration of urban centers and also caused the horizontal development of cities. A return to the traditional pattern of neighborhoods was considered essential for creation of efficient and stable communities by this movement.

2   STATEMENT OF THE PROBLEM

According to data of the United States Department of Economic and Social Affairs, in 2007 for the first time in human history, 50% of the entire global population lived in urban areas, while only a century ago this figure stood at 13%, and it is now predicted to reach 69% by 2050 (Barresi and Pultrone, 2013, 62). So we can said, in the last century, cities and urban spaces have faced great changes and transformations in their process of development and evolution as a consequence of changes and progresses originated from the idea of globalization of phenomena. In this process, the relationship between human beings and their environment has faced a tremendous rupture which has generated spatial separation and intensified the formation of neighborhoods without socio-spatial unities. Actually the above-mentioned socio-spatial rupture was generated from site selection of urban services based on financial benefits and disregarding the social tendencies. Disruption of socio-economic relations and its effect on structural development of the cities during the development turned the behavior of urban textures into abnormalities including abandonment, application change and uncertainty of the units, security, hygiene and specially disruption of social organization and the value of neighborhoods (Khani et al., 2009, 2). Iran is an emerging country, still encountering development challenges. The country's demographic and socio-economic situation has drastically changed in recent decades. Once an agriculture-based society with most of the population residing in rural areas, during the last decades of the 20th century, Iran changed into a more urbanized country with a shift from agriculture to a market economy and the resulting creation of a modern but oil-dependent urban sector (Mirmoghtadaee, 2016, 38). As a result of Rasht City's history and background in urbanization, valuable buildings and structures in terms of architecture and antiquity are observed all around the metropolis. Existence of old neighborhoods may be mentioned as the most significant feature of Rasht. Ostadsara is among these kinds of neighborhoods which according to the available documents has been a neighborhood of Rasht in 1769. It is located near the central core of the city. In the last years, population growth and manipulations imposed on its texture have faded out the identity, social interactions and its role as an old neighborhood with a historical background and if it is not reprogrammed, the value of this neighborhood will be reduced. In this regard, it seems that

assessment of the principles of new urbanism in this neighborhood in which improvement of social units and centers with urban identity has been considered and it pays attention to human scales and needs of the local community and on the other hand, it has been applied in a large scale all around the world and has obtained significant successes. In this case, we're looking for answers to the following questions:

— what is the situation of Ostadsara neighborhood in term of new urbanism criteria?
— what is strategies for planning a successful neighborhood center considering the new urbanism criteria in Ostadsara neighborhood?

3 RESEARCH PURPOSES

The main purpose of this research is study of possibility of planning the successful neighborhood center in Ostadsara Neighborhood of Rasht with an emphasis on New Urbanism principles. In order to we used the SWOT analysis. SWOT analysis is recognized extensively and constitutes an important means for learning about a situation and designing future procedures that can be considered necessary to enable strategic thinking. The SWOT analysis approach has been broadly applied in a variety of disciplines for investigating problems from a strategic perspective (Li et al., 2016, 75). By using SWOT analysis we:

— assessment and identification of indicators (Walkability, Connectivity, Mixed-Use & Diversity, Mixed Housing, Improvement of Architecture Quality and Urban Design, Maintenance and Improvement of Traditional Neighborhood Structure, Density, Public Transportation Improvement, Maintenance and Improvement of Open and Green Spaces and Using Cooperation of Inhabitants) which are compatible with the new urbanism criteria;

— presentation of strategies for planning a successful neighborhood center considering the new urbanism criteria in Ostadsara neighborhood.

4 THEORETICAL FOUNDATIONS AND CONCEPTS

Neighborhood is a basic planning unit in the fabric of city (shi et al., 2016, 972). Neighborhood is an idea of studying the difference of the people, living and sharing the same environment for the purpose equality living environment. Neighborhood zone demands a set of community that can interact, care, and cooperate with each other continuously (Omar et al., 2016, 309). In this regard, a neighborhood can be defined from different dimensions. For instance, neighborhoods can be defined administratively by their established and certain walls, roads and borders; socially by local residents' perceptions; functionally by various domains of local services; environmentally by their traffic, quality and security and finally aesthetically by having certain features or the age and lifetime of its development (Barton, 2004, 16).

 A residential complex or a neighborhood is a reflection of the type of aggregation and interaction in small social groups. The spatial and functional relationship between each residential unit and the neighborhood is the same as family members with the neighborhood in a way that each neighborhood includes components and organs rather than its major component meaning residential units. Those other components include a space called the center of neighborhood which is included of various elements such as gathering places and other spaces and service elements (Soltanzadeh, 1992, 350-351).

Center of a neighborhood as the linking element of skeletal organs, texture and also neighborhood community has a central role in giving identity to it and creating interaction between inhabitants. Also as the service, economic, cultural and entertainment core, a neighborhood provides a space for responding people's daily needs, a place for strengthening social links and creating a sense of belong and cooperation in inhabitants. Although its role has faded in today's life, but it can be revived by aligning it with needs of today's life based on features of modern life. In historical cities, neighborhoods were the habitats of people with specific

occupations and jobs or religious minorities and various social classes in a way that even religious minority groups had specific places in cities to reside in, such as Jolfa neighborhood in Esfahan, Zoroastrians neighborhood in Yazd or Jewish neighborhood in some cities of the country. In historical cities, the center and its neighborhoods provided a unified, convergent and organic combination in terms of space and skeleton, also they formed the historical nucleus of the cities based on their specific validity and special gradation. The number of neighborhoods in a city had a direct relation with its significance and space and none of neighborhoods in a city were the same in terms of space and form but all neighborhoods had unified and identical structures and synthesis (Pourzargar, 2012, 107).

4.1 INTRODUCTION OF THEORIES AND SCHOOLS OF THOUGHT

As shown in Table 1, paying attention to concept of neighborhood in urbanism system began in the middle of 19th century, aimed at giving identity to cities and creating hierarchies. Ebenezer Howard proposed the principle of dividing the cities into a hierarchy of interdependent units with different dimensions for the first time. The residential units of Le Corbusier (1953) are considered as one of the general solutions of neighborhood planning in the first half of 20th century (Lang, 1994). This general model was proposed as a complete society and independent collection by Le Corbusier. In addition to the mentioned models, the Neighborhood Unit which was proposed by Perry and performed by Estein and Henry Wright in Radbern are considered as primary models of neighborhood planning in the first half of the 20th century (Table 1). Sides the differences, all of these models had common purposes for creating their own local communities which are mentioned in the following table:

Common purposes	Theories
- Creating independent units; - decrease of daily trips within the city; - paying attention to the relation with green spaces and the nature; - creating local communities; - paying attention to passengers' movement.	Howard's Garden City
	Le Corbusier's residential units
	Perry's Neighborhood Unit
	Estein-Wright's Neighborhood Unit

Tab. 1 Studying the Primary Models of Neighborhood Planning in the First Half of 20th Century

According to Table 2, in the second half of the 20th century, various complexes were designed in America with the aim of confronting dispersion and lack of cities' coherence, maintaining identity and developing life quality in available textures of the cities. Based on opinions of many critics, these solutions have adapted the same "Neighborhood Units" model belonging to 20th century with new conditions and they have used them with new terminologies in designing current residential complexes (Hashemnezhadeh and Malekian, 2012, 44).

For example the Planned Unit Development pattern which possesses framework unity and coordinated building planning through simultaneous approval of the plans and appropriate scales in the urban infrastructures and ease of access to public facilities in the neighborhood scale (Eynifar, 2008, 45). residential neighborhoods called Traditional Neighborhood Development (TND) are planned as alternatives for residential complexes in form of multi-functional and independent towns (Katz et al., 1994; Dutton, 2000; Neal, 2003).The Transit-Oriented Development model is actually a kind of development which depends on public transportation based on light railway, and in a general look, it is based on heavy loaded short buildings, multi-purpose main streets, saving energy, reduction of roadway traffic, availability of urban services and etc. (Curtis et al., 2009). Urban Village movement became the most important form of development as a result of creating urban developments in terms of mixed pedestrian-centered function and based on a constant scale (Caves, 2005). The Eco Village movement aims at protecting and supporting the improvement of stable human residences, facilitates

information exchange among residences, and makes the information related to eco village concepts available through worldwide information networks (Kim, 2007). It also proposes the Smart Growth hypothesis which suggests the idea of climatic planning of buildings and urban textures by supporting new urbanism models and the green planners in order to reduce the energy consumption (Duany et al., 2009, 12). All the above-mentioned theories prioritize human beings, revival of traditional method, retrospection to past experiences, reliance on the background of architecture. Some of the common purposes among these models are as follows:

Common purposes	Hypotheses
- compact neighborhoods; - independent neighborhoods;	Planned Unit Development
- paying attention to public spaces;	Traditional Neighborhood Development
- improving social sense; - paying attention to pedestrian movement;	The model of Transit- Oriented Development (TOD)
- considering natural environment and green spaces; - a distinct and efficient neighborhood center;	Urban Village movement
- mixing uses;	Eco-village
- caring about public transportation; - paying attention to quality of architecture and urban design.	Smart Growth Hypothesis

Tab. 2 Studying Primary Models of Neighborhood Planning in the 2nd Half of 20th Century

4.2 REVIEW OF NEW URBANISM'S PRINCIPLES

In 1993, the Congress for the New Urbanism was founded by six architects: Peter Calthorpe, Andre´s Duany, Daniel Solomon, Elizabeth Moule, Elizabeth Plater-Zyberk and Stephanos Poly- zoides. (Falconer et al., 2010, 287). New Urbanism is posited as a new approach to suburban development, which could reduce car dependence by creating pedestrian-friendly environments.

New urbanism which has been rendered to New Urbanization or Urban Planning in Persian is "a movement in the United States which challenges expansion of cities by discussing about guiding the growth of urban suburb in form of creating small cities and residential complexes. The orientation in proposing this project relies strongly on revival of urban planning ideas which was originated in the early 20th century but they were adapted to modern life models" (Madanipour, 2001, 310). The concept of new urbanism is an emphasis on the fundamental principles of urban design in scale of neighborhood and alignment with the current world. The most important document explaining the theoretical content of new urbanism movement is new urbanism's Charter. This charter which was presented in 1966 after the 4th annual meeting of new urbanism council can be considered as a statement against Athens' Charter. This charter studies all the analyzable levels in association with human communities (Arendt, 2008).

The New Urbanism has clear 27 principles addressed by a charter. A broad range of architects, planners, interested citizens, scholars, elected officials and developers worked to emerge it between 1993 and 1996. The fourth annual Congress, CNU: 2000 published the ideas of New Urbanism. CNU has twenty seven principles. The twenty-seven principles are nine principles for each one of the region, the neighborhood and the block. The principles asserted to guide public policy, development practice, urban planning, and architecture design. According to a literature review pursued on CNU, the principles of New Urbanism, at the level of the neighborhood, modified to be ten principles instead of nine (Elshater, 2012, 829).

I   Walkability

Walkability is a measure of how friendly an area is to walking. Walkability takes into account the quality of pedestrian facilities, roadway conditions, land use patterns, community support, security and comfort for walking (Shbeeb and Awad, 2013, 172). The new urbanism believes that streets and squares must be secure

and interesting for walking and be designed in a way that provide inhabitants' comfort and encourage them for walking. Therefore, it insists on locating daily and weekly services within the distance of inhabitants' 10 minute walking.

II   Connectivity:
—   network of connected streets which scatter traffic and facilitate walking;
—   a hierarchy of narrow streets, boulevards, and alleys;
—   a network of high quality pavements and public places which make walking pleasant.

III   Mixed-Usage & Diversity:
—   a combination of stores, departments, residential apartments and houses in a limited area together with different combinations of neighborhood units, blocks and buildings;
—   various types of people from different ages, groups, cultures and races together with the buildings.

IV   Mixed Housing:
—   a continuum of different types, spaces and costs in a neighborhood area.

V   Consideration of Historically Qualified Buildings and Improvement of Architecture Quality and Urban Design:
Emphasis on beauty, elegance, human welfare and creating sense of belonging to the place. Specific places possessing urban services and places for gathering; a human-scale architecture and beautiful surroundings which nourished the human spirit.

VI   Maintenance and Improvement of Traditional Neighborhood Structure:
—   recognizable centers and limits;
—   public spaces at the center;
—   importance of public spaces, open public spaces designed as the urban art;
—   a continuum of usages and densities with a 10 minute walking.

VII   Density Increase
Buildings, residences, stores and services accumulated near each other to facilitate walking, to provide the possibility of efficient use of services and resources, to create a more enjoyable and comfortable place for life.

VIII Smart Transportation
The past decade there has seen a resurgence in both the use and the study of alternative forms of transportation, including walking (as well as cycling, car sharing, and public transit, which have similar issues). Though walking is generally regarded as a distinct mode, it also forms an important component of trips made using other modes. This is most apparent in the case of public transit: before boarding and after alighting from a bus, streetcar, or train, every passenger is a pedestrian. For this reason, a deeper understanding of the spatial patterns of walk accessibility can also contribute to planning and research of public transit. Similarly, bike and car-sharing systems generally require walking trips to and from vehicle storage locations, and extended distances pose a disadvantage to bicycling compared to motorized transportation (Levinson, 2016, 165).
—   A network of metropolises and small cities and neighborhood units which are connected to each other by high- quality trains;
—   a friendly design for pavements which improves more use of bicycles, rollerblades, scooters and pedestrians as daily transportation.

IX   Maintenance and Improvement of Open and Green Public Spaces (Sustainability)

The new urbanism is based on the belief that public spaces and parks can lead to the flourish of neighborhoods and creation of a unique concept of the space through providing interesting spaces. Maintenance and improvement of open spaces such as pavements, squares, parks, public buildings and gathering spaces in order to create informal meetings and social connections with others, cause neighborhoods to seem like balanced and vivid environments.

X   Utilization of Inhabitants' Cooperation

One of the most important principles that new urbanism applies, especially for the purpose of planning in available urban textures, is utilization of inhabitants' cooperation. The new urbanism benefits from cooperation of inhabitants, social leaders, politicians, government officials, developers and local organizations throughout all phases of neighborhood planning (http://www.newurbanism.org).

5   INTRODUCTION OF THE UNDER-STUDY AREA

Rasht County is among counties of Gilan province (Figure 1), which possesses 9% of the province's total space and 33% of its population. Based on historical documents, the first foundation of Rasht as a village with a rural texture goes back to B.C when Gil and Deilam nations lived. As a result of Rasht's tradition and long historical background in urbanism, architecturally valuable antique buildings and structures can be observed all over the city. The most important feature of Rasht may be the existence of old neighborhoods which have yet maintained the old residential structures. Ostadsara is considered as one of the old neighborhoods in Rasht which is located in its middle. In zoning map of the city texture, Ostadsara is located in the ancient texture and has a completely organic texture. Even the location of important fundamental elements of the city such as Municipal and Sabzemeidan Squares follow the organic texture of this area. Also the area possesses the most spatial divergence and changes in terms of space and mass combination.

Fig. 1 the Location Ostadsara Neighborhood in the Rasht City

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structures. Ostadsara is considered as one of the old neighborhoods in Rasht which is located in its middle. In zoning map of the city texture, Ostadsara is located in the ancient texture and has a completely organic texture. Even the location of important fundamental elements of the city such as Municipal and Sabzemeidan Squares follow the organic texture of this area. Also the area possesses the most spatial divergence and changes in 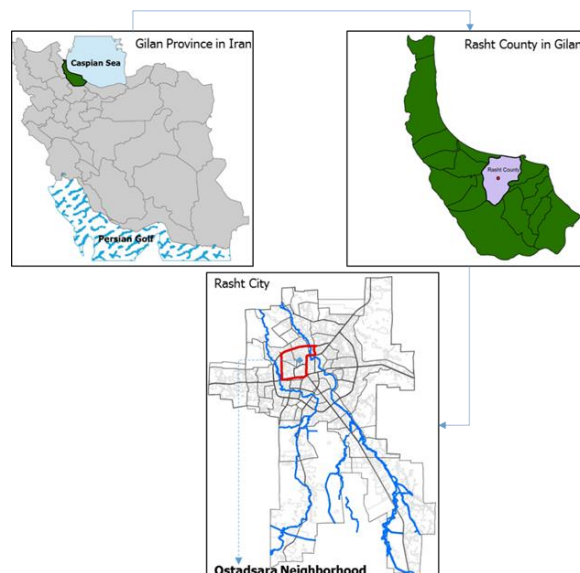terms of space and mass combination. The arrangement of communication networks and passages and the manner of neighborhood development is in a way to create the most focus and spatial connection between other places of the city and its central-linear core. The dominant urban texture in this neighborhood is old and traditional except the structure of main streets which has been reconstructed or renovated. Ostadsara is located in zone 1 of Rasht Municipality and is connected to Moallem Boulevard from north and west, Saadi Street from east and Bisotoun Street from south.

6   RESEARCH METHOD

Generally, the research method is determined based on the major purposes and nature of the research. Hafez Nia (2009) believes that classification of researches in terms of purpose includes basic, applied and practical, and in terms of nature it includes historical, descriptive, correlation or consistent, causal and empirical researches.

In terms of research purpose, this study has applied goals since it utilizes cognitive grounds originated from basic studies with the purpose of finding and presenting solutions for research questions. In terms of nature, this research includes analytical, historical and descriptive studies since it describes the subject and environment's condition by providing information and then analyzes and assesses the collected data.

In order to collect data in this research, documentary and field methods are applied which themselves include qualitative and quantitative methods.

The statistical population of this research includes the whole population of Ostadsara neighborhood in zone 1 of Rasht Municipal which was about 6264 people. A sample of population was studied in order to save time and money, then the results were generalized to the whole population. For this purpose, size of the sample was calculated using Cochran and Morgan's sample size formula which accordingly 190 samples were obtained, therefore the same number of questionnaires were analyzed. The questionnaire had 2 parts. The first part included questions about gender, age, education and etc., which was developed based on research purposes. Second part of the questions was designed based on 10 principles of new urbanism which were selected based on theoretical studies in form of questions. To analyze the obtained data, SPSS software was utilized. Also SWOT technique was applied to identify and evaluate strengths and weaknesses, also to identify and analyze available threats and opportunities and finally to represent appropriate strategies for changing this neighborhood into a valuable one.

7   AN EVALUATION OF THE CRITERIA IN THE UNDER-STUDY AREA

To prevent the reduction of significance of these neighborhoods, analysis of the structure of traditional urban neighborhoods and combining their structure with principles of current perspectives of sustainable urban development may provide urban builders with desirable standards by which answering today's needs and preservation of cultural-historical identity will be possible. One of the current viewpoints of urban development is the new urbanism which provides a set of norms for planning which leads to viability potential of neighborhood units and creation of a friendly environment for the passers. Thus, the current study aims to represent strategies in order to provide the flourish and efficiency of the Ostadsara neighborhoods in the Rasht city with modern life features considering the new urbanism norms and principles .In this part, new urbanism criteria under-study area (Ostadsara neighborhood) will be assessed. To this assessment methods including,

observation and photography, expert assessments and interview with users, passers, and trades people were applied. In the next step, conducted studies, with SWOT analysis summarized and strategies were presented (Figure 2).
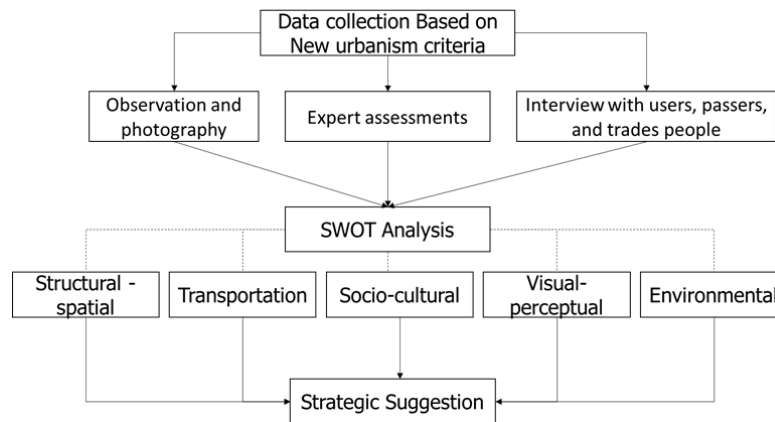

Fig. 2 The process of evaluation of the new urbanism Criteria in the Under-Study Area

I   The Criteria of Walkability

One of the principles observed in the new urbanism movement and all of the related models of this movement which has received considerable attention in neighborhood designing during recent decades is the pavement and prioritizing pedestrians in neighborhoods. Based on findings of the questionnaires and also the skeletal cognition, no specific definition of pavement in Ostadsara neighborhood has been represented and passages lack security, grace and no kind of urban design is observed in them which have led to lack of comfort of the passers. Since about 80% of inhabitants have claimed that they provide their daily needs by bicycle or on feet, if these passages are improved, the inhabitants would be encouraged to walk and have more interactions.

II   The Criteria of Connectivity

Based on the studies in the theoretical part, the new urbanism believes that the connected passages network, accompanying the definition of high quality hierarchy of streets, alleys and pavements lead to reduction of traffic and facilitation and increase of walking and encouraging the public to walk. In this framework, one of the major problems of historical and old urban textures like Ostadsara neighborhood is inefficiency and inaccessibility of passages network. Narrow, meandrous, non-geometrical passages inconsistent with transportation needs and adjacent usages make problems in inhabitants' availability and traffic as well as it causes difficulties in providing urban services and facilities such as fire department, water transfer, gas transfer, and etc. Therefore these textures are so vulnerable in critical conditions, such as after the earthquake, and also there is a little hope for timely assistance. There are also some problems in terms of passages network in the under-study area. All of the mentioned problems specifically those in the residential texture are more critical and severe. Another problem in the passages network in Ostadsara neighborhood is a passage which connects the neighborhood to the city center and causes traffic and noise pollution in the neighborhood.

III   The Criteria of Mixed-Use & Diversity

One of the main elements in designing new neighborhoods is user system and neighborhood's activities. In other words, in designing new neighborhoods, the combination of elements and urban activities are designed in a way that people get to their destination without even thinking about driving cars. Therefore, an appropriate neighborhood is the one which can keep the balance between occupation, residence and urban services (Azar and Hosein zade Dalir, 2009). Also the conducted researches have proved that mixed-used encourages walking and cycling and discourages using cars for light and heavy food purchases. Also mixed-used reduces out-neighborhood trips and increases in-neighborhood on-feet trips.

The results of assessing Ostadsara neighborhood demonstrates no convergence with the new urbanism principles in terms of usage disciplines as a result of low level of services in the texture, shortage of essential urban per capita including: open space, green space, sport and remedial services, lack of appropriate places for children's play, almost 80 % dominance of residential usage. Also no usage mixture was identified, however these shortages can be recovered through incorporating cultural, entertainment and service-related usages.

IV   The Criteria of Mixed Housing

One of the other principles considered by new urbanism is creating various types of houses in order to assist the interaction among various classes of people from any range of age, race and income, creation of interaction and reduction of existing distances among residents through observance of social justice in order to attract families who are able to choose their desired house.

Results of the field studies together with the questionnaires show that a various continuum of villas and apartments can be observed in the neighborhood. Villas are mostly observed in central part of the neighborhood and apartments can be observed in edges of the passages, however construction processes in the neighborhood imply a tendency toward apartment building.

V   The Criteria of Improvement of Architecture Quality and Urban Design

The new urbanism pays a considerable attention to valuable and historical buildings in order to create a sense of location and maintain aesthetical values. Also a specific respect is paid to these buildings by new urbanism in order to maintain and renovate them which is essential for preserving and strengthening identity of the neighborhood. Ostadsara neighborhood should have possessed a strong identity as a result of existing precious buildings and vicinity to urban central core including the Municipal building, traditional bazaar and etc., but unfortunately the old and sometimes deserted houses and lack of attention to identity-making elements in the neighborhood demonstrate the weak sense of belonging to neighborhood in people except residents which have inhabited in the neighborhood for a long time (Figure 3). Therefore, it must be attempted to establish principles in order to maintain and renovate these buildings.
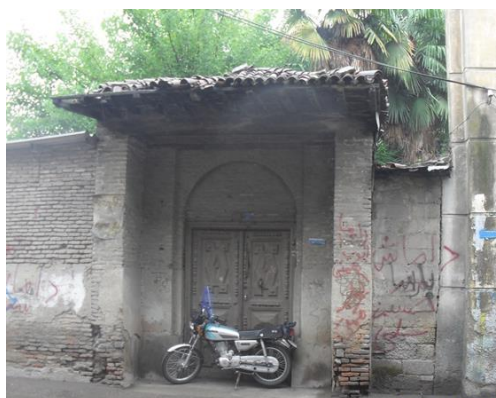
Fig. 3 Precious and Deserted Buildings in Ostadsara Neighborhood

VI   The Criteria of Maintenance and Improvement of Traditional Neighborhood Structure

According to new urbanism criteria, in order to provide inhabitants' needs and prevent the trips within the city and also to improve the social interactions, one of the necessities in organizing traditional neighborhoods is determining the center of neighborhood.

Findings of the field studies and interviews with inhabitants demonstrate that because of the automobiles' traffic through center of the neighborhood, the essential security for inhabitants' communication does not exist. Also the existing administrative usage in the vicinity has caused the patrons to use the neighborhood's center as a parking space and make it visually unpleasant. On the other hand, lack of appropriate facilities

including benches, appropriate lighting, green spaces and places for children's playing has led to lack of defined spaces in the neighborhood and has reduced social interactions among residents.

VII   The Criteria of Density Increase

Another criteria and principle of new neighborhoods' planning is vertical design which aims to increase the efficiency of land. According to the field studies and results of the questionnaires, in the under-study area, most of the buildings are two story houses and in the interior texture of neighborhood the buildings are one story houses, also some buildings of the neighborhood, located next to the main streets and also the newly constructed buildings are three story houses.

Since this neighborhood has been introduced as an old and historical texture, some limitations exist in terms of increasing density. On the other hand, considering the shortage of arid lands in the neighborhood, it may be stated that Ostadsara neighborhood has no convergence with principles of new urbanism in terms of increasing density. However findings of questionnaires demonstrate that people's tendency is toward density increase and plans are required to perform and administer principles of new urbanism considering the existing conditions in a way that it is not in conflict with the existing rules.

VIII The Criteria of Public Transportation Improvement

Using public transportation, correct and accurate planning for transportation using all varieties of transportation systems is one of the major principles in new urbanism models. Under current condition, Ostadsara neighborhood has appropriate availability to public transportation in surrounding passages since it is located in center of the city, however as a result of narrow passages, inhabitants have no access to the public transportation inside the neighborhood.

IX   The Criteria of Maintenance and Improvement of Open and Green Spaces

Existence of open and green spaces is very important in new urbanism perspective, on one hand for providing beauty, balance and improvement of life quality and vividness of neighborhood and on the other hand, as places for gathering and creating social interactions.

In Ostadsara neighborhood, no kind of open and green spaces have been defined. Green spaces are inside houses and the only garden in the neighborhood is Vatan Abadi's garden which is private (Figure 4). The public open spaces for children's playing are the alleys along the streets that lack security. Suggesting green spaces is one of the essentials of this neighborhood.

Fig. 4 Green Space of Ostadsara Neighborhood

X   The Criteria of Using Cooperation of Inhabitants

Despite the existing issues in the neighborhood and also interviews held with inhabitants and shopkeepers, every bodies asserted that opinions and perspectives of the inhabitants have not been used in constructive projects, also no information was exchanged and in some cases the activities were completely in contrast with their desires and welfare which all demonstrate inhabitants' lack of cooperation to maintain this neighborhood.

Weak relationships among residents, authorities and related departments can originate from lack of responsibility in maintaining the neighborhood and also lack of a unified management that utilizes inhabitants' suggestions and policies. Therefore, by establishing a committee including residents and managing it by the elders and elites, inhabitants' issues and opinions can be transferred to authorities by the representatives and their cooperation may be used in order to solve problems.

After assessing the criteria in the selected neighborhood, some findings about the current condition were obtained which were applied for identifying weaknesses, strengths, and also opportunities and threats of urban spaces and finally presenting strategies.

7.1 SWOT ANALYSIS

After reviewing and assessing criteria of the neighborhood, we analyzed the neighborhood using the SWOT technique to represent research purposes to identify the weaknesses and strengths, threats and opportunities, major and minor aims and obtained policies and strategies.

Aspect	Strengths and Opportunities	Weaknesses and Threats
Structural-spatial	- old and organic texture - location centeredness of neighborhood - existence of commercial centers in surrounding streets - existence of certain structure - existence of public spaces such as mosques - existence of specific centers and areas - using high quality materials in new constructions - existence of valuable buildings in the neighborhood - existence of architecturally valuable buildings - the possibility of providing essential needs - people's reception of density increase	- lack of urban furniture inside the neighborhood - existence of administrative usages in neighborhood - weakness in neighborhood renovation and maintenance - existence of usages with performances beyond the neighborhood - existence of residential compressed textures and narrow passages - lack of various cultural, educational and commercial usages in the center of neighborhood - lack of attention to valuable buildings - limitation in increase of building density - existence of major commercial usages in surrounding area - adjacency with central core of the city - lack of deserted lands without usage - lack of appropriate possibilities in the center of neighborhood in order to encourage social interactions
Suggested strategies	- protecting interior textures and preventing destruction of identity and organization of neighborhood - attention to the coordination between new constructions which are convergent with the historical identity of neighborhood's texture - transporting extra-neighborhood units to outside of the site - protecting valuable buildings in neighborhood through using existing potentials in order to improve readability in the texture - constructing appropriate urban furniture in neighborhood - creating various usages in the center of neighborhood - organizing the lighting equipment in a way that does not disrupt neighborhood's coordination with surrounding texture - creating active usages such as green and business spaces in the neighborhood - establishing principles and regulations to protect and maintain the related texture	

Tab. 3 Analysis of Structural-Spatial Aspect in Ostadsara Neighborhood of Rasht

Aspect	Strength Points and Opportunities	Weak Points and Threats
Transportation	- existence of organic passages - appropriate access to public transportation in city center - existence of public parking lots in entrance of neighborhood from Sabzemeidan - existence of important passages around the related area - potential for performing traffic limitation activities in residential streets - demands for using public transportation in case of improvement of its quality	- lack of attention to pedestrian movement inside neighborhood - lack of a hierarchy of access spaces - disconnectedness of passages network - interference of pedestrian's and cars' movement - traffic in surrounding passages - increase of traffic to neighborhood as a result of existing urban features - lack of a connected network of public transportation inside texture - lack of appropriate floor coatings in passages - traffic in residential streets
Suggested strategies	- connection of public transportation lines to Moallem St. - encouraging residents to park their cars in parking for creating limiting the traffic - creating spaces in the passage to encourage walking - constructing taxi lines in neighborhood to transport inhabitants between neighborhood and its southern passages - improvement of current floorings of the passages - defining an appropriate hierarchy for connected passages to neighborhood in order to slow down before entering the residential streets - expanding public transportation inside neighborhood and in relation with neighborhood's surrounding arteries to coordinate them with neighborhood' performance (defining hierarchies)	

Tab. 4 Analysis of Transportation Aspect in Ostadsara Neighborhood

Aspect	Strengths and opportunities	Weaknesses and threats
Socio-cultural	- background of cultural and civil activities in specific centers of the area - people's tendency to cooperate in developing and renovating neighborhood - the possibility of restoring neighborhood's cultural and civil centers - being identified as a historical texture and an opportunity for improving the past identity and culture	- shortage of open and public spaces in the area - lack of comfort and security of open spaces and passages for inhabitants - lack of entertainment facilities in neighborhood - lack of possible cooperation of trades and inhabitants in urban and neighborhood plans - lack of local strength in the process of decision-making
Suggested strategies	- The necessity of designing cultural spaces proportional to needs of various classes - identifying previous cultural centers and creating local structure for attracting inhabitants' cooperation - creating neighborhood's center for inhabitants' gathering and approximating residential and entertainment centers to each other - improving the relationship between inhabitants and Municipality through introducing ideas and inhabitant's issues by the local committee - creating active centers and sense of identity and belonging to neighborhood in inhabitants by using their cooperation	

Tab. 5 Analysis of Socio-Cultural Aspect in Ostadsara Neighborhood

Aspect	Strengths and opportunities	Weaknesses and threats
Visual-perceptual	- antiquity of neighborhood - existence of important and valuable elements in neighborhood - existence of specific and historical buildings and elements for increasing sensational wealth - having different identities and moods as an old texture	- lack of harmony in new-constructed building's proportion, materials and etc. with texture's total mood - visually undesired quality of neighborhood's center - exhaustion of some of the available buildings - lack of neighborhood's activeness at nights as a consequence of non appropriate lighting
Suggested strategies	- improvement and maintenance of identity-making elements in the neighborhood - formulation of new buildings' coordination standards with local architectural elements - repairing valuable buildings - surviving the role of neighborhood's center through equipping it with appropriate facilities such as lighting and furniture	

Tab. 6 Analysis of Visual-Perceptual Aspect in Ostadsara Neighborhood

Aspect	Strengths and Opportunities	Weaknesses and Threats
Environmental	- appropriate sunlight of the neighborhood - appropriate slope of the texture - people's tendency to use public transportation services in case of improvement of its condition - people's tendency to walk in case of providing security of the passage - possibility of creating green spaces in neighborhood	- sound and air pollution in passages - shortage of green spaces and children's play spaces in neighborhood - insecure and polluted environment of the neighborhood - lack of transportation sub-structures and sources like water and energy - inhabitants' dependence on using private cars - inappropriate quality of public transportation - shortage of green space per capita - reduction of environments' quality hygienically and visually caused by lack of organizing the sub-structures
Suggested strategies	- creating appropriate passages for walking and cycling - using vegetation for separating the walking passage from car traffic passages - designing passages aligned with the topography and slope - ordering the health status and sub-structures for reducing pollution	

Tab. 7 Analysis of Environmental Aspect in Ostadsara Neighborhood of Rasht

8 CONCLUSION AND SUGGESTION

In order to actualize research purposes and considering new urbanism lessons in neighborhood designing and also the results of neighborhood's analysis, there is the possibility of applying the following principles in Ostadsara neighborhood for planning the creation of a valuable neighborhood center:

- suggestions for creating a friendly and walkable environment;
- organizing the passages network and controlling traffic in order to reduce it and provide security for inhabitants;
- organizing and programming public transportation;
- improving the sense of place considering neighborhood's historical identity;
- improving the environmental quality;
- providing local needs of the residents;
- providing an appropriate ground for attracting inhabitants' cooperation.

Considering the major principles, the following elements can be discussed in the neighborhood:

• Providing an Ideal Environment for Walking:

To encourage inhabitants to walk, the following actions can be taken: changing neighborhood's streets into wide and desired sidewalks specifically in passages which end up to neighborhood's center and also equipping it with appropriate furniture such as benches located in certain distances and lightings for using at nights, and finally in addition to reducing using motor vehicles, they can be used as a factor for strengthening the social links;

• Developing a Flexible System of Passages

Limiting cars' entry to some entrances which end up to the neighborhood and also passages around the center of neighborhood, make these passages walkable in order to provide security and comfort of the inhabitants and prevents extra traffic of motor vehicles to neighborhood which itself leads to traffic reduction in it.

Also by defining a network of connected streets which distribute the traffic and observance of a hierarchy of main streets, 1st and 2nd grade minor streets, alleys, sidewalk networks and differentiating it by changing the flooring, the traffic can be reduced and the security and comfort of the children and elders can be provided;

• Constructing Taxi Stations in Neighborhood

Since the bus traffic in the neighborhood is not possible and the only transportation devices are taxis for which no stations has been designed, they do not traffic regularly. Therefore by constructing taxi stations in entrances of the neighborhood, a specific place can be considered for their traffic and more monitoring can take place;

• Maintenance and Improvement of Historical Identity Making Signs and Elements

Through identification and maintenance of historically valuable buildings, mending and modernizing local-national traditions we can attempt to strengthen the identity of the texture and prevent neglecting this precious identity which has been maintained by our ancestors throughout the time.

The Mostofi mosque can be mentioned as a considerable and valuable building located in center of the neighborhood and can play an important role as a symbolic component in making the center of neighborhood and totally identity of the neighborhood distinguished.

House of Mirza Koochak khan is another construction located next to Main Street of the neighborhood and due to the historical events and their relation with the Jungle Movement which is valuable in national level; it has a significant role in showing identity of the city and even Guilan;

• Creation and Improvement of Open and Green Spaces

According to the principles of new urbanism, a neighborhood has a center which is normally a square or a green area or a part of the street which stays on the mind and can play a significant role in improvement of the environmental quality in neighborhood and providing beauty, increasing social interaction and totally improving life quality in green and open spaces. These spaces can increase vividness of neighborhood, despite improving air quality. Providing security and equipping these locations for public usage specifically children and facilitating the access to these spaces should be emphasized.

Among open available spaces in the neighborhood, there is an open space in its center and next to Mostofi mosque which has been ignored and turned into a parking for business and administrative usages which has to be organized;

• Renovating and Equipping the Center of Neighborhood with Mixed and Various Usages and Their Appropriate Distribution

Identifying the center of neighborhood is one of the basic essentials in organizing the traditional neighborhoods. Neighborhood's center, as a symbol of identity and characteristic of the neighborhood has a

significant role in forming a strong image in inhabitants. In modern urbanism, most of the usage mixtures are located in neighborhood's center and it is used as a space for providing inhabitants' needs and as a place for more social interactions of people and it should assist positive interaction of classes of people from different genders and races, and it must be equipped with various and mixed usages, furniture and appropriate facilities for all groups.

In present situation, at the center of the neighborhood, no usage varieties and essential facilities are observable;

• Planning for More Cooperation of Neighborhood's People in Decision-Making

To provide qualitative, structural, and socio-cultural improvement of the neighborhood and facilitating its problem solving, using inhabitants' cooperation plays an important role. People's cooperation in solving neighborhood's problems, develop their commitments and personal and social connections which is possible through local institutions, people's notification and information exchange about issues of neighborhood.

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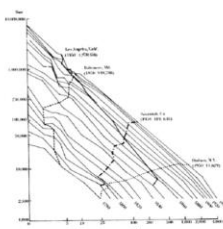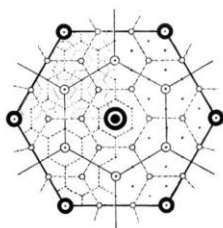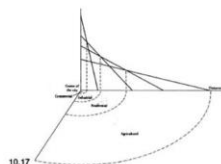
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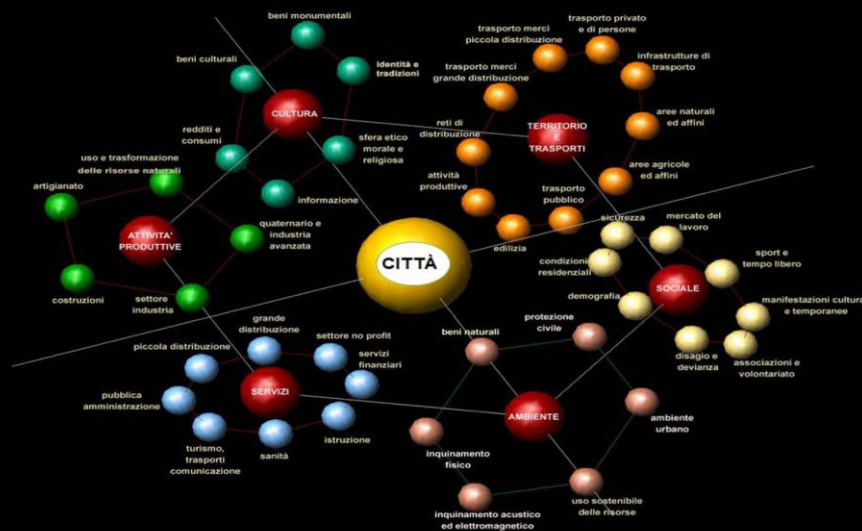
PRESIEDE

FLAVIO BOSCACCI, *DAStU - Politecnico di Milano*

9:30 SALUTI ISTITUZIONALI

ILARIA VALENTE, *Preside della Scuola di Architettura, Urbanistica e Ingegneria delle Costruzioni*
GABRIELE PASQUI, *Direttore del Dipartimento di Architettura e Studi Urbani*
MATTEO RUTA, *Coordinatore del Corso di Studi in Ingegneria Edile - Architettura*

10:00 INTRODUZIONE

FULVIA PINTO, *DAStU - Politecnico di Milano*

10:15 INTERVENTI

MATTEO CAGLIONI, *University of Nice Sophia Antipolis*
VALERIO CUTINI, *Università degli Studi di Pisa*
GIOVANNI FUSCO, *University of Nice Sophia Antipolis*
FRANCESCO SCARLATTI, *Politecnico di Milano*

11:00 Tavola rotonda

DINO BORRI, *Politecnico di Bari*
ARNALDO CECCHINI, *Università degli Studi di Sassari*
GIUSEPPE LAS CASAS, *Università degli Studi della Basilicata*
ROCCO PAPA, *Università degli Studi di Napoli "Federico II"*
MAURIZIO TIRA, *Università degli Studi di Brescia*

12:30 DIBATTITO

13:15 CONCLUSIONI

STEFANO MORONI, *DAStU - Politecnico di Milano*

13:30 BUFFET

TeMA

REVIEWS PAGES

PLANNING FOR LIVABLE AND SAFE CITIES:
SOCIO-ECONOMIC CHANGES IN ADVANCED SOCIETIES

Starting from the relationship between urban planning and mobility management, TeMA has gradually expanded the view of the covered topics, always remaining in the groove of rigorous scientific in-depth analysis. During the last two years a particular attention has been paid on the Smart Cities theme and on the different meanings that come with it. The last section of the journal is formed by the Review Pages. They have different aims: to inform on the problems, trends and evolutionary processes; to investigate on the paths by highlighting the advanced relationships among apparently distant disciplinary fields; to explore the interaction's areas, experiences and potential applications; to underline interactions, disciplinary developments but also, if present, defeats and setbacks.

Inside the journal the Review Pages have the task of stimulating as much as possible the circulation of ideas and the discovery of new points of view. For this reason the section is founded on a series of basic's references, required for the identification of new and more advanced interactions. These references are the research, the planning acts, the actions and the applications, analysed and investigated both for their ability to give a systematic response to questions concerning the urban and territorial planning, and for their attention to aspects such as the environmental sustainability and the innovation in the practices. For this purpose the Review Pages are formed by five sections (Web Resources; Books; Laws; Urban Practices; News and Events), each of which examines a specific aspect of the broader information storage of interest for TeMA.

01_WEB RESOURCES
The web report offers the readers web pages which are directly connected with the issue theme.

author: Maria Rosa Tremiterra
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02_BOOKS
The books review suggests brand new publications related with the theme of the journal number.

author: Gerardo Carpentieri
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03_LAWS
The law section proposes a critical synthesis of the normative aspect of the issue theme.

author: Laura Russo
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04_URBAN PRACTICES
Urban practices describes the most innovative application in practice of the journal theme.

author: Gennaro Angiello
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05_NEWS AND EVENTS
News and events section keeps the readers up-to-date on congresses, events and exhibition related to the journal theme.

author: Andrea Tulisi
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TeMA
Journal of
Land Use, Mobility and Environment

评述页：

规划建设宜居安全城市：
发达社会的社会经济变化

TeMA 从城市规划和流动性管理之间的关系入手，将涉及的论题逐步展，并始终保持科学严谨的态度进行深入分析。在过去两年中，智能城市（Smart Cities）课题和随之而来的不同含义一直受到特别关注。

学报的最后部分是评述页（Review Pages）。这些评述页具有不同的目的：表明问题、趋势和演进过程；通过突出貌似不相关的学科领域之间的深度关系对途径进行调查；探索交互作用的领域、经验和潜在应用；强调交互作用、学科发展、同时还包括失败和挫折（如果存在的话）。

评述页在学报中的任务是，尽可能地促进观点的不断传播并激发新视角。因此，该部分主要是一些基本参考文献，这些是鉴别新的和更加深入的交互作用所必需的。这些参考文献包括研究、规划法规、行动和应用，它们均已经过分析和探讨，能够对与城市和国土规划有关的问题作出有系统的响应，同时还对诸如环境可持续性和在实践中创新等方面有所注重。因，评述页由五个部分组成（网络资源、书籍、法律、城市实务、新闻和事件），每个部分负责核查 TeMA 所关心的海量信息存储的一个具体方面。

01_WEB RESOURCES
网站报告为读者提供与主题直接相关的网页。

author: Maria Rosa Tremiterra
那不勒斯菲里德里克第二大学民用建筑与环境工程系 TeMA 实验室 e-mail: mariarosa.tremiterra@unina.it

02_BOOKS
书评推荐与期刊该期主题相关的最新出版著作。

author: Gerardo Carpentieri
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03_LAWS
法律部分提供主题相关标准方面的大量综述。

author: Laura Russo
那不勒斯菲里德里克第二大学民用建筑与环境工程系 TeMA 实验室 e-mail: laura.russo@unina.it

04_URBAN PRACTICES
城市的实践描述了期刊主题在实践中最具创新性的应用。

author: Gennaro Angiello
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05_NEWS AND EVENTS
新闻与活动部分让读者了解与期刊主题相关的会议、活动及展览。

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01

PLANNING FOR LIVABLE AND SAFE CITIES: SOCIO-ECONOMIC CHANGES IN ADVANCED SOCIETIES

REVIEW PAGES: WEB RESOURCES

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In this number
HOW CITIES CAN FACE NEW SOCIO-ECONOMIC CHALLENGES

Sustainable urban development has been defined in many ways in last decades but there is some consensus that the four areas of sustainable development are environmental, economic, social, and governance (Hiremath et al., 2013; Salvati et al., 2013). However, while a widespread attention is focused on the urban environmental issues, ranging from the urban pollution to climate change, there are also some new socio-economic concerns that should be urgently considered in the urban agenda today. Indeed, international migration flows is continuously increasing and this means that more and more people will move to urban areas involving cities to be ready to deal with increasing multi-ethnical population but also with the necessity to avoid social inequalities and urban spatial segregation. Therefore, a big challenge for cities is how to best absorb the new population in the urban environment guaranteeing social inclusion, participatory democracy and human rights. Moreover, since cities and urban areas have suffered the global economic crisis emerged in 2008 due to globalization, they now should "reshape" themselves in order to reduce their economic vulnerabilities. In accordance to the New Urban Agenda adopted during the United Nations Conference on Housing and Sustainable Urban Development (Habitat III), cities and human settlements should "meet the challenges and opportunities of present and future sustained, inclusive and sustainable economic growth, leveraging urbanization for structural transformation, high productivity, value-added activities and resource efficiency, harnessing local economies, and taking note of the contribution of the informal economy while supporting a sustainable transition to the formal economy" (UNHABITAT, 2016).

So, in order to deeply investigate what is going on globally at the urban level to tackle with a sustained and inclusive economic growth and a social and cultural development, three websites are described: the first one is the website of Urban Transformations – a platform for partnerships, resource sharing and other opportunities to foster urban projects and research beyond the sectoral approach; the second website presents the activities of the Committee on Social Inclusion, Participatory Democracy and Human Rights aimed at supporting the implementation social inclusion and citizen participation policies at the urban level; and the third one is the website named "Sustainable Cities Platform" which goal is to support and accelerate socio-cultural, socio-economic and technological transformation of European Cities.

URBAN TRANSFORMATIONS
http://www.urbantransformations.ox.ac.uk/

Urban Transformations is a network of the Economic and Social Research Council (ESRC) projects, coordinated from the University of Oxford. The aim of such network is collecting and showcasing researches on urban transformations.

In particular, the Urban Transformations portfolio contains more than 50 international projects about different topics on social, economic and demographic changes. Moreover, such projects share a number of common principles, such as:

— cross-disciplinarity, to support an holistic and integrated research and to benefit from other fields of knowledge;

— multi-scalarity, to consider a breadth of projects from neighborhood to megacities;

— future-orientation, to anticipate emerging trends, also using new technologies;

— international vision to be align and be compared with many policies around the world.

These principles are useful to implement a platform because case studies can help communities, firms and local authorities in order to choose more effective measures at urban level. Moreover, the Urban Transformations portfolio tries to overtake the "silos" approach to urban issues because there are different professions and experts that operate on cities. Therefore, the Urban Transformations tries to be a platform to integrate the different sectors in an holistic manner.

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The website is articulated in six main sections: About, Funding, research, News & Debate; Events and Connections.

While in the About section are all the information on the Urban Transformation portfolio, in the Funding section both open and closed projects calls are listed, as well as the grants. In such a way, different possibilities to support projects about urban planning are collected and the contents are presented in a simply format, including the reference to the main lead institution. Examples of projects about urban planning can be found in the section Research where more than 50 projects are collected depending on their location and their main topic that can range from the urban ageing and social exclusion to the economic development.

In addition to this, the News and Debate section is continuously updated with articles on key issues faced by cities across the world in order to provoke discussion between scholars and practitioners or with blog articles collected from other websites.

Beyond the showcase of international projects and the posts about funding opportunities, the Urban Transformation provides information about events and their connections with several organizations in the field of urban research, including government, civil society, industry and university.

So, Urban Transformations seeks to create a bridge between the academia research and the practitioners in the urban field to overcome a sectoral approach, serving as a platform for partnerships, resource sharing and other opportunities.

UCLG - CISDP
http://www.uclg-cisdp.org/en/home

On the UCLG-CISDP website, the user can access to the information and to the activities of the Committee on Social Inclusion, Partecipatory Democracy and Human Rights that is member of the United Cities and Local Governments (UCLG). The Committee has been established in 2005 as a forum for the discussion made up by local authorities from all over the world initially about two themes (social inclusion and participatory democracy) and, afterwards, also on a third theme: human rights in cities.

The main concern of the Committee is the urban environment. indeed, the Committee is involved in activities related to the cities as shown in its Action Plan.

Moreover, one hand the Committee represents a global platform for representing and defending the interest of local governments before the international community in the areas of Social Inclusion, Partecipatory Democracy and Human Rights, on the other hand it helps these governments in designing their strategies and policies also by means of exchanging knowledge and expertise.

With this aim, the Committee has also developed a platform "*Inclusive Cities Observatory*" that collect more than 60 case studies around the world related about:

— innovative policies for community development;

— access to basic services;

— gender equality;

— environmental protection

— eradication of poverty.

Thanks to this initiative successful experiences have been identified and investigated in order to create an inspiration for other cities to design and implement their own social inclusion policies.

The Inclusive Cities Observatory has been developed with the scientific support of the Development Planning Unit from the University College of London (15 case studies) and a team of researchers from the Centre for Social Studies (CES) at the University of Coimbra (50 case studies).

In addition to real case studies and successful experiences to deal with social issues in cities, the Committee puts efforts also in providing scientific material and guidelines.

Indeed, starting from a "manifesto in favour of social inclusion policies, considered as a safeguard of citizens' rights, necessary to achieve a vibrant and effective local democracy, respectful toward the growing diversity of urban societies", the study "Social Inclusion and Participatory Democracy - From the conceptual discussion to local action" has been published in 2014 to provoke discussion and stimulate intellectually academia and practitioners in research and in implementing social inclusion and citizen participation policies.

SUSTAINABLE CITIES PLATFORM
http://www.sustainablecities.eu/

The European Sustainable Cities Platform was launched in 2016, following the 8th European Conference on Sustainable Cities and Towns in the Basque Country. It is focuses on the uptake of The Basque Declaration – the main outcome of the 8th European Conference on Sustainable Cities and Towns – which "outlines new pathways for European Cities and Towns to create productive, sustainable and resilient cities for a liveable and inclusive Europe. The document aims to support and accelerate socio-cultural, socio-economic and technological transformation".

These transformation are leaded by 15 "pathways" that are the followings:

- for the socio-cultural transformation: the creation of a culture of sustainability, the involvement of the citizens, the re-think of the public-private boundaries, the promotion of social innovation and the nurturing of sharing economy;

- for the socio-economic transformation: the research of opportunities for local economies, the creation of value chains, the application of innovative financing approaches, the application of sustainable procurement principles, the pursuing of a circular economy;

- for the socio-economic transformation: the wise selection and application of smart technologies, the use of procurement to influence market, the creation of equal access to information/digital services, the support to open data standards, the preparation for socio-cultural changes due to technology.

In accordance with these pathways, the Platform provides inspiring examples of Transformative Actions. Indeed, there is a Transformative Actions Database where projects in line with The Basque Declaration have been collected depending on their main pathway and their main topics (decarbonization, urban mobility, biodiversity, greenfield land and natural space, water resources and air quality, climate change, public space, housing, social inclusion and integration, local economies and employment). There is also a sub-section that allow cities and organization to submit their Transformative Actions and their projects in line with the Basque Declaration. Indeed, in order to make effective the goals of the Basque Declaration, the activity of monitoring and documentation of Transformative Actions are fundamental to make them available for replication.

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IMAGE SOURCES

The images are from: http://www.urbantransformations.ox.ac.uk/; http://www.uclg-cisdp.org/en/home; http://www.sustainablecities.eu/.

02

PLANNING FOR LIVABLE AND SAFE CITIES: SOCIO-ECONOMIC CHANGES IN
ADVANCED SOCIETIES

REVIEW PAGES: BOOKS

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In this number
REGENERATION AND SOCIO-ECONOMIC SUSTAINABILITY

In the last decades, the world has changed extremely, our ideas, practices, modes of production and consumption, demographic structures, as well as education and health conditions have radically changed. The way cities are shaped, their form and functionality have also been transformed over these years. Many of these transformations have been for the better, but others for the worst. The growth of the urban areas is ingrained in a culture of short-term economic benefit and often unbridled consumption and production practices that compromise the sustainability of the environment. The causes may vary according to different contexts, but uncontrolled growth, privatization of public goods, lack of regulations and institutions as well as forms of collective indolence are often the key factors behind a model of urbanization that is becoming highly unsustainable. Urbanization is at the same time a positive force underpinning profound social, political and economic transformation. Furthermore, the urbanization and growth go hand in hand, and no one can deny that urbanization is essential for socio-economic transformation, wealth generation, prosperity and development. According with this themes, the two principal approaches develop in the last years from scientific research are the Smart City and Resilient City. That are mainly addressed to improve sustainability and increase the quality of life, although each concept seems to pursue these objectives following different paths (Papa et al., 2015). In this context, another important theme is the inclusion of migrants. It has become more important theme, especially in light of the current financial crisis and the growing political mood surrounding immigration. The freedom of movement of people is at the crux of European integration. The principle of social inclusion should also allow for people to enjoy a standard of living consistent with what is considered normal in the society in which they reside. Further, social inclusion relates to social cohesion in which all members of society are drawn together to become more active members of society. Many migrants participate in the labour market, enrol in education and training, and participate in arts and leisure activities as well as integrating into the community. Over the past ten years, the European Union has undergone significant expansion leading to increased scope for the movement of people from one member state to another.

According to these themes, this section suggests three books and reports that help to better understand the issue of this number: UN Habitat World Cities Report 2016, Socio-economic inclusion of migrant EU workers in 4 cities and Metropolitan Areas and Smart Governance Successful Initiatives and Critical Aspects towards Smart City.

The analysis of urban development of the past twenty years presented in this re-edition of the World Cities Report shows, with compelling evidence, that there are new forms of collaboration and cooperation, planning, governance, finance and learning that can sustain positive change. This report declares the emerging future of cities largely depends on the way we plan and manage urbanization, and the way we leverage this transformative process to provide the setting, the underlying base and also the momentum for global changes. It proves that the current urbanization model is unsustainable in many respects, puts many people at risk, creates unnecessary costs, negatively affects the environment, and is intrinsically unfair. It conveys a clear message that the pattern of urbanization needs to change in order to better respond to the challenges of our time, to address issues such as inequality, climate change, informality, insecurity, and the unsustainable forms of urban expansion. The Habitat Agenda adopted at the United Nations Conference on Human settlements (Habitat II) in 1996 was influential in the recognition of the right to adequate housing, sustainable human settlements development in an urbanizing world, and the increased participation of the private sector and non-governmental organizations in the urbanization process. It reinforced the role of local authorities and stirred progress in strengthening fiscal and financially management capacities. However, in general terms, implementation, financing and monitoring have remained major challenges.

It conveys a sense of urgency in the implementation of policies and actions that can no longer depend on political schedules or opportunistic moments, but should, instead, be set. The new Urban Agenda should adopt a city-wide approach to development with concrete actions, setting out clear funding mechanisms and effective means of implementation and monitoring. The new urban agenda seek to realize goal 11 of the 2030 agenda for sustainable development, which is to make cities and human settlements inclusive, safe, resilient and sustainable. The United Nations Conference on Housing and Sustainable Urban Development (Habitat III) held from 17 to 20 October 2016 in Quito, Ecuador, successfully concluded with the adoption of the New Urban Agenda. The Habitat III Conference as a whole was a resounding success: 30,000 people, among them 10,000 international participants from 167 countries were accredited in the Conference. In the span of four days almost 1,000 events took place, including 8 Plenary sessions, 6 High-level Roundtable sessions, 4 Assemblies, 16 Stakeholders Roundtables, 10 Policy Dialogues, 22 Special Sessions, 3 Urban Talks, an Urban Journalism Academy, 59 United Nations events, 157 Exhibition booths, 42 Village projects and over 460 side, networking, training and parallel events were organized by various stakeholders. The components of the new Urban Agenda are focused on desired directions of change for urban areas in the context of national development. These focus points are largely at the city level, although they are combined together through national urban policies. the key strategic components are considered as "development enablers" that can be thought of as frameworks for action in response to the multiple challenges raised by the often chaotic forces of urbanization; and also, at the same time, as frameworks for action to harness the opportunities that the same urbanization brings. the new Urban agenda highlights three development enablers, which are jointly referred to as a "three-pronged" approach: rules and regulations; urban planning and design; and municipal finance mechanisms. Along with national urban policies, these three development enablers underpin planned urbanization and they can generate across-the-board sustainable urban development. The components overall respond to the question of what needs to change
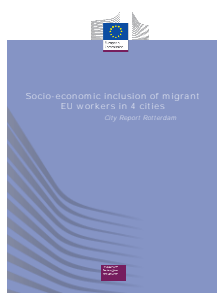
Title: Socio-economic inclusion of migrant EU workers in 4 cities
Author/editor: Employment, Social Affairs & Inclusion program
Publisher: European Commission
Download: http://ec.europa.eu/social/BlobServlet?docId=14423&langId=en
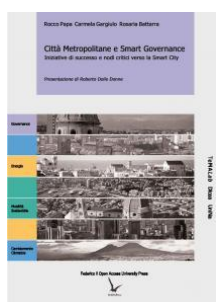Publication year: 2015
ISBN code: n.d.

The freedom of movement of EU workers is one of the four freedoms on which the EU's Single Market is based, alongside freedom of movement of goods, capital and services. Since 2004, the year the European Union (EU) expanded from 15 to now 28 Member States, the scope of mobility for people within the EU increased substantially. The purpose of this study was to provide the European Commission with information on the challenges and the opportunities in the economic and social inclusion of migrant EU workers and their families at local level. This report is the final synthesis report summarising the results of the four case studies from cities across the European Union: Leeds (UK), Frankfurt (Germany), Rotterdam (Netherlands) and Milan (Italy). Each of these cities was selected because it has received large numbers of migrant EU workers since 2000. This project aimed to examine the specific barriers to and facilitators of economic and social inclusion of EU migrant workers. Research efforts included analysing secondary data and conducting surveys, interviews and workshops with key stakeholders. Information about EU migrant workers and their situation was gathered through a variety of methods: literature review; analysis of statistical data; interviews and focus groups with key stakeholders (employer, trade unions, local authorities, migrants' associations, public and private employment services, other civil society organisations; etc.) and questionnaires for migrant EU workers.

The report is divided in five chapters. The first chapter sets out the policy context at EU level on the free movement of workers, including recent developments and debates. The second chapter sketches a profile of EU labour migration in the four cities. The third chapter discusses the challenges and opportunities for migrant EU workers, local workers and the local community in various domains: when arriving and registering; in getting a job and starting a business; when accessing local services and when participating in social and cultural life. The fourth chapter discusses the policies and practices to support the socioeconomic inclusion of migrant EU workers at local level. The fifth chapter draws conclusions and provides recommendations for the socioeconomic inclusion of migrant EU workers.

Overall, there are many similarities in the challenges and opportunities encountered in the four cities, together with some differences that are often related to the organisation of services at national level and other local circumstances. Language barriers feature as an important shared challenge for the socioeconomic inclusion of migrant EU workers and for their access to the labour market.

 Access to quality and affordable housing is the other most widespread challenge. Other challenges are emphasized in some of the cities: the recognition of qualifications, the exposure to worse working conditions and exploitation, being hired at a lower qualification level. Access to information on social and health services is mentioned as a key challenge in Frankfurt and Rotterdam while in Milan the poor functioning of the matching mechanisms of labour supply and demand is highlighted. There is more variety across the city reports on the key opportunities that are offered to migrant EU workers. Job opportunities and the possibility to access to good quality local public services are the most important ones. Social inclusion is a process which affords citizens the necessary opportunities and resources to fully participate in economic, cultural and social life.

Title: Metropolitan Areas and Smart Governance. Successful Initiatives and Critical Aspects towards Smart City
Author/editor: Rocco Papa, Carmela Gargiulo e Rosaria Battarra
Publisher: Fedoapress
Download: http://www.fedoabooks.unina.it/index.php/fedoapress/catalog/view/35/30/216-1
Publication year: 2016
ISBN code: 978-88-6887-005-8

The book describes the results of the research project "Governance Analysis Project Smart Energy City" of the Pon Smart Cities and Communities PON 04a2_E to the implementation of Smart Energy Cities in metropolitan areas in Europe in Italy, and in the convergence regions. The programme aims at verifying what Italian cities are trying out with regard to application of the Smart City paradigm, also in the light of the process of transformation of the institutional system being dealt with by the cities after the introduction of Law no. 56/2014. This has meant, on the one hand, verifying the level of propensity of Italian metropolitan areas for adopting a smart approach; on the other hand, by collecting the critical literature about what is being tried by cities from the smart viewpoint, a thorough study was made of the initiatives that could help metropolitan cities to deal with the tasks assigned to them by the law. The metropolitan cities investigated were the ten identified in Law no. 56/2014 (Bari, Bologna, Florence, Genoa, Milan, Naples, Reggio Calabria, Rome, Turin and Venice) as well as Palermo and Catania. About 1,000 smart initiatives (actions, researches, technologies etc.) were identified during the research, and were classified and analysed using a single interpretation grid for all the citiesJust as a series of things to ponder appear, about what the foreseeable developments in the adoption of the smart approach might be, but in particular about what the main critical aspects to be dealt with are. To assess the smartness of Italian metropolitan cities, from the vast literature on the subject, a set of indicators has been selected, articulated in the six characteristics that identify the smart city: Economy, People, Environment, Living, Mobility, Governance (Giffinger et al., 2007). Using these indicators, it was possible to compare the Italian cities and evaluate the different levels of smartness. Through the use of indirect sources, a screening was carried out of initiatives - research, interventions, projects, technologies/products, plans/programs, promotion - aimed at the implementation of the Smart City that each metropolitan city is implementing. Current initiatives in 12 metropolitan cities, then, were compared to verify the type, characteristics, the actors involved, and the resources committed.

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03

REVIEW PAGES: LAWS

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THE DIGITAL AGENDA: SOCIAL CHALLENGES AND OPPORTUNITIES

We often hear that the future is digital. The digital revolution, as many call it, has been changing our world since the middle of the last century, driven especially by technological and market innovation. These transformations are inevitably altering people's way of living and interacting, and thus they are also impacting cities. However, technology by itself cannot boost territorial competitiveness (Barresi & Pultrone, 2013; Las Casas et al., 2014). Political strategies and territorial policies are equally important in order to effectively manage the spread of new fast, reliable and connected digital networks. In this context, every year, the World Economic Forum publishes the Global Information Technology Report, which provides a ranking of more than one hundred global countries based on a set of indicators that measure the ability of an economy to use information and communication technologies (ICTs) to foster both social and economic growth. In its last edition (Baller et al., 2016), five EU countries are in the top 10, two of which on the podium (i.e. Finland at the second place and Norway at the third). These good performances of the EU countries can be partially consider as a result of the efforts of the European Commission to support Europe's digital revolution. In particular, the *digital agenda for Europe*, launched in 2010, with its 101 actions, can be consider a point of reference for all European countries that want to effectively exploit ICTs and generate sustainable growth.

The main goal of the digital agenda is the creation of a *European digital single market,* and three priority lines of action have been identified in order to reach this goal:

- to provide consumers and businesses with better access to digital goods and services across Europe;
- to shape the right environment for digital networks and services to flourish;
- to create a European digital economy and society with growth potential.

Based on these priorities, European countries have developed their own strategies, considering the specific political, geographical, social and economic context of reference.

The focus of this issue of TeMA is the Italian strategy for improving digitalization across the country. In particular, two main documents are described in detail: the Italian strategy for digital growth, and the Italian strategy for next generation access network. These two Strategies are part of the Italian digital agenda and introduce a wide range of initiatives that have been already gradually changing the way citizens and public administrations interact. The efforts of the Italian government are aimed at reducing the digital gap with the other European countries in terms of access to network, digital rights and development of digital competencies, as well as at developing normative and digital infrastructures to foster innovation in both public administration and industry (Verrò, 2016).

DIGITAL ITALY (FROM 2012 TO PRESENT)

According to the Global Information Technology Report (2016), "Italy is one of the countries that improved the most during the last year its ability to leverage information and communication technologies to improve its competitiveness and the well-being of its population" (Vetrò, 2016). This positive result reflects the commitment by the government to promote the digitalization of the country during the last four years. In particular, the normative history of the Italian digital Agenda officially starts in 2012, with the adoption of the Decree Law n. 179 "Ulteriori misure urgenti per la crescita del Paese", which includes a number of measures aimed at promoting economic growth and digital culture within the Italian context. During the same year, the *Agency for digital Italy* (AdI) is introduced as the implementation body of the digital Agenda (Decree Law n.83/2012). The role of Agency is to coordinate the three levels of the Italian administration system – state, regions, and cities – for the fulfilment of the Italian digital agenda's goals, consistently with the European guidelines. After 2012, additional digital development measures have been introduced with the so-called *Decreto del Fare* (Law n. 98/2013) and with the 2014 and 2015 Stability Laws (Law n. 147/2013 and Law n.140/2014 respectively). However, 2015 proved to be a pivotal year for the Italian digital Agenda, because the government approved two key complementary documents: (1) The Italian strategy for digital growth 2014-2020; and (2) The Italian strategy for next generation access network.

The main goal of the **Italian strategy for digital growth 2014-2020** is to spread new digital competencies among citizens and companies in order to foster social and economic growth, especially in a moment when the country is hardly trying to overcome a long period of economic crisis. The Strategy includes a numerous set of measures grouped into three different pillars: (a) cross-infrastructural actions, (b) enabling platforms, and (c) acceleration programs.

The first pillar – cross-infrastructural actions – includes the following actions/projects:

− Public System of Connectivity (SPC). This action aims at providing all public buildings, especially schools and hospitals, with access to broadband connection services above 30 Mbps (70% above 100 Mbps) and wireless network;

− Digital Security for the Public Administration (PA). This project wants to ensure cyber security within the PA by defining a set of standards and guidelines that all PA must adhere to;

− Rationalize of ICT endowment, reinforcement of data center and cloud computing. The main goal of this action is to exploit the advantages offered by the cloud and improving the rationale use of the PA's ICT capital; in particular, the Strategy estimates that 70% of PA data center should be migrated to cloud by 2020 in order to save about 15% of the actual expenses;

− Public Service of Digital Identity (SPID). The project aims at providing at least 70% of the active population with a secure access to the digital services offered by the PA by 2020. Up to now, 3719 PA have been involved and almost two hundred thousand of digital identities have been distributed.

The second pillar – enabling platforms – refers to the development of those platforms that are necessary to enable the digital transformation of the public administration sector, in a digital-first perspective. This pillar includes the following actions/projects:

− National Civil registry (ANPR). This action aims at developing a centralized database system for the management of the national civil registry. This would improve the quality of the service offered to the

citizen, who would be able to access any civil certification in any municipal office. Up to now, only 26 out of 8047 municipalities have been involved;

— Electronic payments ("Pago PA"). The goal of this project is to allow citizens and companies to make any type of PA payment online, as with any e-commerce platform. This innovation would benefit both the PA, which would be able to collect its payments in real time, and private citizens/companies, which could save time and money. Up to now, over fourteen thousand PAs have been participating at the project, and over six hundred thousand payments have been made electronically;

— Electronic invoicing to PA. Since March 31, 2015 all PAs are required to issue, manage and store invoices exclusively electronically. Up to now, almost fifty million invoices have been transmitted electronically;

— E-procurement. In accordance with EU Directives on public procurement, this action aims at simplify and make more transparent all public procurements, which must be conducted electronically starting from April 2016. The digitalization includes: e-notification (e.g. electronic only publishing of public procurements); e-access (e.g. electronic only consultation); and e-submission (electronic only submission of tenders);

— Open Data. The project's goal is to develop a set of national guidelines for supporting the free sharing of government data, based on open standards;

— Digital Health Care. In order to improve the price-quality ratio of health care services and the efficiency of the whole system, a number of activities have been put in place, such as the realization of the electronic health record (FSE) for each citizen, which is already active in seven regions, and the replacement of traditional paper prescriptions into digital ones;

— Digital School. This project includes different actions that aim at the digitalization of all school buildings by 2018. In particular, any school building will be provided with access to broadband connection services; each student and teacher will get a digital profile; schools will be provided with new labs and classrooms for integrated teaching; and additional digital training for teachers is planned;

— Digital Security and Justice. In order to reduce time and cost and optimize the whole judicial system, the Strategy aims at digitizing civil and criminal trials. The civil telematics trial is a reality in Italy since 2014, and now it has been working on the penal telematics trial as well;

— Digital Tourism. This project includes a set of actions for the digital promotion of Italy as a tourism destination, and for the development of new infrastructure in order to make South Italian destinations more accessible;

— Digital Agriculture. This line of action follows a previous project called "Agricoltura 2.0", which aims at using new technologies to both facilitate farmers' access to public funding and innovate the sector.

The third and final pillar – acceleration programs – is the one meant to produce the strongest impact, in terms of social and economic development, and it includes the following actions/projects:

— Italy Login - The home for citizens. This project aims to be the most innovative government platform for citizens. It will provide a digital platform that allows better joint participation of the public and private sectors. Using their digital identity, citizens will be able to access any apps, provided by the public and private sector, based on their profile. According to the Strategy, the platform should be completed by 2017, and 100% of PAs must adhere to it by 2020;

— Digital Competence. This acceleration program aims to develop digital skills among Italian citizens in order to increase the number of people with access to the internet: in 2015, only 60% of Italian citizens had a computer and were able to send an email, the goal of this initiative is to reach 90% by 2020;

— Smart City & communities. The project focuses on the construction of a digital platform for coordinating the development of smart communities. Up to now, this initiative seems to be stuck.

In 2015, together with the Italian Strategy for digital growth 2014-2020, the government also approved the **Italian strategy for next generation access network**, a document that highlights the importance of telecommunication networks for the social and economic future of the country. The Strategy identifies high-speed Internet infrastructure and services as a necessary condition for a faster, more efficient, less bureaucratic Italy. Up to now, Italy is way back in all European rankings for take up of advanced digital services and high speed networks availability, therefore the gap that needs to be fill is very large, and the objectives defined by the Strategy can be considered very ambitious.

In particular, the Strategy identifies three main objectives:

− provide 85% of population with access to broadband connection services above 100Mbps by 2020, in line with the European digital agenda;

− provide access to broadband connection services above 30Mbps to 100% of population by 2020;

− provide access to broadband connection services of at least 100Mbps for public administration, local schools, health care facilities, industrial parks, high demographic density areas.

These goals complement the actions included in the *Italian strategy for digital growth 2014-2020*, and this is not just a coincidence. The two Strategies have been developed in an integrated manner, so to provide both infrastructure and services, in order to bridge the Italian digital gap faster and more effectively.

Looking at the *Italian strategy for next generation access network* more closely, the main aim is to build a completely new infrastructure, able to support any type of communication and satisfy future needs for at least the next 20 years.

This Strategy divides Italy into four different clusters, based on population density and several socio-economic variables as well on the existent supply of infrastructures for ultra-fast broadband. In particular, Cluster A includes the 15 main cities as well as the major industrial areas of the country, and it is where is most likely that private investment will take place; Cluster B includes 1120 municipalities where operators have realized or have planned the deployment of networks providing speeds above 30 Mbps, but the market conditions are not sufficient to guarantee an adequate returns on investments to upgrade networks to provide speeds above 100 Mbps; Cluster C includes 2650 municipalities where operators can be interested in investing in networks with more than 100 Mbps only thanks to state aid support; finally, Cluster D includes 4300 municipalities where only through public intervention resident population can be provided with broadband connectivity above 30 Mbps. For each cluster, a specific model of intervention for ultra-fast broadband has been designed, so to make the best use of the available financial resources and limit any waste of money.

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04

PLANNING FOR LIVABLE AND SAFE CITIES: SOCIO-ECONOMIC CHANGES IN ADVANCED SOCIETIES

REVIEW PAGES: URBAN PRACTICES

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In this number

PLANNING FOR AN URBAN AGING POPULATION: TWO CASE STUDIES

Population aging and urbanization are two converging global trends with significant implications for urban planning and development (Buffel & Philipson, 2012). According to the United Nation World Population Prospects Report (UN, 2015), the global population of older people is growing at an unprecedented rate. By 2050, for the first time in human history, there will be more over-65s than children under-15s and the number of people over 100 will increase by 1.000%. At the same time urbanization will continue to growth, with urban areas absorbing the majority of the expected population growth over the next four decades (UNFPA, 2014). The combined effect of these two converging trends will present huge challenges for the cities of tomorrow that will need to adapt themselves in order to respond to the needs and aspirations of a fast-growing urban aging population.

An ageing population is not inherently a bad thing as it reflects improved health and rising life expectancies. Older people are a resource for their families and communities, and for the wellbeing of the cities where they live. However, in order to tap the potential that older people represent for continued human development, cities must ensure their inclusion and full access to urban spaces, structures, and services (Plouffe, 2010).

According to the World Health Organization (WHO) definition an "age-friendly city" is one that promotes active aging; that is, "it optimizes opportunities for health, participation, and security in order to enhance quality of life as people age" (WHO, 2007). An age friendly city is thus a place that helps older people stay healthy and active and provides appropriate support to those who can no longer look after themselves. It adapts its structure and services to be accessible to and inclusive for older people with varying needs and capacities (Buffel & Philipson, 2012).

Developing responsive actions to fulfil the aspirations and needs of older people has become a major concern in many cities worldwide. Cities indeed are a locus for bridging across policy sectors to address the concerns of ageing populations in urban settings in an integrated way.

To encourage world cities to plan for aging as an integral part of planning their built and social environment, the WHO initiated a global, collaborative project in 2005 to identify the key features of an "age-friendly" city. This contribution illustrates two relevant case studies of cities that participate in the WHO *Global Network of Age-Friendly Cities and Communities* and have recently developed advanced plans, initiatives and regulations to address their aging populations needs: i) Manchester (UK) and ii) New York (US).

MANCHESTER

With over 500.000 inhabitants, Manchester is one of the most populated urban area in the UK and an important cultural, business, and retail center. According to official statistics, the proportion of residents aged 65 and older is 10.6% (Manchester City Council, 2016). The highest concentrations of older people are in the areas at the city's extremities, such as Wythenshawe, Didsbury, Blackley and Moston, while the areas close to the city center have the lowest concentrations of people aged 65 and over. By 2028, the number of over 65s is expected to increase by 44%, and over 85s by 81%.

Manchester is one of the first city to participate in the WHO Global Network of Age-Friendly Cities and Communities and its commitment to promote active aging can be rooted in 1993 when the city developed a series of initiatives related to the European Union Year of Older People (Buffel et al., 2014). This prompted the City Council to create a multi-departmental working group charged with promoting a broader range of opportunities and services for older people. In 2003, the City Council launched the Valuing Older People (VOP) partnership, an initiative designed to develop partnerships with older people and a variety of organizations within the community. Between 2003 and 2010, the VOP program developed a variety of actions on the age-friendly theme, including engagement program aimed at involving older residents in the leadership of VOP work, a communication strategy organized around positive images of aging, and the development of initiatives with external partners such as universities and agencies representing the voluntary sector (Buffel et al., 2014). In 2010, the VOP launched the Manchester Ageing Strategy (MAS) following extensive consultation with older residents, elected council members, and a panel of nationally recognized experts. The objectives of this strategy, that covers the 2010-2020 time period, is to ensure that older citizens will be more active and engaged, experience less inequality, receive better-quality care and support, and live in lifetime neighborhoods with affordable housing options. The strategy incorporates a variety of themes including:

− *Housing*. Actions in this domain focus on increasing the supply and choice of homes, increasing the proportion that are accessible to mobility-restricted residents, improving existing homes, and extending support and housing advice services. According to the MAS, by 2020, Manchester's older citizens will have more housing options with an improved supply, mix and choice of good-quality homes adapted to their needs. With better support and advice, older people will be able to take advantage of the improved housing offer.

− *Transport*. Actions in this domain are oriented toward making public transport easier to use, reliable, and more comfortable. This will be achieved by providing better support for people having difficulties getting around and by developing transport hubs and transport information better suited to older people.

− *Environment and safety*. Actions in this domain focus on developing local environmental projects involving older people in order to make public spaces more accessible and safe. Planned actions in this area include: the design of pedestrian friendly public spaces, solutions to calm road traffic and the redesign of street intersections at key locations to improve the safety for older people.

The MAS also provide strategies in the *job, cultural and healthcare domain*s. These include: targeted support for the over-50s to get back into work; cultural and learning opportunities for older people; the development of people-oriented health-care services and the promotion of physical activity.

NEW YORK

With over 8,5 million inhabitants, New York City (NYC) is the most populous city in the United States and one of the most populous urban agglomerations in the world. According to official statistics, the elderly population 60 years and older living in New York numbered 1.407.635, representing 17,2% of the City's population (NYDAP, 2016). Brooklyn and Queens are the neighborhoods with the largest number of residents 60 and over, each accounting for about 30% of the City's 60 plus population. By 2030, the number of New Yorkers who are age 60 and older will increase by 47% (compared to 2005).

NYC has a long tradition in addressing the concerns of its ageing population. And is the first city to participate in the WHO Global Network of Age-Friendly Cities and Communities. In 1948, for example, the nation first senior's center was opened in the Bronx. Twenty five year later, Major John Lindsay established the *Mayor Office for the Aging,* with one of its first mandate was to conduct a landmark study on inner city older adults. In 1986, the city was the birthplace of the country's first NORC (*Naturally Occurring Retirement Community*), a service model that brought health and social services to a complex of buildings where old people resides.

In 2007, the City Council and the *New York Academy of Medicine* launched a city-wide investigation to determine the current status of New York's elderly residents. Public participation was an essential element of this preliminary stage, and investigators held city hall meetings, launched a website with information about the project, and hosted a number of roundtable discussions with experts in all areas of city planning. The findings of this investigation led in 2010 to the development of *Age Friendly NYC*, a long term strategy to sustain and enhance NYC's age-friendliness for the growing population of seniors. A blueprint for enhancing NYC's livability for older New Yorkers, outlines 59 specific initiatives focused on four areas:

— *Public space and transportation*. Actions in this area focus on improving the safety of the urban environment while making public transport more comfortable and easier to use by older people. Examples of planned interventions in this area include: improve the safety of street intersections and increase the time allotted for pedestrian crossing; create new seating in bus shelters, improve elevator and escalator service and enhance the accessibility of subway stations; match accessible taxis with users who need them.

— *Housing*. Actions in this domain are devoted to facilitate older people's access to safe and affordable housing as well as focusing on improving housing safety, security, services, and supports. Examples of planned interventions in this area include: provide loan assistance for older people for home repairs; provide loans for rehabilitation and new construction of affordable housing; provide additional support services to NORCs.

— *Community and civic participation*. This area focuses on improving the participation of older adults in the city's civic life. Examples of planned interventions in this area include: increase the number of paid job opportunities for older New Yorkers; promote intergenerational volunteering and learning through partnerships with schools and non-profit organizations; establish citywide partnerships between seniors center and cultural and recreational centres;

— *Health and social services.* Actions in this domain are devoted to ensure access to health and social services and support independent living. Planned measures in this area include: redesign senior centres

focusing on wellness and health outcomes; increase access to community-based health care services; implement citywide health prevention initiatives.

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05

PLANNING FOR LIVABLE AND SAFE CITIES: SOCIO-ECONOMIC CHANGES IN ADVANCED SOCIETIES

REVIEW PAGES: NEWS AND EVENTS

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In this number
SOCIAL MIX POLICIES DURING THE "SECOND DEMOGRAPHIC TRANSITION"

During the last three decades, a wide range of socio-demographic processes, such as the destabilization of traditional patterns of marriage, the growing fluidity of ties of kin and the aging of population, has modified the traditional household system. These dynamics have been summarized under the common name of the `Second Demographic Transition'.

The basic idea behind the aforementioned concept, as launched in 1986 (Lesthaeghe & Van de Kaa, 1986), is that industrialized countries have reached a new stage in their demographic development. During the transition, mortality typically begins to decline first, followed some decades later by fertility decline, thus leading to a series of changes in population growth rates, size, and age distribution that continues for many decades. The transition transforms the demography composition towards an ageing society, characterized by radical change in "women's economic and social roles, the invention of retirement as the third stage of life, and a demographic efficiency that fostered heavy investment in the human capital of fewer but longer-lived children" (Lee & Reher, 2011). Furthermore, (Van de Kaa, 2002) affirms that "the gradually increasing disequilibrium apparently generates a compensatory trend in the third demographic factor of the classical demographic balancing equation: migration".

Economists, geographers, and urban planners have been exploring housing as a key component of urban structure, but they have rarely examined the demographic composition of the housing units. (Myers, 1990) conceptualized the new field of research as the interface between population and housing that might be approached from both the demand side and the supply side. In this perspective population influences housing through housing demand, but at the same time, housing influences the demographic composition of certain areas through the attraction or deterrence of migrants. These connections between housing and population vary over time and between places.

On these bases, the European Union seems to have figured out that social housing requires an integrated approach to merge the urban complexity, the supply of affordable housing, the socio-economic aspects and sustainability and demographic challenges (De Matteis et al., 2014). According to the Treaty of Lisbon, in fact, European Union "shall combat social exclusion and discrimination, and shall promote social justice and protection" as well as "economic, social and territorial cohesion". The target involving social inclusion is to have at least 20 million fewer people in or at risk of poverty and social exclusion by 2020, with the achievement of this goal measured by an indicator corresponding to the sum of persons who are at risk of poverty or living

in households with very low work intensity or who are severely materially deprived. Material deprivation includes, among others, indicators related to housing and environment of the dwelling, such as unaffordability of rent and utility bills, and impossibility to keep a home adequately warm. In response to these challenges, Member States are required to adopt innovative strategies in order to:

— include social groups who are particularly affected by the economic crisis or usually excluded from traditional social housing policies;

— diversify sources of funding;

— involve new stakeholders creating partnerships between public, market and third sector organizations;

— develop high quality, energy efficient, socially mixed social housing.

For these reasons, new forms of integrated social housing policies are growing especially in the Northern countries of Europe. In this context, there are some limits related to what isolated, sectorial policies might achieve if they are not coordinated following a thorough analysis of the specificity of the areas problems, their residents' profiles and needs (Nascimento Neto et al., 2012). Therefore, one of the main issue to deal with the aforementioned challenges lies on a context-based approach in order to establish the benefits of applying social mix policies into specific areas.

This means, first of all, including a ex-ante assessment of the situation of the specific areas of intervention, and an understanding of the profile and needs of its current and possible future residents before action is taken, specifically in the case of deprived areas where demolition and renewal are being considered as a way of socially and physically regenerate the area. In particular housing demand parameters need to be redefined finding out about modes of research and techniques for gathering data capable of taking into account also the diversified and informal demand.

The selected conferences represent an opportunity to share the most recent studies and experiences on the relationship between the main socio-economic changes in the advanced societies and the urban structure of cities, with special regard to the following issues:

— cities locked in networks;

— European cities & migration;

— sustainability transformations in practice;

— city and territory in the globalization age;

— population and sustainable development.

EURA 2017

Where: Warsaw, Poland
When: 21-24 June 2017
http://py.wgsr.uw.edu.pl/eura2017/

The main topic of the conference is "cities locked in networks"; it aims at analyzing the mutual influence between endogenous factors of cities and global dynamics, starting from the idea that cities operate into innumerable networks in multi-scalar spaces, from the local one to the regional and international ones. This perspective embrace various topics connected to political, social, functional, economic and spatial relations between local and global networks.

Through the participation of scholars and practitioners dealing with cities from various perspectives, EURA 2017 intends to open tables of discussion and debate around the main factors that define the network of networks structure, and how they influence policy implementation with which the cities struggle in the 21st century. In particular, the conference is organized in the following tracks:

- cities locked in metropolitan regions;
- cities locked in economy;
- cities locked in Europeanization;
- cities locked in physical space;
- cities locked in global challenges;
- cities locked in democratic institutions.

THE 3RD INTERNATIONAL CONFERENCE ON "CHANGING CITIES: SPATIAL, DESIGN, LANDSCAPE & SOCIO-ECONOMIC DIMENSIONS"

Where: Syros - Delos - Mykonos Islands, Greece
When: 26-30 June 2017
http://changingcities.prd.uth.gr/

The main conference theme is "European cities & Migration; Spatial impacts of immigration and out-migration". The conference aims at bringing together architects, urban planners, urban geographers, economists, sociologists and demographers to investigate on the future of cities in a moment of quick and radical changes in the socio-cultural and economic structure of the society.

The conference thematic fields include, among others, the followings:

- urban cultures & public open spaces;
- green architecture & urban design;
- transportation planning and policy in cities;
- urban planning laws, real estate & property rights;
- urban economies & spatial impacts;
- shrinking cities;
- divided cities;
- resilient cities;
- migration, multinational and multicultural societies & urban planning.

TRANSFORMATIONS 2017: TRANSFORMATIONS IN PRACTICE

Where: Dundee, Scotland, UK
When: 30th August - 1st September 2017
http://www.transformations2017.org/

Transformations 2017 is the third in a biennial series of international interdisciplinary conferences that focuses on transformations towards sustainability. The aim of Transformations 2017 is to develop a better understanding of the practices that facilitate social and environmental transformations at local and at large scales in both developed and developing country contexts, trying to create a bridge between academic and practical knowledge in order to develop deeper insights into processes that enhance deliberate transformations.

The overarching theme of this conference is 'sustainability transformations in practice'. Within this frame, the conference is organized in the following tracks:

- linking practice with policy;
- creativity and innovation for enhancing thinking and practice of transformation;
- research for transformation;
- conditions and practices for transformation;
- designing transformation and transformative forms of design;
- conceptualizing sustainability transformations.

24TH ISUF 2017 - CITY AND TERRITORY IN THE GLOBALIZATION AGE
Where: Valencia, Spain
When: 27 - 29 September 2017
http://ocs.editorial.upv.es/index.php/isuf/isuf2017

The main topic of the XXIV ISUF Conference is "City and Territory in the Globalization Age". It aims at collecting and analyzing different studies on urban morphology and urban and territorial planning based on a two-fold global concern, environmental sustainability and social and urban inequality, with a special focus on the development of new analytical techniques.

The first issue, "environmental sustainability", is addressed within the following topics:

- stages in territorial configuration;
- efficient use of resources for a sustainable city;
- transforming the existing city;
- urban green space.

The second issue, "Social and urban inequality", will be discussed within the following topics:

- urban form and social use of space;
- reading and regenerating the informal city.

The emphasis in new analytical methods is addressed in two specific topics:

- cartography and Big Data;
- tools for analysis in urban morphology.

(IUSPP) 28TH INTERNATIONAL POPULATION CONFERENCE OF THE INTERNATIONAL UNION FOR THE SCIENTIFIC STUDY OF POPULATION
Where: Cape Town, South Africa
When: 29th October – 4th November 2017
http://ipc2017capetown.iussp.org/

The IUSSP International Population Conference is one of the major international event drawing over 2,000 scientists, policy makers and practitioners in the global population community to debate on possible actions and policy responses to the challenges posed by population phenomena.

The Conference will include invited plenary debates and panel discussions on population and sustainable development issues as well as over 240 scientific sessions featuring the results of recent research from around the globe. A special attention will be given to advances in methods and data measuring population phenomena and evaluating progress towards sustainable development goals. Although it is not a conference focused on the urban scale, it contains many issues of great interest for cities development actors and researchers in order to deeper understand, analyze and measure the socio-economic phenomena influencing urban development, especially within the following sessions:

- ageing and intergenerational relations;
- demographic methods and data6. education and labour force;
- migration and urbanization;
- population and development;
- population, consumption and the environment;
- spatial demography.

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