# The Road to change, transformation through infrastructure The development of Prishtina city through infrastructure

keywords / Infrastructure, Institutional Change, Spatial Planning, Transport Instruments, Strategic Development

Amanda Terpo PhD researcher / POLIS University

#### Abstract

Prishtina is experiencing a boom of development and the city is expending rapidly. The new development is creating new residential neighborhoods with no planning standards and no quality spaces for its citizens. The cities connection through infrastructure has played a big role in the expansion process orienting the sprawl towards the main axes creating new economic areas.

Infrastructure can be a vector connection within the cities system. This vector connection can be an activating agent into connecting spaces, improving mobility and social spaces. Infrastructure is vital not only to the cities inner connection but to the development of economies and cultural connection.

For cities investing in infrastructure and development is a complex task involving many actors. The planning process is strategically oriented toward best scenarios and best practices. There are many models and instruments that help cities to introduce these transformations in the best way for the context.

Instrument and models of transport are different for every context, but the process of planning for the city of Prishtina is a challenging scene, since the city has no previous planning in motion and the rapid development process is continuing to happened, using instruments to develop a transport vision might be the only way for the city to manage its needs.

The main aim of this research is to comprehend the role of infrastructure for the city of Prishtina, evaluating the impact of this infrastructure to current expansion and future development that the city will face.

# Introduction

Kosova is one of the newest countries in the world. Declaring its independence in 2008, Kosova has adopted a "Newborn ideology" with the motto of young Europeans<sup>1</sup>. But urban development and expansion is a rather new concept for Kosova, even though most of the cities have a long history, tradition and culture. Until WWII only 10% of Kosova citizens lived in the cities. From 1948 to 80's their cities increased in number from

5 to 30 with also mixed typologies of cities and villages. The 1999 conflict in Kosova started to cause the destruction of urban environments. This situation created a perfect ground for the development of new informal neighborhoods. The lack of regulations, control and urban management had a positive effect on Prishtina by providing open opportunities for investment. After the 1999 the phenomena of sprawl was a big problem for Prishtina, which was unable to respond to the

growth process, stretched along the main infrastructures and agricultural land. And during this time of transition Prishtina was facing a rapid growth of the population that demanded housing and services. Until this time Kosova only had city plans and regional plans that were rigid and not prepared for this growth. (B.Gollopeni, 2016)

Infrastructure development of Prishtina was very poor in the industrialized economy of former Socialist Federal Republic of Yugoslavia. During the 70's Yugoslavia adopted an investment plan develop infrastructure in service of Industry and Energy. Prishtina gained a lot of this investment for two main reasons, the Industrial production located there and the power plant that provided significant energy supply. During the 90's the investments and infrastructure interventions were limited or completely missing. Prishtina is located in the western part of the country, surrounded by medium to high mountains, making infrastructure access and communications more difficult. (W.Bank, May 2001).

Prishtina faces many challenges, because of the rapid population growth and inner migration trends. The changing of the regime from the centralized control and top-bottom approach to a market oriented development with inclusive approach is Prishtina's biggest challenge.

## Methodology

This Research has collected data from censuses, Orthophotos and mapping materials by previous studies, reports and various publications. The methodology is mainly focused in literature review and Quantitative data collection. By using Geographic Informational systems, we measure some physical parts of the urban growth of Prishtina. Also historic and statistical information was collected used by comparative methods. The study aims to portray a picture of the development of Prishtina, with a focus on the role that infrastructure can play in the future.

During the first part of this paper we will consider a literature review on the political, economic and urban influences of the transport development in Kosova focusing on the city of Prishtina, establishing a timeline of development.

The Second part of this paper will use statistical data, future plans and legislation in a comparative method to understand the impact of this development in the current development of the city.

The third and final part will consider case studies to draw a comparison, in order to establish a pattern of development for the future of the city influenced by transport.

# The brief urban development history of Kosova

Prishtina is the capital of Kosova and the most urbanized city of the country. Prishtina has forty-eight villages and the city. The results of the 2011 census showed that the population of Prishtina has 198,897 inhabitants. (I2UD, March, 2013) Kosova is one of the youngest countries in Europe, where 50% of the population is under the age of 25 with Prishtina's population of over 65%, between 15-64 years old. (Statistics, February 2013)

After the war Prishtina started to reconstruct and rebuild the country, in the 2000 a new system was implemented changing from the topdown previous approach. This new planning system had two levels of spatial planning: the local level and the national level. Many cities had the local municipality plans, but no attempts were made to put them into motion. Prishtina had an urban development plan, but this plan did not cover all the territory, just the central part. Since after the war the movement of people was free, inner migration started with people moving from the villages to the main cities, a very similar phenomenon



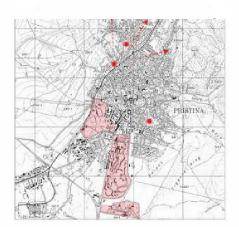
1937
16.000 inhabitants
destruction of core part
of old town



until 1953
24.000 inhabitants
new city center
unplanned expansion of the residential on the north



until 1964
50 inhabitants
new administrative center
emergence of medical center
emergence of planned districts
emergence of industrial areas
unplanned expansion of the
residential on the north



# until **1969**

no data available

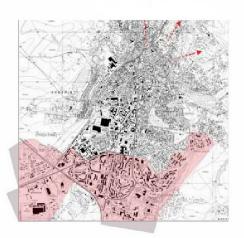
development of university center

development of sports center

planned residential neighborhoods to the south

destruction of the cemeteries

unplanned expansion of the residential on the north



until 1999

250.000 inhabitants

construction of residential districts

upgrade of special functions

unplanned expansion of the residential on the north, south and south-east directions

Fig1 / This map it shows the extent of the urban areas of Prishtina during years till 1999 census Source / https://kk-arkiva.rks-gov.net/prishtina/getattachment/Sherbime/Tema/Vleresimet-e-planit/Vleresimi-i-planit-zhvillimor-Urban-Prishtine.pdf.aspx

with Albania after the regime change that concentrated more than 56% of the population in the main cities. Prishtina was unprepared for this increase of density, leading to urban and sub urban chaos of building without criteria and parameters (Regjepaj, June, 2016). Prishtina, including the new parts of the city<sup>2</sup> started to be open to the capitalist economy, with a late

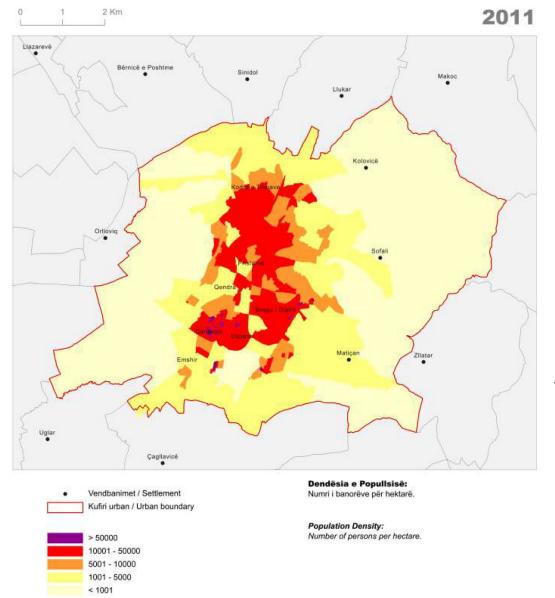


Fig2 / This map it shows population density. By enumeration Area Prishtina 2011 Source / http://ask.rks-gov.net/media/2009/Kosova -census-atlas-2011.pdf

industrialization developed mainly along the infrastructure accesses. The development expanded to the improvement of economic development, education and health system that furthered more the migration trend (B.Gollopeni, 2016).

# The Institutional change

After the 1999 conflict, Kosova was under the UN interim administration and KFOR³ reinforced the security. Until 2008 UNMIK helped Kosova on administrative matters such as the police, customs, justice system etc. The land use development was left in the supervision of PISG⁴ in the

municipal and central level, as this was perceived a less critical issue at the time. Fleeing from the conflict more then 8000 (Statistics, February 2013), Albanians left their homes. Once the situation had passed, they returned to their houses only to find them occupied by Serbs, leaving them homeless. This was one of the first reasons of squatter and informal development. This also started the informal housing market, since people started not registering their properties, leaving room for informal transactions (Cordial, 2009).

Prishtina has gone through some big transformations in urban and political

<sup>&</sup>lt;sup>3</sup> / NATO-led peacekeeping force

<sup>4 /</sup> Provisional Institutions of Self Government

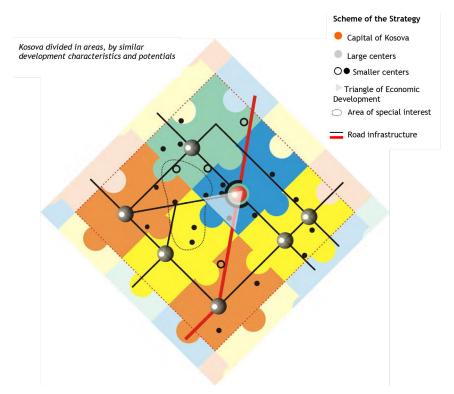


Fig3 / Kosova diamond/Spatial Plan Source / http://www.kryeministri-ks.net/repository/docs/Plani\_Hapesinor\_i\_Kosoves\_2010-2020\_ shq.pdf

specters, the change from a social regime to an open market economy has been a large political and institutional shock for the countries organization. The main factors that rapidly impacted this city were the tabula rasa and urban reconstruction needed after the war. that were an evidence of the political ideology and the post-war rapid urbanization, informal development and sprawl. The phenomenon could not be solved. The attempts started from the organization and decisionmaking process, adopting a large decentralization reform the general government tried to prepare the municipalities to deal with the rapid urbanization. Extensive institutional reforms and support programs, to prepare and build the capacities for local, detailed plans and issuing building permit, construction inspections and zoning plans⁵. (Boussauw, 2011)

### **Population**

As mentioned above after the independence, citizens were free to

move and relocate. Prishtina was one of the first cities to experience the impact of inner migration. The reasons for the migration and informal development were related to the new institutions and improvements in health, education, security and economy. Prishtina municipality has 43 settlements, organized in 16 counties<sup>6</sup>. In this urban part of Prishtina live 40.528 households and only 6.420 households in the rural part. With a population of 207.708 according to the 2015 CENSUS statistical report, followed only by Prizren with a population of 189.058. (Agency of statistics, 2017)

### New planning approaches

During the communist era the urban destruction was a deliberate policy aiming to "destroy the old, build the new". Since then Kosova is trying to change its planning approach from the top-down towards an inclusive and cohesive way of planning. To be able to offer services and draw legislations

<sup>&</sup>lt;sup>5</sup> / In the 2000 the cadaster Agency was established to restore the property register and document the new property changes. In 2003 the PISG presented a new law for planning, the "law on spatial planning". The law defined the organization of central and municipal planning authorities and establish that the spatial plan should be drawn in both levels. (Boussauw, 2011)

<sup>&</sup>lt;sup>6</sup> / Local communities, smaller than cities.

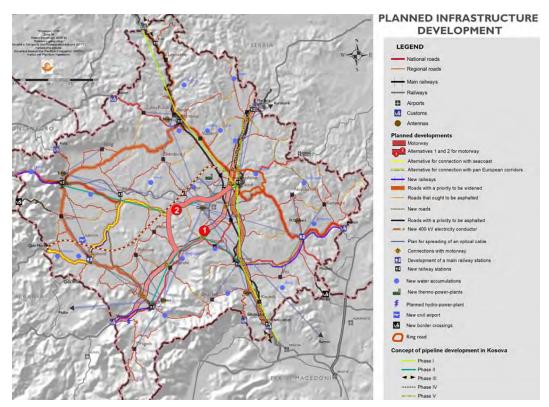


Fig4 / Transport Development / Spatial plan of Kosova. Source / http://www.kryeministri-ks.net/repository/docs/Plani\_Hapesinor\_i\_Kosoves\_2010-2020\_shq.pdf

the central and local government started a series of capacity training, in order to focus on the urban, social and economic issues. After the war the infrastructure of Prishtina was in a very bad state. Since before the infrastructure was key to transport industrial good in the regions around. To be able to offer secure and good infrastructure for its citizens in 2007 the central government created a planning unit within the Ministry of Infrastructure to write the legislation and regulations of transport, which was reorganized in the 2011 as The Ministry of Infrastructure and Telecommunications.

Kosova has 30 Independent institutions, with two of them reporting directly to the assembly of Kosova. These institutions coordinate, control and make decisions about development of the territory and economy development. (Iniciative, 2008)

# Prishtina/Kosova Spatial Plan

Kosova spatial plan had the

intention of being a future guideline for Prishtina's development. In the 2010-2020 spatial plan the country was represented by diamond shape, dividing the territory into development characteristics and potentials: Called the Kosova diamond. Promoting polycentric sustainable future development this plan put Prishtina in the center of gravitation followed by the economic triangle. (Prishtina, 2013) The areas were divided by color<sup>7</sup>, Prishtina the metropolitan areas and capital were represented by blue, which covers 7 cities and has the characteristics of dense urban and rural development, good use of agricultural land, important archaeological and cultural areas and objects8. In terms of Transport Prishtina is strategically located in the main road, rail and energy corridors as a future strategic connection point, giving Prishtina the most important role in terms of national transport corridor connection (Planning, June, 2010).

# Overall of transport policies

<sup>&</sup>lt;sup>7</sup> / Local communities, smaller than cities.

<sup>&</sup>lt;sup>8</sup> / To represent theri common caracterstic and potencials.

Transport and Infrastructure are very important sectors for the economic development of Kosova.

The transportation in the region and beyond is a crucial mater for exchange in a country like Kosova with no self-accesses to the sea. This would increase the investments and accessibility in the country. Several policies and documents were drafted to develop this sector.

In 2003 the ministry of transport and communications through the "Program for development of transport policy in Kosova" and later on in 2005 with the "The Draft Kosova Transport Policy and Plan" supported the link of Kosova with European Transport Networks to increase the economic potential for development. This policies will be possible by linking the routes 6 and 7 of Kosova to the SEE road network and corridors X AND VIII of the Trans-European Network<sup>9</sup>. Infrastructure has always been a priority for the central government, but lack of investments has deteriorated the current situation of infrastructure in the country. Prishtina as the metropolitan center<sup>10</sup> area of the country is where all the infrastructure and important corridors collide.

The city itself was more than 189.3 km of inner infrastructure that covers the center of the metropolitan area. Being the center of economic and government institutions the city was to endeavor a great flux of daily transport. The rapid informal development of the city and the little to non-interventions in infrastructure during the years have made mobility very struggling. In 2002–2007 the municipality increase investments in improving the infrastructure in the city intervening in

163 new road and improvements.

Still city center is only connected with main infrastructure to the suburbs and new neighborhoods of the city, creating big social and economic challenges for its citizens<sup>11</sup>. Prishtina as displaced above is an important stage for the development of the country. The main objective of infrastructure is to connect people, facilitate the exchange of food, of goods, urban products and mainly improve the quality of life. (O'Sullivan, 2012).

The deterioration of Infrastructure affiliated with urban sprawl individual increased motorization are damaging cities. Strategic and long-term planning policies help coordinate the transport of the by infrastructure renovation and expansion, De-concentration of comprehensive services and management.

But improving cities is not a concrete science, cities have their own way of evolving and adapting the interventions for a city vary from its specifics. To be able to answer to specific situations requires a collective and comprehensive vision, shared objectives and civil society involvement to see the vision. (Bank, August 2002)

# **Developing through Transport**

The city of Prishtina, like similar southeastern cities was extended and developed as a result of the infrastructure overlapping and the strategic location<sup>12</sup> in which the city is located. After the country declared its independence, the development rate multiplied instantly. With the increase of housing demand, inner migration trends and the need for larger individual housing, sprawl emerged by creating completely new residential areas.

<sup>&</sup>lt;sup>9</sup> / They also link Prishtina and other important centers.

<sup>&</sup>lt;sup>10</sup> / As was defined in the spatial plan of Kosova

<sup>11 /</sup> In the strategic document of the city of Prishtina infrastructure and mobility scenarios generated the three rings of Prishtina, with the idea that this rings would be able to connect the newly formed neighborhoods and the historic center of the city. Connection would be made by multimodal nodes of transport that would include all the city. See National Background Report On Transport for Kosova.

<sup>&</sup>lt;sup>12</sup> / Strategic location in relation to resources was one of the main influencers in the development of the city during the socialist period (conclusions drawn by the historical development review of the first part of this paper).

The struggle of Prishtina as a new independent city, created an unprepared situation for the public administration in providing Infrastructure and services into these new areas. As a result, the connection between the city center and the new peripheries of the city is weak and provides little to no developed infrastructure.

The National Spatial plan of Kosova highlights Prishtina as an Infrastructure hub, by strengthening the connection of Prishtina to the country and in relation to the European corridors. This NSP contributes into defining the role of the city and main axes at the National level, but gives no indication into the Transport development of the overall current or future development. Cases such as Macedonia, Bulgaria or even Montenegro translated National directives and Plans at the local level by supporting Sectorial Transport plans in the case of Montenegro, breaking these policies and instruments further into SUMP<sup>13</sup> like in the case of Bulgaria (Sofia). These Plans aim to have a horizontal approach with the central government and a city approach into current and future development. (Ministry of Transport, 2012)

The city itself composed by a central ring aims to improve and preserve the center from traffic jams, orienting it in the periphery. This would help the safety and improve mobility in the inner city for citizens and tourist. The plan accentuates three main development paths: The infrastructure towards the Southwest in connection with the airport, the Government institutions agglomerating in the South Prishtina creating a second center and connecting the city with the natural resources, parks and open areas of the Northwest. (Archis Foundation, 2009) For the purposes of this paper, the instruments for the development of infrastructure are divided into two categories, many other instruments

exist but for the purpose of this study, only two main categories were selected. In the transport planning legislation of Kosova there are no specific instruments used, but there is space to introduce them during the detailed plan. Instruments help push the transport sector towards specific goals to achieve a vision.

# Strategic Instruments

Strategic Instruments aim to reduce impact and to support environmental, economic and urban strategies. These strategies connect with all levels of decision-making including transport planning. Many aspects of transport may influence economic, social or urban development policies. government local always cooperate with the general government to implement urban infrastructure and improve mobility. However, improving transport and mobility is one of the higher costs for a city. The regulatory and legislative instruments are effective tools to minimize the financial burden of the local government.

# Regulatory and Legislative Instruments

The local government should always cooperate with the general government to implement urban infrastructure and improve mobility. However, improving transport and mobility is one of the higher costs for a city. The regulatory and legislative instruments are effective tools to minimize the financial burden of the local government and provide the support that "new-est" cities such as Prishtina need.

Policies and Instruments to achieve an integrated transport planning must be part of an integrated policy. Integrated policy refers to integration across different ways of transport, different government objectives (such as the economy, health and the environment),

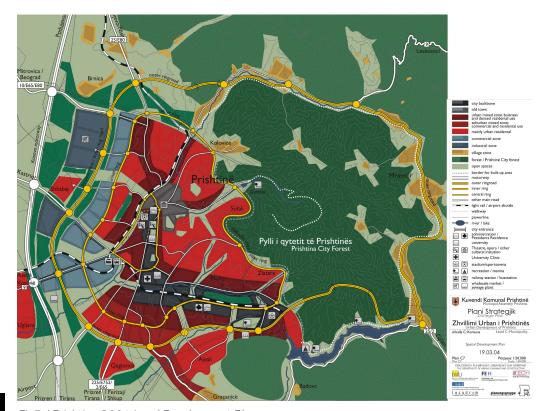


Fig5 / Prishtina 2004 Local Development Plan Source / http://prishtinaonline.com/uploads/prishtina\_pzhk\_2012-2022\_shqip%20(1).pdf

considering the needs of different social groups, and coordinating action between the relevant government institutions.

#### Conclusion

Kosova has a complex history. The rapid urbanization of the main cities has made it hard for local authorities to respond. Prishtina is the capital and the most urbanized area of Kosova and its development has affected the quality of urban life. This dense concentration has further led to sprawl and loss of agricultural land. Using Infrastructure this density has spread to the main corridors of connection and created new residential areas with limited infrastructure and services access.

Prishtina is e territory composed by 43 villages with Prishtina at the center. The population of this city has grown tremendously, partly because of the inner migrations after the war and the agglomeration of people towards the main cities. After the war Kosova was unprepared and going through a political transition with no proper institutions support decisionto These institutions making. were restored with the help of UNMIK that provided support and capacity building for the new country's administrative matters such as the police, customs, and justice system.

The special plan of Kosova was drafted in 2010 and was a plan shared by two levels: the local and central level. This plan defined the growth strategy and development of the country, with Prishtina being the center of it as the metropolitan area and capital of the country. Prishtina was defined as an administrative center that provides good agricultures, services and better quality of life.

A special focus was put in Infrastructure and the need for the county to connect in terms of infrastructure. The main of 2005 "The draft of Kosova transport policy and plan", aimed for Kosova to be a part of the European transport networks, since it has no direct access to the sea the country needs a good infrastructure connection to exchange good and services.

The city of Prishtina suffered from rapid urbanization new neighborhoods with no infrastructure or standards lack of investment in infrastructure. The deterioration of infrastructure was crippling the city with traffic jams and

pollution.

Developing the city of Prishtina through infrastructure is an important paradigm to renovate the city, prevent further sprawl and provide better quality of life. Developing strategies for transport planning would help reduce traffic jams in the center and redefine the center as a pedestrian area. As the 2002-2007 planning approach of investing and renovating infrastructure showed, integrating the new residential areas through transport and services closer to the citizen would improve the quality of life.

To be able to successfully implement this planning approach we need instruments for strategic and legislative planning. However, an infrastructure policy paper within the national strategic plan is indispensable, in addressing the above mentioned obstacles. This would help the center to be connected to the economic area and reinforce the connections with Skopje and their economic areas.

There is a need for regulations and policies, but to implement these policies we must rely on planning instruments. We divided instruments two categories: on Strategic instruments and Legislative instruments. These instruments will help guide infrastructure development transport planning towards strategic goals and visioning.

The successes in using these instruments is the cooperation and collaboration of the local and central government giving top-down a approach to the planning of this sector. Including this approach would help developing in a sustainable way including transport policies, economic, social and urban development to achieve the special planning goals.

The streets of urban Prishtina do not meet the requirements for a capital, infrastructure and street hierarchy, need improvement in order to overcome the traffic and jam in the center of the city. The new ring around the city would help orient the transitory traffic out of the center. The improvement in the connections of the city and the new neighborhoods would help to distribute and even reduce traffic<sup>14</sup>. Traffic management tools should be introduced, to prevent the use of the center for transit traffic.

# **Bibliography**

Agency of statistics, K., 2017. ESTIMATION of Kosova population 2015, Prishtine: KAS (ASK).

Archis Foundation, M. o. P., 2009. PRISHTINA - Dynamic City. Prishtina, Municipality of Prishtina.

B.Gollopeni, 2016. SOCIO-URBAN DEVELOPMENTS IN Kosova STUDY CASE PRISHTINA. Research Gate, 07 June, pp. 84-86.

Banister, D., 1995. TRANSPORT AND URBAN DEVELOPMENT. 1st ed. London: E & FN Spon.

Bank, W., August 2002. CITIES ON THE MOVE, Washington, DC: The World Bank.

Boussauw, K., 2011. Challenges, threats and opportunities in post-conflict urban development in Kosova, Gent, Belgium: Geography Department, Ghent University, Krijgslaan.

Cities, E. S., 2012. Improving energy efficiency "Prishtina", Washington, DC: The world Bank.

Cordial, M. &. R. K., 2009. Post-Conflict Property Restitution: The Approach in Kosova and Lessons Learned for Future International Practice. 3rd ed. Leiden, Boston: Martinus Nijhoff.

Finances, B. M. P., September 2017. Analysis on Public Infrastructure Kosova, Prishtina: European Union.

Gunilla Jönson, E. T., 2005. Urban Transport Development A Complex Issue. Lund, sweden: Springer-Verlag Berlin Heidelberg.

HOYLE, B. S., 1973. Transport and Development. 2nd ed. London: THE MACMILLAN PRESS LTD.

I2UD, C.-P. A. I. P., March, 2013. PRISHTINA, City Synthesis Report, Prishtina, Kovoso: The World Bank.

lan Skinner, M. F., 2011. Instruments for Sustainable Transport in Europe, London: Institute for European Environmental Policy.

Infrastructure, M. o., 2015. Sectorial Strategy and Multimodal Transport 2015-2025 and the Action Plan for 5 years, Prishtina: Ministry of Infrastructure.

Ministry of Transport, M. A. a. T., 2012. TRANSPORT DEVELOPMENT STRATEGY OF MONTENEGRO, Montenegro: Ministry of Transport, Maritime Affairs and Telecommunications.

O'Sullivan, A., 2012. Urban Economics. 8-th ed. New York: McGraw-Hill.

Planning, M. o. E. a. S., June,2010. Spatial plan of Kosova 2010-2020, Prishtina: Institute for Spatal Planning.

Prishtina, M. o., 2013. Urban Development Plan of Prishtina 2012-2022, Prishtina: Municipality of Prishtina.

Regjepaj, F., June,2016. Urbanization and land management issues in Kosova , Lund, Sweden: Department of Real Estate Sciences Faculty of Engineering.

Sh. Buza, R. D., 2009. NATIONAL BACKGROUND REPORT ON

TRANSPORT FOR Kosova , Prishtina: wbc-inco.

Statistics, K. A. o., February 2013. ESTIMATION of Kosova population 2011, Prishtina, Kosova : Kosova Agency of Statistics.

W.Bank, May 2001. Kosova, Economic and Social Reforms for Peace and Reconciliation, Washington, D.C.: The World Bank.

# Webliography

Iniciative, E. S., 2008. ESI. [Online] Available at: https://www.esiweb. org/pdf/esi\_future\_of\_Prishtina%20 booklet.pdf [Accessed 16 May 2018].