# CONTEMPORARY ASPECTS OF SPATIAL AND URBAN PLANNING IN THE CANTON OF SARAJEVO

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### **Abstract**

In the paper, contemporary aspects of spatial and urban planning in the Canton of Sarajevo have been analysed. Physical planning and planning of urbanisation in the Canton of Sarajevo make important elements of rational and humane use of space and organisation of economic activities, by adjusting the planning with the technical and technology development, as a phenomenon of the present time, and vital needs of the working people. Area planning in the Canton of Sarajevo is being carried out on the grounds of spatial and development plans of the urban area. Spatial and development plans of the urban area are the social instruments by which a policy of physical planning and urbanisation is implemented. With spatial and development plans of the urban area, a long-term urban development of the Sarajevo Canton, municipalities and the regions is determined.

Keywords: urbanisation, planning, population, economic activities, the Canton of Sarajevo

## 1. INTRODUCTION

According to socio-economic and other factors of development, the forms and dynamics of spatial and urban planning in the Canton of Sarajevo are different. Such form of urbanisation is a consequence of the pronounced differences in development and lifestyles between cities and villages, which results in the intensive migrations of population from rural areas to Sarajevo. Urban population growth ranges mainly within the limits of dynamics of the total population growth. The migrations of population from rural environments are weaker and weaker, whereas the migrations from urban centre of Sarajevo to suburban areas of the Canton of Sarajevo are intensified. The focus of spatial and urban planning in the sense of concentration of population, jobs and housing settlements is shifted to marginal areas and suburban zones of the Canton of Sarajevo. In the structure of settlement and the level of urbanisation of the Canton of Sarajevo, there are also changes occurring from year to year. Firstly, this relates to the separation of urban settlements. It was, therefore, necessary to separate these settlements according to a model that gives a more realistic picture on number of urban settlements and participation of urban population (Černe 2005).

Planning has its geographic, time, function, and institutional distribution. Time distribution arises from the focus of planning in the future. From the past, it takes the elements and factors which are fundamental to the analysis of existing conditions for future development, and to determine possible and desired changes and ways to reach them (Friedmann 1987). Spatial

problems are different from each other by a number of concerns which relate to the various possible ways of appropriation and resolution and finally the possible final results. Uncertainty is a fundamental characteristic of all spatial issues (Christensen 1985).

Therefore, one should set a clear framework which act as a stable element on which we rely in the appropriation, treatment of and solving spatial problems. To solve spatial problems, it is necessary to formulate clear principles, norms and goals, on the basis of which it is possible to unambiguously identify spatial problems and change the appropriate decisions for the solution of spatial problems in line with long-term goals of spatial development (Faludi 1996).

The development of human resources potentially has a key role to play as a driver of regional development and it constitutes a specific element of the territorial capital of region. Following from this, it can be argued that accessibility to educational opportunities is an important determining factor in developing the potential of such human resources (Czapiewski 2011).

Increased global competition and the limited availability of mobile capital have led to the transformation of many national centres toward metropoles. One characteristic of many former Yugoslavian countries in socialist times was the spatial concentration of specific branches of industry with highly qualified labour, such as the armament or glass industries. Many of these concentrations have been unable to adapt to the new economic market-based realities and have declined, resulting in the loss of major employers in many regions (Finka 2011).

There is a growing awareness that synergy through the combination of different planning sectors can lead to additional value. Due to the emphasis on functional scope, planning practice seems to be less focused on the spatial scope (Heeres et al. 2012). As regards the compact urban form, since the EU Green Paper of the Urban Environment, this model was advocated as the most sustainable for urban development. In fact, according to several researches (Newman and Kenworthy, 1999; Næss, 2013), compact cities can promote sustainability by limiting the losses of surrounding natural and agricultural areas; reducing the amount of travel, car dependency and energy use for transport; reducing energy use; limiting the consumption of building materials for infrastructure; and maintaining the diversity and possibilities for choice among workplaces, service facilities and social contacts (Coppola et al. 2014).

While the formal economy becomes globalized and dematerialized, moving towards the large scale, at the same time growth is also evident in the so called "informal economy" in which lower skilled professionals can find jobs. In this sense, the urban economy becomes more and more a "dual" economy, physically demarcating differences between rich areas connected to global networks and poor ones where millions of people live without dignity (Girard 2006).

Although the concept of development refers to processes that are supposed to lead to improvements in the living conditions of people, in practice the development paradigm is associated with planning and economic capacity building strategies that develop infrastructures primarily designed to increase economic growth and profit, not quality of life (Rees 1998; Pinderhughes 2004).

Traditional spatial planning is basically concerned with the location, intensity, form, amount and harmonisation of land development required for the various space-using functions. In the 1960s and 1970s, in a number of countries, spatial planning evolved towards a system of comprehensive planning – the integration of nearly everything – at different administrative levels. In the 1980s, when the neo-liberal paradigm replaced the Keynesian–Fordist paradigm and when public intervention retrenched in all domains, many countries witnessed a retreat from planning fuelled not only by the neo-conservative disdain for

planning but also by post-modernist scepticism, both of which tend to view progress as something which, if it happens, cannot be planned (Albrechts 2010).

Jenkins (2007) has shown that the process of urbanisation, whereby the world's population is becoming increasingly and predominantly urban, has been and continues to be dramatic in terms of its intensity and its consequences for human well-being – both positive and negative. Urbanisation has been uneven both in time and space, with its 'take-off' in core countries in the nineteenth century being linked to the expansion of industrial capitalism, and its latter manifestations in the now rapidly urbanising world being linked to globalisation.

According to Hall (2002) planning as a general activity is the making of an orderly sequence of action that will lead to the achievement of a stated goal or goals. Its main techniques will be written statements, supplemented as appropriate by statistical projections, mathematical representations, quantified evaluations and diagrams illustrating relationships between different parts of the plan. It may, but need not necessarily, include exact physical blueprints of objects.

Despite some wavering in the 1980s, planning's main direct long-term impacts here have been to protect and enhance established commercial functions. Planners played important roles in facilitating the renewal and extension of the commercial fabric of city centres, creating new shops and offices. Already declining central area land uses such as manufacturing, wholesale warehousing and distribution and, at least until recently, residential have been further diminished (Ward 2004).

According to Jakovčić (2004), there are significant differences between the functions of shopping centers in the city center and shopping centers in its marginal zones. While shopping malls in the city center have developed, besides commercial functions, social, business, and sometimes even residential functions, shopping centers in peripheral areas showed the dominance of commercial functions.

The development of shopping centers in Europe has progressed a little slower, and it was not until the 60s of the 20th century that the first centers were opened. Moreover, the authorities have long sought to limit the spread of shopping centers in suburban areas as well as the areas of the so-called green belt around the towns. At the same time, they have been trying to keep the commercial functions of the city center (Davies and Baxter 1997). Retail is only one of the economic activities which reorganized and adapted to the new conditions in the shortest possible time (Standl 1998).

The old historic core of Sarajevo city, Baščaršija, occupies an area of 54 hectares. The area represents an old urban heritage from the Ottoman cultural-historic period of the highest value. Contemporary aspects of spatial and urban planning in the Canton of Sarajevo are adjusted to the preserved original pattern and improvement of space in the old city center. Nevertheless, with regard to occupying new surfaces, it should be emphasized that it is often exaggarated in direct comparison of population urbanisation and arrangement of space in the Canton of Sarajevo. Regarding occupying the agricultural surfaces, the issue is mostly directed to the fact that the contemporary urbanisation aspects affect dynamically the development of new economic activities in the Canton of Sarajevo.

This does not relate only to space use but also to the problem of more and more intensive use of natural resources, water and forest, at which a special position is occupied by landscape degradation and natural original ambient in the Canton of Sarajevo.

The paper provides detailed analysis of urban characteristics and spatial distribution of the population of Sarajevo Canton, as well as separating urban settlements and new workforce development centers in the process of urbanization. As the indicators of polarized development, there were used data on population numbers, the share of the active population and the share of employees, i.e. the structure of the labor, the share of the employees in the activities of primary, secondary and tertiary sectors. Scoring indicator of development of

urban settlements was obtained by the quantitative evaluation of selected parameters on the basis of which the typology of regional development in the Sarajevo Canton was made (Vresk 1985). Polarization and regional development of urban settlements have a major impact as the development centers of new urban settlements, making them the focal points in spatial planning and regional development in general.

## 2. METHODS OF WORK AND DATA SOURCES

Methodological approach is imperatively adjusted to the purpose of the paper, hence, some new characteristics of contemporary aspects of spatial and urban planning in the Canton of Sarajevo, as well as of its dynamics in the period from 1995 to 2013, will be emphasized. The research has been included through urban development in the Canton of Sarajevo. Therefore, studying the general models and the type of methodology of urban geography in combination with regional geographic approach will be applied.

The Agencies of Institutes for Statistics and Statistics of Bosnia and Herczegovina have been conducting a Survey on labour force in accordance with methodological rules and principles of the International Labour Organisation (ILO) and the Eurostat requirements for five years already, by which international comparability of data in the area of labour statistics has been provided. As a basic method of gathering the primary data sources, an interview method has been used, i.e. in-depth interview, with a reminder for an interview as a main instrument. About ten institutes of urbanism for area planning in the Canton of Sarajevo have been surveyed. The Interview consisted of twenty questions on transition, respectively the processes of urbanisation and society on the whole. The research was also completed by an analysis of contents of secondary sources, interpretation and description of the corresponding data bases of the Agency for Statistics of Bosnia and Herzegovina.

# 3. URBAN CHARACTERISTICS AND SPATIAL DISTRIBUTION OF POPULATION

Urban characteristics and the spatial distribution of population of the Canton of Sarajevo were influenced by both natural and social factors. Of natural factors, the terrain morphology, that was a key factor in such way of settling the Sarajevo valley, is certainly the most important, thus becoming attractive to future inhabitants of Sarajevo, so that in the present situation, except for the Sarajevo valley, a considerable part of population also settled on hillsides. The range of socio-economic factors in population distribution is rather broad. Level of economic and technological development, political system and organization, religion, education level, social position and other factors can influence, directly or indirectly, the spatial mobility of population, population density and type of urbanisation in the Canton of Sarajevo.

On the grounds of data on population numbers in municipalities of the Canton of Sarajevo in 2011, it can be seen that the Municipality of Novi Grad is the most populated with 125.395 ihabitants, and is followed by the Municipality of Novo Sarajevo with 73.584 ihabitants, the Municipality of Centar with 69.673 ihabitants, and the Municipality of Ilidža with 60.060 ihabitants.

On the other hand, the lowest population number, only 2.433, was registered in the Municipality of Trnovo, and the municipalities of Ilijaš with 18.928 inhabitants, and Hadžići with 22.705 ihabitants also have low population numbers. The differences in population density are the result of differentiation in interaction of natural and social factors. With regard to possibility of space use, an increase in population numbers should be expected in new urban settlements of the municipalities of Vogošća, Ilidža and Novo Sarajevo. Due to existence of the set of urban functions, the Municipality of Novi Grad will remain the most densely populated urbanised area in the Canton of Sarajevo for a long time (Nurković 2012a).

In the past ten years, urbanisation has developed permanently in conditions of a rapid population growth in the Canton of Sarajevo. The interest predominantly shifted to housing construction, which gave a fundamental characteristic to spatial and urban development of Sarajevo. The housing construction was ongoing in a westward direction. In the past, communications and other characteristics had one of the major roles in spatial distribution of population of the Sarajevo Canton.

Traffic network in the area of the Canton of Sarajevo has been developing through a long history of Sarajevo development. Contemporary urban construction of settlements in the Canton of Sarajevo is harmonized with the preserved original pattern, by improving the space in a very limited and controlled scope regarding the purposes, capacities, size and all contents and visual interventions that are undertaken (Nurković 2012b). Regarding the population numbers, the Canton of Sarajevo had 419,030 inhabitants in 2007 (Table 1, Figure 1 and Figure 2). The population number in the Canton of Sarajevo increased rapidly, so in 2010, according to estimations of the State Agency for Statistics in Sarajevo, there used to live about 750,000 inhabitants.

Table 1. Total population of Sarajevo city per municipalities, 2000-2007.

Municipality	2000	2001	2002	2003	2004	2005	2006	2007
Centar	67.430	68.173	68.151	68.067	67.974	70.294	70.228	70.143
Hadžići	19.608	19.964	20.055	20.133	20.251	21.958	22.089	22.140
Ilidža	46.020	47.502	47.654	47.924	48.105	48.291	52.290	52.374
Ilijaš	14.744	15.249	15.277	15.325	15.414	15.462	17.533	17.572
Novi Grad	112.838	116.288	116.588	116.832	117.079	119.883	122.636	122.737
Novo Sarajevo	71.932	74.471	74.493	74.402	74.364	73.381	73.297	73.268
Stari Grad	37.773	38.149	38.167	38.211	38.106	38.000	37.975	37.917
Trnovo	801	850	839	836	819	2.187	2.184	2.182
Vogošća	19.388	19.852	19.894	19.966	20.054	20.575	20.659	20.697
Total	390.534	400.498	401.118	401.696	402.166	410.031	418.891	419.030

Source: The Agency for Statistics of Bosnia and Herzegovina, 2007.

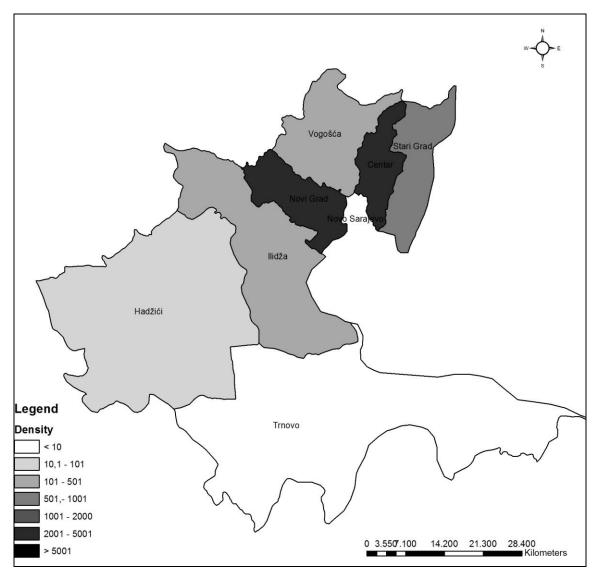
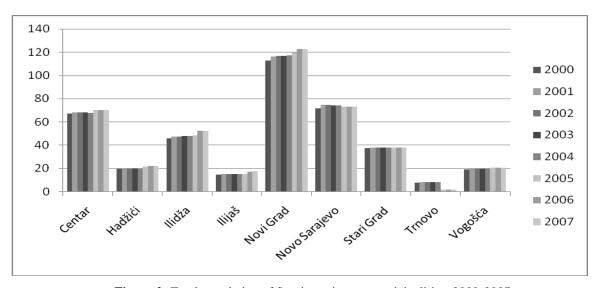


Figure 1:Population density of the Canton Sarajevo, according to assessment of total population in 2007.



**Figure 2:** Total population of Sarajevo city per municipalities, 2000-2007. Source: The Agency for Statistics of Bosnia and Herzegovina, 2007.

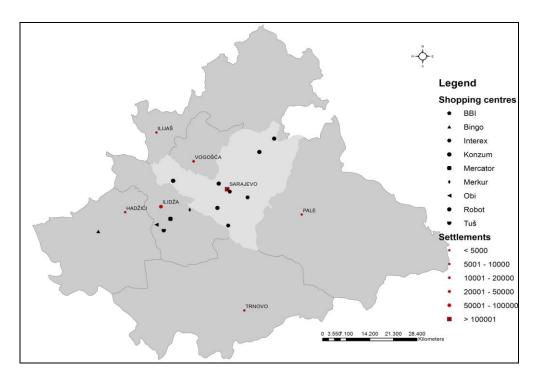
## 4. SEPARATION OF URBAN SETTLEMENTS IN THE CANTON OF SARAJEVO

Starting from the fact that urban settlements in the Canton of Sarajevo have a big influence as development centres and generators of new urban settlements, it may be concluded that it makes them the focal points in area planning and regional development on the whole. However, given the importance of the urban-geographical study of tertiary activities in Sarajevo in the last ten years, it is obvious that modern technical measures strongly affect the urban and rural development of the settlements. In addition, in the paper there are some new features of urban and geographical development under the influence of new tertiary activities.

Tertiary activities were developing with different intensity and the concentration in single municipalities (Hallsworth 1994). Spatial distribution of tertiary activities mostly coincides with spatial distribution of the industrial, respectively the urban centres. With development of new activities in the Canton of Sarajevo, primarily of tertiary activities, industry and traffic, in particular, urban settlements have been developing the production of different industrial products and sevices, not only within their limits, but also in the broader zone of influence.

However, regarding the importance of urban-geographic studying the tertiary activities in the Canton of Sarajevo in the past ten years, it is obvious that contemporary tehnical measures strongly affect the urban and rural development of settlements. However, in order to become acquainted with urban structure of urban settlements u Bosnia and Herzegovina as objectively as possible, four criteria have been applied. These are: size of settlements, share of agricultural population, share of households without agricultural estates and the share of employed workers of a given settlement in total number of the employed people. Parametres in the model have not been chosen accidentally and are the result of the conducted analysis. By means of the mentioned models and by using the census data, five urban settlements, in which approximately 50% of the population lived, were separated in the Canton of Sarajevo in 2013. In structure of urban settlements, according to size, there were twenty urban settlements up to 4.999 inhabitants, which were prevalent. There were four medium-sized urban settlements from 5.000 to 19.999 inhabitants, while two urban settlements had more than 100.000 inhabitants (Griffin and Ford 1980) (Figure 3).

Today, commercial and business centers in the Canton of Sarajevo develop on the sites which are already marked by pre-war industrialization. Business centers expand and occupy new areas. In Sarajevo, there are two zones of concentration of shopping centers. The first zone of concentration is in the southern part of the city. In this zone, there are several shopping centers. Among others, there is the shopping center "Robot" which is located in the Hrasno area of Sarajevo, and which was founded in 2002 and covers an area about 12,000 square meters. In the immediate vicinity of the center, there is another mall which is also owned by the group "Robot", and it is located in Novo Sarajevo on the busy road near the tramlines. It was founded in mid-2007 and occupies an area of about 14,000 m². We have already mentioned that the "Robot" is the first major shopping center in Sarajevo founded in 1999, and since then it has been in constant development.



**Figure 3:** Map of shopping centres in the City of Sarajevo, 2011 Source: compiled by the author, GIS

Today, the "Robot" employs 700 workers in Sarajevo and 600 workers in Bihać. It uses around 55,000 m² of retail space of their own where there is a wide range of food and chemical products, household appliances, audio and video equipment, dishes and toys as well as its own storage space. In Sarajevo, in addition to these two shopping centers, there is also the shopping center "Robot" in Ciglane, founded in 2000, with a sales area of 9,000 m², as well as the shopping center "Robot" in Rajlovac, founded in 2004 with a sales area of 20,000 m².

The "Mercator" center was founded in 2003 and since then it has been in constant development. The shopping center "Mercator" is a part of the eponymous company that its sales centers of different capacities has in Slovenia, Croatia, Serbia and Bosnia and Herzegovina. The total number of employees is more than 20,000 people and the number of employees in Sarajevo is 1.045. The "Mercator" center differs from other shopping centers by the ambience. By the appearance of the area, especially the interior, choosing business content and promotions, it sends a message that it can be a place to meet and socialize, and the purchase becomes a special experience (Table 2).

Table 2. Shopping centres in Sarajevo, 2008

Shopping centres	Year of establishment	Area	Address
"Robot" - Ciglane	2000	9.000 m <sup>2</sup>	Hakije Kulenovića bb
"Robot" - Hrasno	2002	12.000 m <sup>2</sup>	Azize Šaćirbegović bb
"Robot" - Rajlovac	2004	20.000 m <sup>2</sup>	Rajlovačka cesta 41
"Robot" - N.Sarajevo	2007	14.000 m <sup>2</sup>	Zmaja od Bosne bb
"Interex I"	1999	$3.000 \text{ m}^2$	Stupska bb
"Interex II"	1999	1.950 m <sup>2</sup>	Kolodvorska 12
"Mercator" centar	2003	13.000 m <sup>2</sup>	Ložionička
"Mercur"	2008	16.000 m <sup>2</sup>	Stupska bb

Source: Archives of shopping centres, 2008

In the immediate vicinity, in addition to the "Mercator" center in Novo Sarajevo, there is another shopping center "Konzum" and several supermarkets. Among others, there is also the "Interex" center that was founded in 1999 and uses a sales area of 1,950 m². Today, the "Interex" is present in 19 cities with 21 outlets, and in the following years, the "Interex" plans to continue developing and duplication of leading position in the market. It employs 80 workers in Sarajevo, and the average sales area is 2,500 m². On one side, we have a strong concentration of business centers in the municipalities of the Canton of Sarajevo, namely: Stari Grad, Centar, Novo Sarajevo, Novi Grad, Ilidža, while on the other side, there is the existence of shopping centers, to a much lesser extent, in the municipalities of Hadžići, Trnovo, Ilijaš and Vogošća.

The second zone of concentration of shopping centers is in Stup, in the western part of the city not far from the motorway junction on the outskirts of city. This zone is dominated by the "Konzum", and a number of other centers. There is another shopping center "Interex" with a sales area of 3,000 m². In the immediate vicinity of the "Interex", there is a new shopping center "Mercur", founded in mid-2008. This new center uses a sales area of 16,000 square meters and has 360 free parking spaces. The center has 100 employees. All commercial and business centers have provided a large parking lot. After the war (1992-1995), there was a large investment of capital from the European Union and the opening of domestic producers to the Western European market. The process of transition from centrally-planned to market economy has brought, with general social changes, also changes in the economic structure of the Canton of Sarajevo.

If the separated municipal centres in the Canton of Sarajevo are analysed as a unique urban system, on the whole, the edifying results will be reached. In order of size of urban settlements that indicate to hierarchic properties of the urban system, a certain irregularity that was present in urban development of the Canton of Sarajevo is noticed. The first thing to notice in order of size of urban settlements of the Canton of Sarajevo is enormousness of the municipalities of Stari Grad, Novo Sarajevo, Ilidža and Vogošća, respectively of the largest urban settlements in relation to others.

Differences in the share of urban population, respectively in urbanisation level, are the result of unequal dynamics of construction of housing units in the Canton of Sarajevo. In 2011, there were more than 30 residential settlements in Sarajevo. In *Spatial Plan* of the *Canton of Sarajevo*, new housing surfaces occupying the largest part of territory of the municipalities of Novo Sarajevo and Novi Grad are noticed, while the smaller surfaces of terrain are in residential function in the area of the Municipality of Centar, and the smallest in the area of municipality of Stari Grad. The biggest number of housing units is in the area of the Municipality of Novo Sarajevo with 30.850 or about 26%, in the Municipality of Centar with 27.880 of housing units, or with approximately 23%. The area of Municipality of Stari Grad has the smallest number of residential buildings, respectively 18.690 of housing units. (Table 3)

**Table 3.** Distribution of housing units in Sarajevo, 2013

Parameters	Stari	Centar	Novo Sarajevo	Novi Grad	Town
	Grad				
Number of housing units	18.690	27.880	30.850	43.200	120.620
Percentage	15,5%	23,1%	25,6%	35,8%	16,73%
Population	38.211	68067.	74.402	116.832	297.512
Percentage	2,05	2,44	2,41	2,70	2,4
Total	56.901	100	105.252	121152	418.132

Source: Spatial Plan of the Canton of Sarajevo, 2003-2013.

#### 5. CENTRES OF WORK IN THE CANTON OF SARAJEVO

The importance of centers of work in urbanisation process in the Canton of Sarajevo is shown in two main forms. One is the mentioned influence of permanent immigration of population to centres of work and their suburban zones. The consequence of this is the population growth of these centres. The migration of population to cities is very often stronger than required by the needs of function of work of urban settlements, which causes negative effects. Such phenomena are noticeable in many countries of the less developed world, and in a certain form they also appear in our cities. Urbanisation of new rural settlements in the Canton of Sarajevo should also imply the socio-economic, functional and physiognomic changes in rural environments that lead to reducing differences between central settlements. Fundamental nature of these differences is determined by population lifestyle changes, which is most directly associated with restructuring of the rural to urban population. However, social restructuring of rural to nonrural population has its spatial manifestation, as already mentioned. It is the spatial mobility of population, which has become evident in permanent moving of the population toward centres of work (Vresk 1990).

In the Canton of Sarajevo, the number of employed people was 126.068. Of this number, the biggest number of employed people was in the Municipality of Centar with 40.414, in the Municipality of Novo Sarajevo with 24.749, whereas the smallest number of employed people was recorded in Trnovo with 377, in Ilijaš with 2.286, and Hadžići with 3.862. In the same year, total of 294.151 of economically active population was recorded. Of this number, the bigger part was in Novi Grad with 86.605 and the least part was in Trnovo with 1.531, whereas there was total of 195.910 of economically active population in the area of Canton in the same year. Most of the economically active population was recorded in Centar with 48.111, while the least was in Trnovo with 847. If observed proportionally, then it can be seen that the rate of economically active population in the Canton of Sarajevo was 42.9 % in 2011, with the highest rate of 81.5% recorded in the Municipality of Centar, whereas the lowest rate of 16.5% was recorded in Trnovo. The rate of economically active population was 64.3% in 2011, with the highest rate of 84.0% recorded in Centar, whereas the lowest rate of 30.3% was recorded in Ilijaš (Table 4).

Table 4. Employment rate in the municipalities of the Canton of Sarajevo in 2011

	Number of	Working-	Active	The share of employment in %			
Municipality	employees	age population	population	Populatio n	Working- age population	Active population	
Centar	40.414	46.430	48.111	58.0	87.0	84.0	
Hadžići	3.862	15.258	9.504	17.0	25.3	40.6	
Ilidža	18.406	39.549	29.535	30.6	46.5	62.3	
Ilijaš	2.286	11.765	7.556	12.1	19.4	30.3	
Novi Grad	21.855	86.605	41.138	17.4	25.2	53.1	
Novo Sarajevo	24.749	48.737	33.390	33.6	50.8	74.1	
Stari grad	9.868	28.679	16.361	23.2	34.4	60.3	
Trnovo	377	1.531	847	15.5	24.6	44.5	
Vogošća	4.251	15.597	9.468	18.1	27.3	44.9	
Total	126.068	294.151	195.910	28.7	42.9	64.3	

Source: the Federal Institute for Development Programming, Sarajevo 2011.

According to the 2011 data, the number of unemployed people was 69.842, while the unemployment rate at the Canton level was 37.3 %. Such urban population growth and dynamical development of industry and tertiary activities are the results of new forms of the urbanised areas in the Canton. Physionomic changes, which follow the mentioned social restructuring of population, are the most noticeable in new forms of settlements, in their sizes, appearance and infrastructure equipment, as well as in other morphological features of the whole settlements. The main functional change of new urban settlements in this process is that such settlements predominatly become places of living. In addition, such settlements develop necessary service functions that are needed for adequate lifestyle in the Canton of Sarajevo. In such settlements the infrastructure is being developed and the environment is being arranged. Thus, there are differences between new urban settlements, and it can be said that such settlements have been urbanised. Nevertheless, there are different levels of changes in reality, so that the settlements can be differentiated in several categories regarding their urbanisation level. It should be particularly emphasized, however, that the social restructuring of agricultural population in the Canton of Sarajevo, along with development of central settlements and urbanised zones, is most tightly associated with development of nonagricultural activities, respectively with development of industry and service activities, and strengthening of function of work of single settlements (Woods and McDonagh 2011).

#### 6. CONCLUSION

The analysis confirms the high degree of interdependence between the polarization of population and economic activities, and features of urbanization in the Canton of Sarajevo. There is an especially pronounced correlation between the development and the structure of functions of work on one side and a type of spatial planning of urban settlements i.e. urban development units on the other side.

In this paper, contemporary aspects of urban planning in the Canton of Sarajevo have been separated and categorised. Some changes of contemporary development of urbanisation in the Canton of Sarajevo have been analysed. In addition, some changes in construction of residential buildings and infrastructure development have been analysed. For this purpose, urban centres of Sarajevo, Stari Grad, Novo Sarajevo, Ilidža, Vogošća, Hadžići and Trnovo have been analysed by comparing the growth of total and urban population in the Canton of Sarajevo in the period from 1991 to 2013. Comparing these development trends with general urbanisation trends in Bosnia and Herzegovina, it can be ascertained that the Canton of Sarajevo has the urbanisation trend similar to other cities in transition countries.

Due to the modern tendencies of urban development of the Canton of Sarajevo, there are basically two groups of spatial units. The first, which is characterized by a higher concentration of population, developed functions of work and stronger socio-economic transformation, and the second, with more or less pronounced spatial differentiation and appropriate, negative structural features.

Positive spatial pole of urban regional development of Bosnia and Herzegovina is the City of Sarajevo, i.e. wider Sarajevo socio-economic region (the Canton of Sarajevo and municipal centers). In contrast, marginally housed municipalities with less developed main central settlements have the least favorable fetaures of modern urban development. This refers primarily to the major problem area of the municipality of Trnovo, Ilijaš and Hadžići, whose main central settlement does not even meet the rank of suburban city in the Canton of Sarajevo. Then, according to features of negative developments, there are also illegal construction of residential settlements and services along the roads. Such developmentally

depressed regions in total occupy about 47% of the area, on which in 2013 lived about 28% of the population of Bosnia and Herzegovina.

Spatially differentiated processes of urbanization and differentiation, and the associated direction of the intensity of transformation of regional structures, indicate that the differences in development between these two groups of spatial units have been deepening more and more. Proportionately, there is an increase in the contrast in the spatial planning of the Canton of Sarajevo, with all the negative implications for the overall development of Bosnia and Herzegovina.

The necessity of more rational socio-economic development requires that such noncompliance in spatial planning development of the Canton of Sarajevo is reduced as soon as possible. This implies the need for a different development potential of less developed municipalities, especially those which are faced with the problem of demographic extinction. Special attention deserve the following measures and policy instruments of modern spatial planning of development in the Canton of Sarajevo:

- redistributive population policy;
- multisector, space economic development, and
- coherent nodal-functional organization, with the development (of urban centers) at least to the rank of a small urban center.

Although the choice of specific measures depends on the specific problems of each municipality, faster urban development is possible only under the assumption of a complex socio-economic and spatial development. Since, this way, the existing spatial relationships within the Canton are changing, it requires a permanent analysis, predicting and directing development trends. Such reducing of disparities in regional development planning, an even spatial distribution of population and activities is a prerequisite of not only rational socio-economic development of the Canton of Sarajevo, but also a higher level of functional integration of Bosnia and Herzegovina.

## **REFERENCES**

Agency for Statistics of Bosnia and Herzegovina, 1991-2013.

Albrechts, L. 2010. More of the Same is Not Enough! How Could Strategic Spatial Planning be Instrumental in Dealing With the Challenges Ahead? *Environment and Planning. B, Planning & Design*, 37 (6): 1115.

Archives of Shopping Centres in Sarajevo, 2008.

- Černe, A. 2005. The national development plan as a strategy of regional development of Slovenia. Regionally developmental problems of Bosnia and Herzegovina and neighbouring countries in the process of approaching to European union. An International seminar. University of Tuzla. *Proceedings*: 239-248.
- Christensen, K. 1985. Coping with Unceratinity in Planning. *Journal of the American Planning Association*, 51 (1), 63-73.
- Coppola, P., Papa, E., Angiello, G., Carpentieri, G.: Urban form and sustainability: the Case study of Rome, *Procedia Social and Behavioral Sciences 160* (2014) 557 566.
- Czapiewski K., Janc, K. 2011. Accessibility to education and its impact on regional

- development in Poland. *Territorial development, cohesion and spatial planning*. Regions and Cities. 345-372. Routledge. London
- Davies W., Baxter, T. 1997. Commercial intensification: the transformation of a highway oriented ribbon, *Geoforum*, 28 (2), 237-252.
- Faludi, A. 1996. Rationality, critical rationalism, and planning doctrine. In S. Mandelbaum, L. Mazza, & R. Burchell (Eds.), *Explorations in planning theory*. New Brunswick, NJ: Center for Urban Policy Research, Rutgers University.
- Finka, M. 2011. Evolving frameworks for regional development and spatial planning in the new regions of the EU. *Territorial development, cohesion and spatial planning*. Regions and Cities.103-122. Routledge. London
- Friedmann, J. 1987. *Planning in the public domain: from Knowledge to Action*. Princeton University Press. New Jersey.
- Girard, L. 2006. Towards sustainable planning. Evaluation in planning. Ashgate, 85-100.
- Griffin, E. and Ford, L. 1980. A Model of Latin American City Structure. *Geographical Review* 70, 397-422.
- Hall, P. 2002. Urban and Regional Planning, Routledge, London.
- Hallsworth, A. G. 1994. Decentralization of retailing in Britain: The Breaking of the Third Wave, *Professional Geographer* 46 (3), 296-307.
- Heeres, N., Tillema T., Arts, J. 2012. Functional-spatial sustainability potentials of integrated infrastructure planning, *Procedia Social and Behavioral Sciences* 48 ( 2012 ) 2533 2544.
- Jakovčić M., Spevec D. 2004. Trgovački centri u Zagrebu, *Geografski glasnik*, 47-60, Zagreb.
- Jenkins, P., Smith, H., Wang, J.P. 2007. *Planning and Housing in the Rapidly Urbanising World*, Routledge, London.
- Næss, P. 2013. Urban form, sustainability and health: the case of greater Oslo. *European Planning Studies*. 1-20.
- Newman, P. and Kenworthy, J. 1999. Sustainability and Cities: Overcoming Automobile Dependence. Washington, DC: Island Press.
- Nurković, R. 2012a. Geographic Views on Regional Planning and Development of Bosnia and Herzegovina. *17th International Conference on Urban Planning. Regional Development and Information Society REAL CORP 2012 RE-MIXING THE CITY*. (CD-ROM). 1-6. Multiversum Scwechat, 2012. (www.corp.at).

- Nurković, R. 2012b. Urbanization and rural development in Bosnia and Herzegovina. *UGI* 2011. Regional Geographic Conference. Santiago Chile (CD-ROM). 26 Local Development.
- Pinderhughes, R. 2004. Alternative Urban Futures: Planning for Sustainable Development in Cities throughout the World. Rowman & Littlefi eld.
- Rees, W. 1998. Understanding Sustainable Development, in Hamm and Muttagi (eds).
- Standl, H. 1998. Der postsozialistische Transformationprozes in grossstaditschen Einzelhandel Ostmitell und Osteuropas, *Europa Regional*, 3, 2-15.
- Vresk, M. 1985. Urbanizacija Dalmacije u uvjetima litoralizacije. Transactions 20, 31-40. Zagreb.
- Vresk, M. 1990. Introduction to Urban Geography. 76-84. Zagreb.
- Ward, S. 2004. *Planning and Urban Change*, Sage Publications, London.
- Woods, M. and McDonagh, J. 2011. Rural Europe and the World: Globalization and Rural Development. *European Countryside*, 3 (3):153-163