1ST INTERNATIONAL ACADEMIC CONFERENCE

PLACES AND TECHNOLOGIES 2014

BELGRADE, 3-4. APRIL 2014 | KEEPING UP WITH TECHNOLOGIES TO IMPROVE PLACES

EDITORS:
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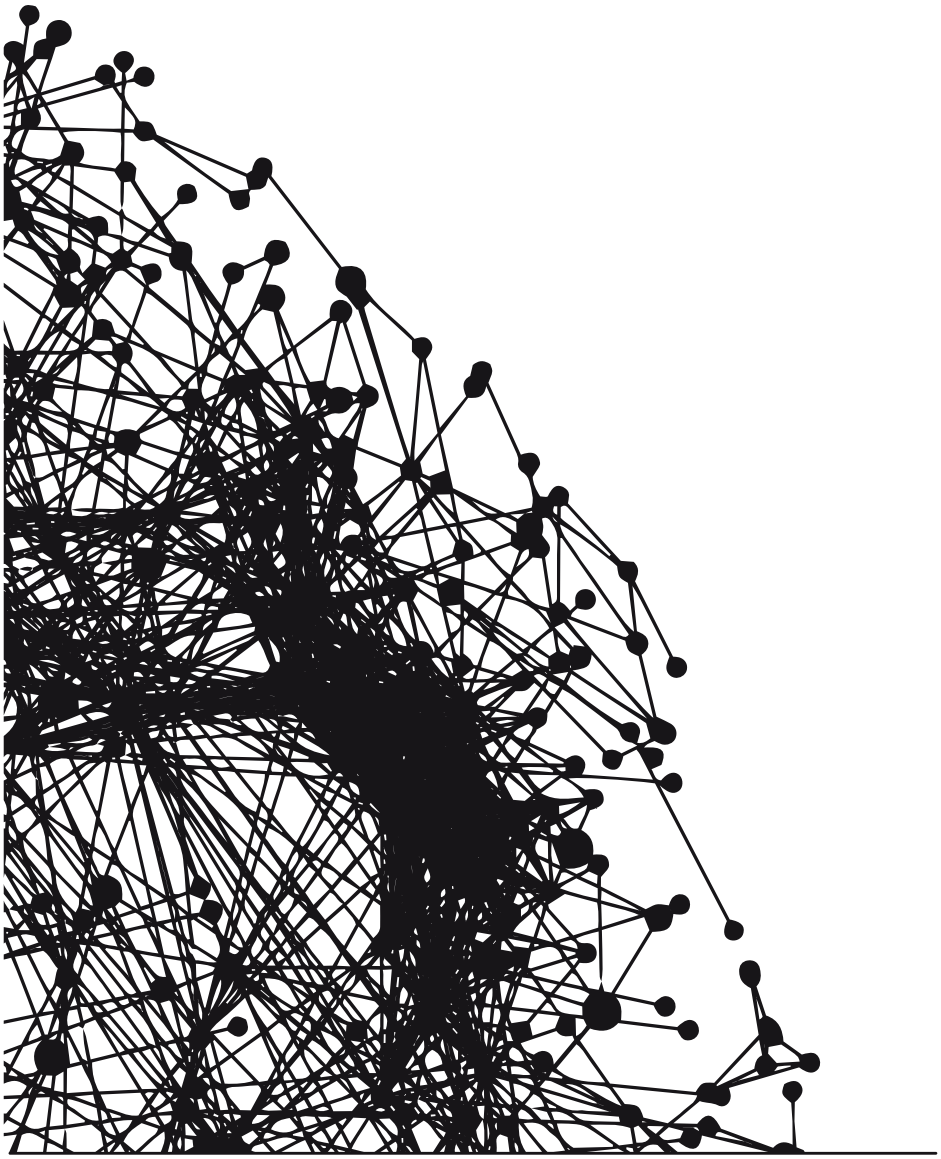
conference proceedings



ISBN 978-86-7924-114-6

www.placesandtechnologies.eu

Proceedings of INTERNATIONAL ACADEMIC CONFERENCE ON PLACES AND TECHNOLOGIES

April 3-4, 2014, Belgrade, Serbia

PLACES AND TECHNOLOGIES 2014

Proceedings of First International Academic Conference on Places and Technologies

International Academic Conference on Places and Technologies, Places and Technologies 2014, will be the first conference organized by Univerisity of Belgrade – Faculty of Architecture, Professional association Urban Laboratory and University of Belgrade – Faculty of Philosophy.

Editors: Dr Eva Vaništa Lazarević, Dr Aleksandra Krstić-Furundžić, Dr Aleksandra Đukić and Dr Milena Vukmirović

For publisher: Dr Vladan Đokić

Publisher: University of Belgrade – Faculty of Architecture

Design: Stanislav Mirković

Place and year: Belgrade 2014

ISBN 978-86-7924-114-6

CIP - Каталогизација у публикацији
Народна библиотека Србије, Београд

711.4.01(082)(0.034.2)
711.4:005.591.6(082)(0.034.2)

INTERNATIONAL Academic Conference on Places and Technologies (1st ; 2014 ; Belgrade)
Places and Technologies 2014 [Elektronski izvori] : keeping up with technologies to improve places : conference proceedings : 1st international academic conference, Belgrade, 3-4. April 2014 / [organized by Univerisity of Belgrade - Faculty of Architecture, Professional Association Urban Laboratory and University of Belgrade - Faculty of Philosophy] ; editors Eva Vaništa Lazarević ... [et al.]. - Belgrade : Faculty of Architecture, 2014 (Belgrade : Faculty of Architecture). - 1 USB fleš memorija ; 1 x 2 x 14 cm

Sistemski zahtevi: Nisu navedeni. - Nasl. sa naslovnog ekrana. - Tiraž 150. -
Bibliografija uz svaki rad.

ISBN 978-86-7924-114-6

1. Vaništa Lazarević, Eva, 1961- [уредник]
2. Faculty of Architecture (Belgrade)
a) Градови - Мултидисциплинарни приступ - Зборници b) Урбанистичко планирање - Технолошки развој - Зборници

COBISS.SR-ID 206380812

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University of Belgrade | Faculty of Architecture

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URBAN DEVELOPMENT IN BELGRADE IN THE CONTEXT OF GLOBAL TRENDS: CHANCES OF ILLEGAL HOUSING INTEGRATION

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ABSTRACT

One of the most important aspects of sustainable planning today is sustainable land use and managing city growth. Land use and transport planning have a key role in delivering social, economic, and environmental sustainability and can contribute a great deal in solving the variety of urban planning and transportation issues. By shaping the pattern of development, planning can help to facilitate an efficient transport and land use system through consistent application of sound planning principles and development guidelines to ensure the effectiveness of land use and transport policies. Urban sprawls, regardless of the reasons causing their spread, are considered as one of the biggest problems of the cities in developing countries. Belgrade has been witnessing a wide spread urban sprawls in form of illegal housing and settlements in its suburban areas during a long period. This paper will discuss the possibilities of using the instruments of land use and transport planning with the aim to achieve urban upgrading of informal housing and settlements on the outskirts of Belgrade. Thus the integration of informal settlements could become the true test of the integrated planning, since informal urban sprawls are one of the most challenging issues in Belgrade development, as well as in the other cities with similar urban problems[269].

Keywords: Land use planning, transport planning, informal settlements, urban upgrading

[269] This paper is done as a part of research project "Research and systematization of housing development in Serbia, in the context of globalization and European integrations, with the aim of housing quality and standard improvement" (TR 036034), financed by Ministry of education and science of Serbia.

Shaping the Urban Development by Sustainable Land Use and Sustainable Transport Planning

Recently, the World Bank (2012) has launched Urban and Local Government Strategy, which advocates a new paradigm aimed at harnessing urbanization for growth and poverty reduction. The strategy emphasizes several crucial aspects for cities and local governments in the decade ahead, namely: 1. City management, finance and governance; 2. Urban poverty and slums, making pro-poor policy one of the priorities; 3. Urban economic growth; 4. Urban planning with progressive land and housing markets; 5. Urban environment, climate change and disaster management; 6. Linking urban planning, transport and infrastructure planning, thus emphasizing the importance of integrated approach to urban, transport and infrastructure planning.

Table 27: Transport mode and land use planning (according to: World Bank Institute (2012.): Sustainable Land Use Planning: How Land Use Planning Contributes to Sustainable Urban Development, script)

Non-mechanized transport	**Automobile dependent**	**Transit oriented development**
Pedestrian movement Animal dependent Water-based	Private motor cars Buses, trucks, motorcycles	Street cars Railway/metro Light rail transit Bus rapid transit
Compact city	Concentric city and urban sprawl Gridiron layouts	Liner and multi-nodal city
Explanation: Typically the oldest parts of cities are based on street patterns. More recent urban areas in developing countries have slums and informally organized shanty towns. Some parts of city have recently organized motor-car free areas in older precincts.	Explanation: Radial routes to accommodate the widespread use of motorcar. Successive ring roads planned to relieve traffic congestion. Extended periphery development as urban sprawl and/or multi clustered satellite development. Recognising the high level of accessibility achieved by motor cars, new parts of the cities have been developed on the basis of gridironed hierarchical road system.	Explanation: Public transport networks have encouraged higher density development around principal transportation terminals within the main urban area, as well as lower density linear corridor development on the periphery.

The relation between land use and transportation is well known in theory but not so well practiced, especially in the cities in developing countries such as Serbia. By shaping the pattern of development and influencing the location, scale, density, design and land use mixes, planning can help to facilitate an efficient transport and land use system through consistent application of sound planning principles. On the

other hand, transport system and models greatly shape land use pattern, affecting not only the distribution of different urban functions, but also influencing land market. The Table 1 shows how different transport concepts shape urban land use.

Broad approach	Important terms and approaches	Strengths	Weaknesses and contingencies
Smart growth and transit-oriented development	Smart growth Compact development Integrated development Mixed-use development Intensification Coordination Transit-oriented development	Encourages inter-sectoral and inter-agency links Encourages links between planning and implementation Improves sustainability Improves public transport Strong transport–land-use links Can slow urban sprawl	These good links are difficult to achieve Assumes significant capacity and organization Poor or narrow implementation undermines prospects Popular support difficult to achieve due to conflicting views and lifestyles Claimed benefits contested
Integrating land use and transport	Bus rapid transit (BRT) Corridors and axes Integrated rail redevelopment Linking economic activities to transport type New transport/land-use models	Improves public transport Improved usage of public transport Reduces energy and improves efficiency Better transport–land-use links New models enable better understanding of patterns	Heightened property prices on transport axes can marginalize the poor Required integration can be difficult to achieve Needs good understanding of social and economic dynamics and space – difficult to achieve Land use–transport links undermined by different logics, institutional divides New models still data hungry, aggregated, distant
Strategic spatial planning and infrastructure planning	Strategic plans Infrastructure plans Transport–land use links	Can give long-term direction to development Can avoid inequitable and unsustainable development Avoids fragmented development	Conditions required to work are demanding/difficult to achieve Credible analysis Inter-sectoral coordination Stakeholder involvement and buy-in Regular review Internal champions Special agencies
Integrated urban development and management plans	Multi-sectoral investment plans (MSIPs) plans (PEDPs) Physical and environmental development	More flexible, less data demanding, and easier to prepare than master plans Participatory Helps to manage urban growth in context of scarce resources/capacity Can be used iteratively in decision-making process	Problematic if seen in static or narrow way Required inter-sectoral cooperation hard to achieve Can be countered by political decision-making
Strategic structure planning	Integrative framework Long-term vision	More flexible, less data demanding and easier to prepare than master plans Participatory Multifaceted approach Combines short-term actions with long-term planning	Required political and stakeholder buy-in may be difficult to achieve May still be relatively technocratic May not provide detail necessary for some decisions
Linking spatial planning to infrastructure planning	Integrated development plans Spatial frameworks	More flexible, less data demanding and easier to prepare than master plans Participatory Gives direction to infrastructure planning GIS-based models can be used as an input	Required consistency in policy and coordination between agencies difficult to achieve Can be too broad to be useful May be contradicted by the market
Linking mega-projects to infrastructure development	Urban regeneration Multifunctional	Powerful driver in urban form Evolving approaches allow linking to planning over the long term Building cooperation between various sectors and agencies	Mega-projects often politically driven and one-off: approach is hard to achieve Level of integration and cooperation difficult to achieve

Figure 90: The interdependence between land use planning and transport planning (Source: World Bank Institute (2012): Sustainable Land Use Planning: How Land Use Planning Contributes to Sustainable Urban Development, script)

Table 2 shows the interdependence between overall approach on city development, the characteristic of land use planning and transport planning, as well as strengths

and weaknesses of each approach/concept. Main features and negative effects of concepts are:

- Smart growth and transit oriented development assumes significant capacity and organization, narrows implementation, while it is difficult to achieve popular support and there are negative sides of transit oriented development.
- Integrating land use and transport, while forming axes and corridors and linking economic activities to transport type, also heightens property prices on axes and marginalizes the poor, integration is hard to achieve, there are complex social and economic issues and institutional divides.
- Strategic spatial and infrastructure planning, based on long term direction development, does not support fragmented development and also avoids unsustainable and unequal development, but on the other hand requires high inter-sectorial coordination, regular revision, special agencies and massive stakeholder involvement.
- Integrated urban development and management plans stress out physical and environmental planning and multi-sectorial investment plans, but on the other hand require high inter-sectorial cooperation and can be countered by political decision making.
- Strategic structure planning based on long term vision – though more flexible and less data demanding, can be technocratic and may not provide details.
- Linking spatial and infrastructure planning, with similar characteristics as above, requires consistency and coordination between institutions which is difficult to achieve, can be too broad to be useful and may be contradicted by the market.
- Linking mega projects to infrastructure development, though being powerful driver and multifunctional, also bringing coordination between various sectors, can be politically driven.

There is no doubt that land use and transport planning should recognize the effects of transport interventions on future development, but the reverse process – when land use planning or even when land use development/growth happens without plan – has the same effects.

Growth and Urban Sprawls in Belgrade

Although the urban policy in EU has defined limiting urban sprawl (N. Pichler-Milanovic, 2009), Balkan states, having limited possibilities of regulation, make the exception to this rule, specially having in mind the migrations as a negative effect of the civil wars by the end of the 20th century. As an effect, bigger cities' built areas have expanded mostly in the form of uncontrolled illegal housing settlements in the suburbs. Such characteristics have given the attributes of the Third World city development to many Balkan cities, making Belgrade the representative case.

Some of the main issues related to the land use and city growth in Belgrade are:

- Illegal and unplanned settlements, which have grown and spread over the Belgrade territory during several decades, with the exception of historical centre of Belgrade;
- Unfinished and insufficient traffic network, mostly manifested in lack of transit roads and mass public transport;
- Insufficient infrastructure equipment (urgent problems related to the waste disposal and treatment of wastewater);
- Inadequate use of the most attractive areas and locations in the city, especially in the river coastal areas;
- Unequally dispersed greenery and the lack of real green network;
- Chaotic growth along the main traffic corridors.

Though city development policy is not oriented to and is not officially supporting the informal housing, it is estimated that informal settlements take as much as 44% of housing areas in Belgrade. The city growth unwillingly turned to the agriculture land at the outskirts of the city. The problem of Illegal and unplanned settlements in Belgrade region is strongly related to the other problems of city development, sometimes being a cause, but more often being a consequence of complexity of spatial, economic, social and political issues. Instead of being respective residential area, with high quality of life, great green areas and good urban pattern with some amount of planning intervention, informal housing areas in Belgrade are mostly perceived as impersonal and disharmonized residential area, being neither quite urban, nor rural settlements.

Issues in peri-urban areas overlap strongly with weakness of planning institutions and lack of infrastructure. The high incidence of slums in peri-urban areas overlaps with issues of socio-economic inequalities and comprehensive concerns of the urban area expansion.

Housing Integration - The Approach and Actions

Recommendations and suggestions for improvement of informal urban areas in Belgrade reflect the idea of comprehensive approach to the solution, but also being realistic for the habitants and the economic conditions of the city:

- Adopting the set of special regulations referring the urban planning aspect of these settlements and including urban upgrading principles and indicators. They would enable the infrastructure and traffic equipment of the most of the illegal buildings and settlements with minimum of investment. The regulations would also refer to the lower standards and 'softer' criteria than the ones defined for the rest of the city territory.

- Intensifying the production of urban land use plans for these parts of the territory, which will be the legal basis for the construction of necessary traffic network, public transport and social infrastructure. Fast plans implementation is crucial for the process of 'taming' the illegal – informal settlements. Planning action should quickly respond to the building initiatives, no matter if they are legal or illegal (World Bank Institute, 2012).
- It is also necessary to provide the areas where these citizens could organize some of the economic activities that will enable them economic survival and social integration.
- Since this settlements lack social infrastructure, especially education facilities, it is necessary to enable the introduction of additional lines of (less-massive) public transportation or school mini-buses that would allow children a relatively quick and safe access to schools. In this regard, it is necessary that regulatory plans provide for adequate street widths for the movement of school mini-buses.
- Planning the public places, meeting the social and other needs of youth and children. The implementation should involve facilities in private sector, as well as public private partnership. Furthermore, building of affordable private units should be fostered, since it is hard to provide public construction land in already dense built informal areas.
- The improvement of the functional structure of the (informal) units, e.g. by introducing greater share of non-housing land use, such as services, retail, restaurants, manufacture, agencies and similar activities appropriate for the local level. Apart from being recommended in regulatory plans, these actions should also be encouraged through local regulatory framework (subsidies, restrictions, different taxes). This model should achieve mid-scale density (Caruthers, J. I., G. F. Ulfarsson. 2003). High density should be prevented as it might lead to diseconomies of scale (crime, traffic congestion) (Ladd, Helen F, 1994).
- Finally, the most important recommendation refers to the set of future actions for planners and city government: a/defining the city border in order to prevent further re-use of agricultural land out of the city territory; b/fast planning action (regulatory plans) with the aim to provide planned areas for further residential needs of the city within the city border; c/preservation and acquisition such planned areas for traffic and infrastructure equipment, using the model of public and private partnership.

New public transport routes should be planned to ensure safe and convenient passenger accessibility and also to facilitate sustainable urban regeneration. The focus is on integrated planning as a mean of achieving a balance between the need to provide for accessibility and mobility and to create a sense of place where vehicle traffic does not dominate and the impact does not affect people's life styles.

The implications of the above actions would reflect in numerous aspects of city life and development such as: higher quality of life and rational city construction land;

new boost for the economic development of the city and new jobs; consolidating the demographic structure by creating conditions for young people to live and work in the city.

Concluding Remarks

The treatment of informal settlements should be related to the local characteristics and cultural, social, economic and other background. Cutting the informal settlements in the surgery manner during the economic crisis is neither effective nor wise. At the same time, it is neither possible nor useful to define one pattern applicable all over the world, though there are similarities about informal sector worldwide. Though we are in the era of global economy and under the influence of global forces, it is local resilience that will make our cities survive.

In the context of sustainable urban planning it is important to emphasize mutual dependence between land use and growth of the city on one hand, and ecological, social and economic development on the other. In the case of Belgrade its correlation is even more obvious since the spatial consequences of imbalanced 3E are more than visible. Wise governance instead of governing as a way of implementing institutional sustainability will result in balanced land use planning and inner city growth, replacing the practice of spreading and widening the city territory.

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