



# Transdanube.Pearls – Sustainable Network Mobility in the Danube Region

http://www.interreg-danube.eu/approved-projects/transdanube-pearls

# Sustainable Regional Tourism Mobility Plan Municipality of Kladovo

(Considering the wider region of Iron Gate)

	WP/Action 4.2
Regional agencija za razvoj istočne Srbija Regional Development Agency Eastern Strbia	The author: RARIS – Regional Development Agency Eastern Serbia
	Final draft

# Content

1. INTRODUCTION	4
2. METHODOLOGY	5
3. TERRITORY OF STRATEGIC PLAN FOR SUSTAINABLE MOBILITY IN TOURISM	7
5. BASIC INFORMATION ABOUT THE TERRITORY OF THE PLAN	8
4.1 TERRITORY	8
4.2 Population	9
4.3 Settlement characteristics	9
4.4 Relevant transport nodes	10
4.5 Economy of the Region	11
4.6 Economy of the Kladovo Municipality	12
4.7 Space (methods of land use)	17
4.8 Protected natural areas	17
4.9 Tourist attractions in the municipality of Kladovo	18
4.10 Tourist attractions in the Region	22
4.10.1 City of Zajecar	22
4.10.2 Municipality of Majdanpek	23
4.10.3 Municipality of Knjazevac	23
4.10.4 Municipality of Sokobanja	25
4.10.5 Municipality of Negotin	26
4.10.6 Municipality of Bor	27
4.10.7 Municipality of Boljevac	28
4.10.8 Municipality of Veliko Gradiste	28
4.10.9 Municipality of Golubac	28
4.11 Tourist indicators	28
5. Existing mobility services for tourists	34
6. Key participants identified in the Region	34
7. Transport network and sustainable transport systems	34
7.1 Traffic connections of the municipality of Kladovo	34
7.2 Road infrastructure	36
7.3 Railway infrastructure	38

7.4 River traffic	39
7.5 Air traffic	39
7.6 Bicycle routes	40
7.7 Borderlines	40
8. Usability and accessibility of transport systems	41
9. Existing plans at the national level	42
9.1 Master Plan of the Donje Podunavlje	42
9.2 Regional Development Strategy of Timok's Region for the period 2011-2018	43
10. Existing plans and projects in the municipality of Kladovo	45
10.1 Sustainable Development Strategy (2010 - 2020)	45
10.2 Spatial plan of municipality Kladovo	46
10.3 Projects	47
10.4 SWOT analyses	47
11. VISION AND GOALS OF THE PLAN	50
11.1 Vision of Iron gate region	50
11.2 Goals of the STRMP	50
11.3 An integral principle	51
11.3.1 Horizontal integration	51
11.3.2 Vertical integration	52
12. RECOMMENDATIONS FOR SUCCESSFUL IMPLEMENTATION OF THE PLAN	53
13. MEASURES	54
13.1 MEASURES for the implementation of the Plan in the municipality of Kladovo	55
13.2 MEASURES for the implementation of the Plan in the Iron gate Region	75
14. RESPONSIBILITY FOR IMPLEMENTATION	80
15. FINANCING PLAN	81
16. MONITORING AND EVALUATION	83
Partners on the project:	8.4

#### 1. INTRODUCTION

The practice of transport planning in urban areas is nothing new to the developed countries of the European Union. Mobility planning represents a strategic overview of fulfilling one of the basic needs of all citizens – movement. In what way is possible to go from one place to another in urban areas, access to work places, facilities of public importance, city services, cultural points, entertainment contents and similar, is usually the subject of so called Strategic Urban Mobility Plans. (Strateski Urbani Planovi Mobilnosti – SUPM). Based on this plans, while considering the areas of significant tourism potentials, the Sustainable Regional Tourism Mobility Plan (SRTMP) has become more frequent in recent years (Odrziv Regionalni Turisticki Plan Mobilnosti - ORTPM) which is similarly, for their subject matter, planning the guiding of tourists and local residents in tourist destinations, and above all through the prism of sustainable mobility - the use of those transport means with a minimal negative impact on the environment. This planning is of great importance for both tourist and local residents, as it helps preserve a healthy environment, untouched by heavy traffic and numerous cars.

Strategic plans for sustainable mobility in tourism in Serbia are still a novelty and the municipality of Kladovo, by adopting its Plan, becomes the first municipality in Serbia to address this important issue in strategic and planned manner.

SRTMP - Sustainable regional tourism mobility plan (Odrziv Regionalni Turisticki Plan Mobilnosti) is a document designed to meet mobility needs of visitors and the local population in the tourist area in order to ensure a better quality of life and better accessibility to tourist destinations. The plan is based on existing practices in transport and tourism and take into condisderation the principles of integration, participation and evaluation. Compared to SUMP (Strategic Urban Mobility Plan), which is usually done for bigger urban areas, SRTMP is strongly focused on vertical connectivity (municipality-region-region of Danube) and horizontal integration (transport and tourism).

The Danube region is one of the most promising tourist destinations in Europe, and the municipality of Kladovo has an important place in it. Most of the journeys to the Danube region, as well as within the region, are done by car, which causes negative impacts on the environment and residents. By creating and adopting this plan, the Municipality of Kladovo expresses its commitment to solving this problem through the development of socially just, economically sustainable and ecological transport services for visitors who have a positive impact on human health.

#### 2. METHODOLOGY

Sustainable regional tourism mobility plan for the municipality of Kladovo is being created as a strategic - planned document for the territory of local self government unit – municipality of Kladovo and represents the basis for the implementation of measures to promote sustainable mobility. The Plan sets out the objectives and measures needed for the improvement of sustainable transport that are in line with local strategies and other planning documents, as well as representatives of local self-government unit and other key representatives of the public, private and civil sectors.

The key elements of the Plan are:

- 1. Analysis of the situation
- 2. Vision of sustainable mobility
- 3. Measures for promoting sustainable mobility
- 4. Implementation plan

The first part of the Plan presents the situation and trends in the municipality of Kladovo, but also in a surrounding environment, which serve as a base for strategic planning for future mobility development. The analysis is multisectoral and addresses the basic trends in the social, economic, infrastructural and tourist sector. The analysis combines quantitative and qualitative methods in order to obtain a precise insight into the existing situation and trends in the place and sector. The data were collected from relevant institutions and organizations (the Republic Institute for Statistics, Tourism Organizations, Local Governments, etc.), and some of the qualitative inputs were collected by the working group. In that way, all relevant participants from the public, private and civil sectors are involved in the analysis of the current situation and problems in the area.

For the purposes of making this Plan by the Municipal Assembly of Kladovo, a working group was formed which, together with the developer of the Plan - Regional Development Agency Eastern Serbia - RARIS, directed the development and, if needed, promoted its contents. Parallel with the analysis of the situation, mesaures have been developed that will determine the implementation.

Based on the collected inputs, an analysis of the strengths, weaknesses, opportunities and threats to the development of mobility services (SWOT analysis) was carried out, both for the territory of the municipality of Kladovo and the wider region, which clearly define the needs and potentials addressed in the next step – defining vision and the necessary measures for its achievement.

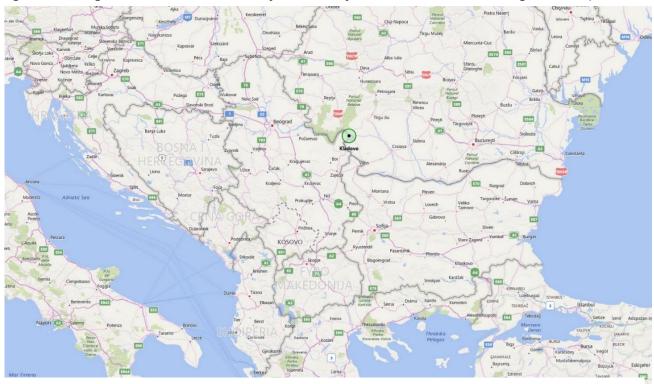
For the implementation of the defined measures by the Plan, an implementation plan has been formed and provide the institutional framework, financial framework and action plan. Institutional framework defines the system of monitoring and realization of the Plan as well as responsibilities. The indicative financial framework defines the financial resources needed for implementation of the measures. Finally, action plan brings connection between strategic framework and planned measures and defines the timeframe for their realization.

The technical design of the Plan was managed by RARIS, and the Working Body for the making of the Plan was named by the Municipal Assembly of Kladovo and it was the key factor in the making of the Plan, which provided all the relevant inputs and qualitative data, as well as a participatory approach in the making of the Plan, because its made up of representatives from the public and private sector.

# 3. TERRITORY OF STRATEGIC PLAN FOR SUSTAINABLE MOBILITY IN TOURISM

Sustainable regional tourism mobility plan must be adapted to the local situation. The key element is defining the geographical scope of the Plan. The planned region, in theory, can be one municipality or a wider region that includes more cities / villages from one or more municipalities that represent a common tourist destination and are committed to sustainable tourism mobility. The defined area should have the main tourist place and the surrounding with mutual functional relations. When defining the territory that will be covered by the Plan, account should also be taken of international links including links to other cities and states in the region. Also, it is necessary to ensure the perfect integration of distance relations (eg, the existence of a bus line, proximity to Eurovelo corridors, cruise possibilities, etc.) with the so-called the "last kilometer" that should be crucial to the competitiveness of the region. The "last kilometer" refers to the traffic connection of transport hubs (railway and bus stations, ports, airports) with interesting touristic places and products the as well as accommodation capacities

It is defined that the Plan will primarily apply to the municipality of Kladovo, but will also, due to the necessary connections, traffic connectivity and complementary tourist contents, consider the wider region of Iron gate, that includes the Donje Podunavlje and eastern Serbia, ie eight municipalities of



Picture 1: The position of municipality of Kladovo

Bor's and Zajecar's administrative district (Kladovo, Bor, Negotin, Majdanpek, Zajecar, Knjazevac, Sokobanja, Boljevac) and two more municipalities from Branicevo's administrative district (Golubac and Veliko Gradiste).

#### 5. BASIC INFORMATION ABOUT THE TERRITORY OF THE PLAN

#### 4.1 TERRITORY

As stated in previous chapter, where has been determined the territory on which the Plan will refer to, the analysis of the situation will observe wider region of Iron gate, ie at the same time Donje Podunavlje, eastern Serbia, as well as the territory of the municipality of Kladovo.

When we say the wider region of Iron gate (hereinafter referred to as the Region or Region of Iron gate) we will observe the territory of ten municipalities covering an area of 7,841 km² and include three administrative districts - Zajecar, Bor and part of Branicevo - the city of Zajecar and the municipalities of Knjazevac, Boljevac, Sokobanja, Veliko Gradiste, Golubac, Bor, Negotin, Majdanpek and Kladovo. The Djerdap region covers 8.8% of the entire territory of Serbia. The border between Serbia and Romania, in this part of the country, is exclusively going through Danube. The total length of the border with the EU in this area is about 380 km.



Picture 2: Iron gate region

The region area is characterized by a considerable altitude difference, as it stretches from 28 m above the sea level (where the Timok flows into the Danube as the lowest point in the Republic), up to 2169 m (Midzor, the peak of Stara Planina, the highest point in central Serbia). The distance between these two points is only 90 km.

Table 1. Surface of municipalities

Municipality	Surface (км²)
Bor	856
Negotin	1089
Kladovo	629
Majdanpek	932
Zajecar	1069
Sokobanja	525
Knjazevac	1202
Boljevac	827
Veliko Gradiste	344
Golubac	367
TOTAL	7841

Source: Statistical office of the Republic of Serbia, census of 2011.

#### 4.2 Population

In this area, according to the 2011 census, 269,468 people live - 3.79% of the total population of the Republic of Serbia, and the share of the population in the republic population is constantly decreasing in all censuses since 1948 (5.5%) to date. According to estimates of the Statistical office for 2016, the number of people has decreased by an additional 5%. The average density in the Region (34 per km2) is 2.3 times lower than the national average (80 per km2).

Table 2: Population and population density in 2011.

Municipality	Population	Population density (popultion/κм²)
Bor	48615	56,79
Negotin	37056	34,03
Kladovo	20635	32,81
Majdanpek	18686	20,05
Zajecar	59461	55,62
Sokobanja	16021	30,52
Knjazevac	31491	26,20
Boljevac	12994	15,71
Veliko Gradiste	16714	48,58
Golubac	7795	21,24
	269468	34,36

Source: Statistical office of the Republic of Serbia, census of 2011.

There are several ethnic groups living in the Region, and the largest are: Serbs (86%), Vlachs (8%) and Roma (1%).

#### 4.3 Settlement characteristics

The network of settlements in the Region is a system of 313 settlements deployed in 317 cadastral municipalities. A total of 13 settlements are cities with a total of 158,683 inhabitants (58.8%): Bor (39.387 inhabitants), Brza Palanka (1.076), Kladovo (9.142), Donji Milanovac (3.132), Majdanpek (10.071), Negotin (17.598), Bogovina (1.348), Boljevac (3.748), Zajecar (39.491), Knjazevac (19.351), Sokobanja (6.757), Veliko Gradiste (4.438) and Golubac (1.494). The average area of the villages are 26 km².

Daily migrations are present from suburban villages to the municipal / city center in the region. It estimated that half of these travels are done by car, and half by bus.

The number of registered vehicles in the Region is given in the following table:

Table 3: Number of registered vehicles in 2016

Municipality	Mopeds	Motorcycles	Cars	Buses	Cargo vehicles	Working vehicles	Road hauler	Trailers
Bor	73	216	12342	94	850	25	269	1995
Kladovo	151	124	5475	22	409	15	131	1478
Majdanpek	68	92	3901	1	295	6	112	615
Negotin	394	439	10362	73	936	19	189	3070
Zajecar	285	365	13020	20	1031	49	146	3174
Boljevac	22	67	2730	5	200	5	203	1372
Knjazevac	103	173	6588	8	562	17	136	1822
Sokobanja	36	82	3480	15	218	3	69	658
Veliko Gradiste	92	158	4946	15	640	25	81	635
Golubac	55	111	2329	2	209	-	37	416
TOTAL	1279	1827	65173	255	5350	164	1373	15235

Source: Statistical Office of the Republic of Serbia, Municipalities in Serbia 2017

#### 4.4 Relevant transport nodes

The region of Iron gate relies on the busiest road in the country - Eastern corridor 10 and proximity to Corridor 4. It also has good connections with neighboring countries - Romania and Bulgaria. In the Region territory there are two border crossings with Romania – Iron gate I and II, and two with Bulgaria - Mokranje and Vrska Cuka. The recent opening of the Vidin-Kalafat Bridge to the Danube has improved its connection with Romania, and it is planned to open another border crossing with Bulgaria.

In the subject territory there are also international railroads connecting the Region with the rest of Serbia and with neighboring countries, but their condition is relatively poor, and the railway traffic is taking place at a low intensity.

River traffic is possible on the Danube, which is the Pan-European Corridor 7, which connects the North and the Black Sea. This waterway is part of the Rhine-Main-Danube waterway and it is the most important European waterway.

Most of the Region air traffic gravitate to the airport "Nikola Tesla" in Belgrade and the airport "Car Constantine" in Nis. There are also two more airports nearby - one in Sofia (Bulgaria) and one in Craiova (Romania).

Also, two bicycle routes - Euro Velo 6 and Euro Velo 13 - pass through the Region.

#### 4.5 Economy of the Region

In the revenue structure of the Region, agriculture dominates by 43.7%, followed by the processing industry with 20.6%, trade 15.9%, transport 10.2% and construction industry 5.7%. The service sector produces 30% of the national income, the manufacturing sector (industry, mining and construction) 26.3%, while the activities of the primary sector (agriculture, forestry, water management, hunting and fishing) produce 43.7% of the Region's national income.

Table 4. National income structure 2015.

Sector	Serbia	Region
Sector	100,0	100,0
1. Agriculture and forestry	17,0	43,7
2. Fishing	0,04	0,01
3. Mining	5,0	-0,01
4. Manufacturing industry	27,1	20,6
5. Energetics	1,9	-1,1
6. Construction	7,3	5,7
7. Trade	24,7	15,9
8. Hotels and restaurants	1,8	3,3
9. Transport	10,4	10,2
10. Real estate jobs	4,2	1,6
11. Health and social services	0,2	0,6
12. Other services	0,2	0,01

Source: Statistical office of the Republic of Serbia

The observed territory in recorded 93.4% of the national average of GDP in industry (per employee) in 2015, or 84.2% of the average GDP per capita. Extraction and processing of copper and the production of clothing and footwear are amongst the most important export activities. The turnover of metals and minerals in the Region generates more than 1/3 of the total export of the Republic of Serbia, while more than 10% of exports include the export of leather footwear.

The Region of Iron gate recorded a minimum growth in tourist revenue in the last few, but the number is changing.

When it comes to employment, the majority of employees are employed in Zajecar (14,895 employees), Bor (13,185 employees), Negotin (6,921 employees) and Knjazevac (6,829 employees).

In the total employment of the Region, dominating sectors are industry (20,3%), health care (10.9%), mining (7.6%), education (7.4%), trade (5.8%), construction (4.9%), transport (4.4%), real estate (2.5%), hotels and restaurants (1.3%), while agriculture and forestry employed only 2.1% of employees.

Between 1991 to 2016, the unemployment in the Iron gate Region almost doubled - from 15,143 to almost 25,122 inhabitants, which was recorded in November 2016.

#### 4.6 Economy of the Kladovo Municipality

According to data for 2016, economy of the Kladovo Municipality is dominated by the manufacturing industry, which has more than a quarter of total 4522 workers employed, significantly more compared to other branches. Iron gate Hydroelectric provides an important contribution to economy of the Municipality, which isn't emphasized in the official statistics, and is a reference point for the Region economy.

Table 5. Employment structure in the municipality of Kladovo sorted by activities (2016)

Total	4522
Agriculture, forestry and fishing	79
Mining	5
Manufacturing industry	1220
Electricity, gas and steam supply	493
Water supply and waste water management	73
Construction	109
Wholesale and retail trade and repair of motor vehicles	743
Transport and storage	114
Accommodation and food services	234
Information and communication	89
Financial and insurance activities	34
Real estate business	2
Professional, scientific, innovation and technical activities	86
Administrative and support service activities	46
State administration and compulsory social security	321
Education	301
Health and social care	465
Art, Entertainment and Recreation	30
Other service activities	77

Source: Statistical office of the Republic of Serbia

Looking at the number of employees and unemployed, as well as the average earnings per employee, it can be concluded that the municipality of Kladovo is average on the Republic level.

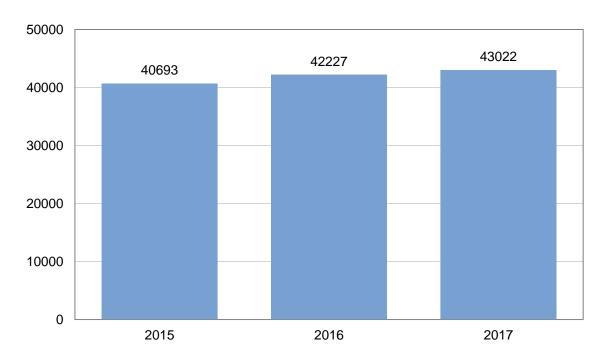
Table 6. Employment and earnings in the Municipality of Kladovo

EMPLOYMENT AND EARNINGS	Sum	Year
Registered employees	4522	(2016)
Registered employees compared to the number of inhabitants (%)	24,6	(2016)
Average salaries without taxes and contributions (RSD)	43022	(2017)
Registered unemployed	1740	(2017)
Registered unemployed per 1,000 inhabitants	98	(2016)

Source: Statistical office of the Republic of Serbia

Average earnings in the municipality of Kladovo are showing signs of slight growth in the last three years, but are still lower compared to the Republic average earnings (by around 10%)

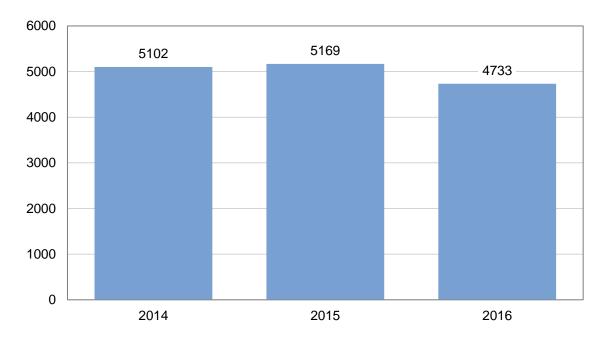
Graph 1: Average earnings without taxes and contributions, 2015—2017. (RSD)



Source: Statistical office of the Republic of Serbia

When it comes to employment, according to data, there is a slight decrease in the number of employees in the municipality of Kladovo occurred in 2016, but it should be kept in mind that the official statistical data does not give 100% precise informations, primarily because of the gray economy and black market, which are present in the municipality of Kladovo, as well as in the territory of the Republic.

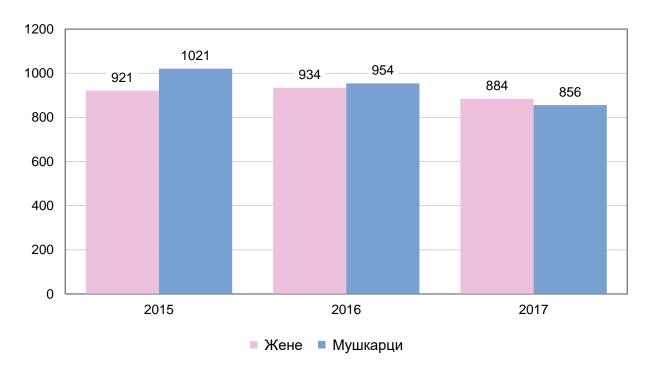
Graph 2: Registered employees, 2014 - 2016



Source: Statistical office of the Republic of Serbia

The number of unemployed in the municipality of Kladovo is at the level of the Republic and amounts to 98 persons per 1000 inhabitants (slightly more than in the Republic which has 96 unemployed per 1000 inhabitants), and the number of unemployed is evenly distributed according to gender.

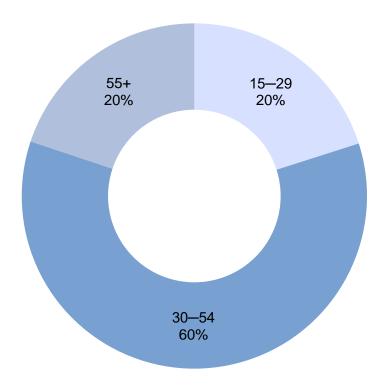
Graph 3: Registered unemployed by gender, 2015 - 2017.



Source: National Employment Service

If we divide the unemployed into the age groups, it's noticeable that the largest number of unemployed are aged between 30-54 years, which is connected to the fact that a large number of young people up to 29 years are still studying, and the percentage of migration is the most prominent in this group of population . This information is worrying, as it indicates the aging trend of the population.

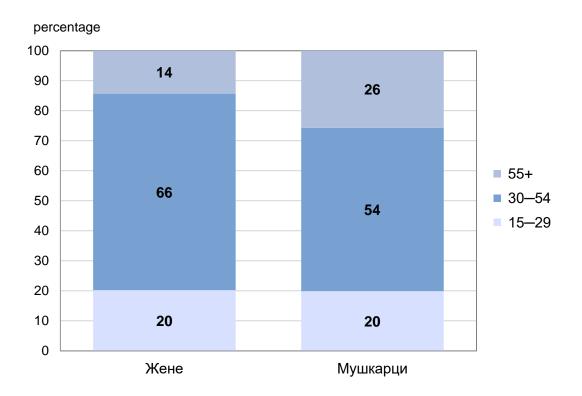
Graph 4: Participation of the unemployed by age groups in the total number of unemployed, 2017.



Source: National Employment Service

At the age of 30-54, there are slightly more unemployed women than men (66% versus 54%), while the number of unemployed women and men aged up to 29 years is almost identical.

Graph 5: Participation of the unemployed by age groups and gender in the total number of unemployed, 2017.



Source: National Employment Service

In the municipality of Kladovo, there are 646 business entities active, 164 of which are companies, and 482 are registered active entrepreneurs. According to the National Employment Service, the state stimulates the development of entrepreneurship through various programs , and incentives are available to entrepreneurs / companies, but their exploatation is satisfactory. In 2016, about 50 million dinars of incentive funds were used, which is only about 650 € per business entity.

Table 7: Active business societies and entrepreneurs (2016)

DESCRIPTION	SUM
Active business societies	164
Active entrepreneurs	482
Incentives (in thousands of RSD)	49.060

Source: National Employment Service

Agriculture is important to the economy of Kladovo municipality, and according to agriculture census in 2012, there were more than 2000 registered agriculture holdings, although with a relatively low level of mechanization (only 4 out of 5 agriculture holdings have a tractor) and with relatively few conditional cattle (only slightly more than one animal per agriculture holding).

Table 8: Agriculture data (2012)

DESCRIPTION	SUM
Agriculture holdings	2136
Annual working units (number)	1664
Two axle tractors	1780
Conditional cattle (number)	2867

Source: Agricultural Census 2012

#### 4.7 Space (methods of land use)

The territory of the Region is mostly mountainous. Agricultural land covers about 45% of the entire territory. Forests cover about 300,000 hectares - about 40% of the total area, or 11,3% of the total number in Serbia. Agricultural land extends to about 3,670 km (about 51%), of which 2,972 km (42%) can be cultivated, and the rest (7%) is infertile.

Agricultural land is mostly present in Zajecar and the municipalities of Negotin, Sokobanja and Knjazevac. The smallest percentage of agricultural land is in the municipality of Majdanpek, dominated by forests. There are fewer forests in the municipality of Negotin and the city of Zajecar.

Infertile land is mostly found in the municipality of Kladovo, and the lowest percentage of infertile areas is in the municipality of Boljevac.

#### 4.8 Protected natural areas

The Iron gate National Park is located in the Iron gate Region. National Park "Iron gate" is located on the right bank of the Danube, on the border with Romania. The total area of the national park is 63,608 hectares, and the protected area covers 93,968 hectares. In the southeastern part of the Region of Iron gate there is a protected area "Babin Zub" and the Stara Planina nature park. Nature Park Stara planina has an area of 48,588 hectares and is located in the territory of three municipalities - Knjazevac, Zajecar and Pirot. Stara Planina also has another name - Balkan. The highest peak, along the border with Bulgaria (Serbian part), is Midzor at an altitude of 2,169 meters. It is covered with snow for about 5 months a year and has a significant potential for long-distance skiing. On Stara Planina there is a ski resort with a total of 13 km of arranged paths and with a system of ski lifts.

Besides these parks, there are other protected areas in the observed area:

Table 9: Protected areas

Name and type of protected area	Municipality	Surface (he)
Natural monument "Lazarev kanjon"	Bor, Boljevac	1755
Natural monument "Ripaljka"	Sokobanja	7
The area of remarkable features "Lepterija-Sokograd"	Sokobanja	406
The area of remarkable features "Ozrenske livade"	Sokobanja	237
Firm natural reserve "Bukovo"	Negotin	10
Natural monument "Vratna"	Negotin	3
Natural monument "Zamna"	Negotin	2
Natural monument "Park suma Badnjevo"	Negotin	5
Natural monument "Valja prerast – Suplja stena"	Majdanpek	8
Firm natural reserve "Mustafa"	Majdanpek	80
Firm natural reserve "Felješan"	Majdanpek	15
Firm natural reserve "Konjska glava"	Majdanpek	25
Firm natural reserve "Rtanj"	Boljevac	15
Firm natural reserve "Mala Jasenova glava"	Boljevac	6
Natural monument "Bogovinska pecina"	Boljevac	14
Archaeological findings and protected areas "Romuliana – Gamzigrad"	Zajecar	2686
Natural monument "Bigar"	Knjazevac	15

#### 4.9 Tourist attractions in the municipality of Kladovo

The most important tourist attractions in the municipality of Kladovo are:

**Iron gate gorge** – Iron gate's gorge is the longest and largest in Europe. It forms part of the border between Romania and Serbia, with Romania on the north and Serbia on the south. The Romanian, Hungarian, Slovak, Turkish, German and Bulgarian name has the meaning of the iron gate, while the gorge in Serbia is known as Iron gate. On the Romanian side is the National Park Iron Gate (rom. Parcul Natural Porțile de Fier), and on the Serbian side National Park Iron gate.

**Iron gate national park** - The Iron gate's gorge and the natural area along the gorge, as a spatial unit, of 63,608 hectares, is characterized by exceptional cultural and historical values, significant natural ecosystems in the composition of exceptional value and rarity, the objects of original flora and fauna and well-preserved forests of natural composition and exceptional appearance. This territory was placed under protection in 1974 as National park Iron gate, the largest national park in Serbia. Part of the national park is located in the territory of the municipality of Kladovo. The National Park provides exceptional opportunities for the development of various types of tourism in nature (cycling, hiking, bird watching, etc.), as well as hunting and fishing tourism, while respecting the rules of behavior in the national park.

**Kazan** - After the basin of Donji Milanovac, the Danube enters a 19 km long Kazan. There is also a place where the Danube is narrowest (140m) and the deepest (90m). Prior to the construction of the hydroelectric power plant "Iron gate", in the deep whirlpools of Kazan, the moruns and sturgeons were spawning coming from the Black Sea. There are boulders and massives Veliki and Mali Strbac in Kazan, with cliffs of 800 meters vertically descending into the river. Rock cliffs change color according to the sun and the time of day, providing an exceptional experience. The most beautiful view of Iron gate can bee seen from the wall of Ploce, above Kazan. At the exit of Mali kazan there is Hajducka vodenica.

**Blederija waterfall**– Blederija waterfall is located near the village of Reka, about 15km from Kladovo, and represents an exceptional natural attraction. River Blederija springs at 190 meters above sea level and flows to the southeast. The water from a height of about 7 m falls in the form of a water curtain in a bigren's tub, a large spring or a small lake, is a turquoise green. Alongside the big waterfall there is another small one, which disappears during the summer when the river decreases its water capacity, but is always present during the spring, when the river is rich in water and up to hundreds of meters per second. Above the waterfall, at about 2km to the right, there are sources of subtermal water with a temperature of 17°C.

**Oasis of birds in Mala Vrbica** – Mala Vrbica is one of identified "Important Bird Areas" (IBA) in Serbia. This international classification of significant areas for birds involves work on their identification, monitoring and protection. The area acquires IBA status if it meets strict criteria based on the presence of endangered species of birds and their number. Although the IBA network is based on the bird wealthfare, the protection of these areas contributes to the preservation of a large number of other animals and plants.

**Trajan's board** - As part of the operations against Dacan (the territory of today's Romania), the Roman Emperor Trajan built a road from Belgrade through the Iron gate gorge, to the point where he built a bridge on the Danube (Trajan's Bridge). Construction of the road ended in the 103rd year, and the whole job is immortalized with a sign board. The board is known as Trajan's board (Tabula Trajana).

**Trajan's bridge** - The remains of the Trajan's Bridge and the fortification of Pontes are located in the village of Kostol, 5 km downstream of Kladovo. The bridge, built between 103 and 105, in just two years, is the work of the Syrian architect Apollo from Damascus, and is one of the most genteel architectural works of Antiquity. The length of the bridge with the portals was 1133,90 m, and part accross the riverbed was 1071 m. The remains of 16 poles of Trajan's Bridge were located in 1932. 50 years later, archaeologists managed to locate 12 of them, and four were probably destroyed by the water in the meantime. The remains of the first poles on both sides can be seen even today, on the banks of the Danube.

**Fortress Fetislam** - The most important cultural monument from, the recent past, was built by the Turks, after the conquest of these parts of Serbia. The fortification consists of two parts: the Small and the Big town. 1524 year is considered to be the year of construction of the fortress. By looking at the preserved remains, it can be concluded that the Small Town had all the features of an artillery base, protected by a walled wall with circular towers at the corners and loopholes in the wall. The Big city was built by the Turks in later years.

Above the gates leading to the fortress were marble slabs with inscriptions, which glorified Sultan Mahmud II.

**Diana fortification** - It is located on Karatas and it was the largest and most important fortification on the border of Upper Moesia. It was built during the time of Emperor Trajan, during his attack on Daki in the 2nd century BC. Given that Diana was built in a strategically important location, the task of a permanent military crew in the camp was to preserve the boundaries and provide a downstream entrance to the canal, which was upstream from the castle. Diana was used as a fortification building until the 6th century. After invasion of the Aaronic and Slovenian tribes, the castle suffered the fate of other fortresses on the limes.

**Hajducka vodenica** - The archaeological site Hajducka vodenica is located along the Danube below Veliki Strpac and dates back to the period of the older Iron and Antique period. Separating from the main road, there is a dirt road leading to the meadows called Hajducka vodenica. This is a nice place for camping or resting, and is very popular among those sailing the Danube – there can be seen many anchored ships during summer.

**Hydroelectric power plant Irog gate I** – Irong gate I was built in 1970 on the 943 km of the river, 10 km upstream from Kladovo. On the Serbian and Romanian side of the Danube, 6 generators of 176.3 MW are made. It is located in the city of Karatas, and there are the remains of the Roman fortress Diana just below the hydroelectric power station. The accumulation lake has a volume of 1380 million m³. The dam is symmetrical, with an overflow dam in the middle and crossings on the Romanian and Serbian sides. Annually it works an average of about 7500 hours and produces about 6,000 GWh. In the total electricity production in Serbia, Iron gate power plants produces around 20%. This object attracts many tourists, because it is an exceptional building project, has a special presentation hall and a guide service for organized guiding of tourists and guests. The destination is a must see for all organized tourist groups that come to the Danube.

**Church of St. George** - There was a small church of St. George in the city of Kladovo around 1735 in which records were kept, thanks to which it is still possible to explain some parts of the history of Orthodox life of this region, and perhaps even the origin of the city names. Today's church of St. George was built during the Obrenovic dynasty, in 1856, and was sanctified a year later. This church is the only one in Kladovo and continues to serve religious services. The church also organizes religious education for children and adults.

**Monastery of St. Trinity, Monastery** - The monastery is located at an altitude of 236 meters above the settlement of the same name. It was founded at the time of King Milutin. According to the legend, the daughter of Knez Lazar - Olivera, married to Sultan Bajazit, was staying in the house, after the victory of Mongols over her husband. Since the second half of the 19th century, the monastery was doing service at times, because it is ornate and prone to decline. Reconstruction activities have started.

**Navigation stations "Pena" and "Varnica" on the Iron gate** - Kazan, the most dramatic natural area of the entire Danube, was the most dangerous for sailing in the past, before the construction of the dam. The difficult sailing conditions in Kazan were regulated by a specific system of river traffic

management and control. A system of six signal stations on both banks of the Danube served as a unique traffic signal on the Danube. Raised or lowered balloon was a sign to the captains to freely pass or wait for the passing of the boat from the opposite direction. Group of so-called The "navigation" station today has the role of a monumental infrastructure heritage. Today, in the navigation station "Pena", which is under the protection of the Institute for the Protection of Cultural Monuments, there is the artistic studio of local artist Radislav Trkulja.

**Archaeological Museum of Iron gate** - Archaeological museum in Kladovo was founded and opened in 1996, as a branch - a museum within the National Museum in Belgrade, with the task of collecting, preserving, scientifically documenting, presenting and publishing or interpreting the cultural heritage of the Danube Region – Iron gate. The rich and diverse archaeological collection Iron gate has been collected over 50 years as part of the program of archaeological excavations and research of prehistoric, Roman, medieval locations, within the measures of protection undertaken by the multidisciplinary project Iron gate - the Diana / Zanes project. The museum exhibition is annually innovated and developed, depending on the theme of the season, new findings, exhibits, presentation methods. The most important findings are constantly displayed, because they best illustrate the millennium past and the significance of these ancient Danube shores.

**Old town in Kladovo** - The pedestrian zone in the center of Kladovo is protected by the Institute for the Protection of Cultural Monuments as a spatial cultural and historical unit. In the Old town there is a reconstructed building of the Municipality, a large number of trade and catering shops and other facilities of public importance, which is why it represents the heart of social life in Kladovo.

**Petrovo's village with surrounding caves** - An authentically peaceful village with a preserved old ambient unit, the only one in the whole area of the National Park "Iron gate". It is located 23km west of Kladovo, and it was founded by immigrants from Montenegro in the middle of the XIX century. It is named after King Petar Karadjordjevic, who was hiding in the surrounding caves after crossing Romania from Serbia to Obrenovic's Serbia.

**Ethno complex Brza Palanka** - Etno house complex is located next to the promenade near the Danube, in the new Brza Palanka, built after the sinking of the old settlement during the construction of the hydroelectric power plant "Iron gate II". It has a traditional setting with dishes, tools, costumes and other traces of the material culture of the old Brze Palanka, from Miroc's, Kljuc's and Krajin's region.

**Hiking trails on Miroc** - There is a tradition of mountaineering and numerous lanes on Miroc, but they are only partially marked. Knafelj's sign (red circles and white dot in the middle) marked the paths of the Veliki and Mali Strpac.

#### 4.10 Tourist attractions in the Region

#### 4.10.1 City of Zajecar

**Radul Begov Konak** – Built at the beginning of the XIX century, Radul Begov Konak is one of the oldest buildings in the city and an integral part of the National Museum. Konak has a ground floor and a floor with two folded docks. There is a sales gallery of paintings, sculptures and products of domestic work, as well as a place where book and literary evenings are often held, on the ground floor, and on the floor there is a permanent exhibition "Old Zajecar".

**Popova plaza** - Popova plaza is a sports and recreational complex close to the city center, on the bank of the river Timok. The complex includes tennis courts, mini golf, basketball, football, volleyball, bowling, skateboard ramps, as well as a special playground for children. The complex was built in 2008 and received the federal award for the most beautiful tourist complex by the river. It often gathers tourists and athletes.

**Forest park Kraljevica** - Located south of the city of Zajecar, it offers excellent conditions for sport and recreation. Kraljevica is very rich in sports facilities, because there are directly next to each other: city stadium with two ancillary stadiums, sports hall, outdoor swimming pool, more terrain for small sports, tennis courts of Euroklub, managed trim track, ski slope with ski lift, polygons for children. A hippodrome was also built and held a few exhibition races. Besides natural resources, Kraljevica also has a richness in the built - anthropological potentials: two monuments - participants of the Timok rebellion and Fallen soldiers in NOR; Youth center, Scout Chamber, Mountaineering Center, Kazamet and, more recently, facilities of the Faculty of Management.

**Felix Romuliana** - Felix Romuliana is an archaeological site of an antique fortified palace, located in eastern Serbia, not far from the city of Zajecar and the village of Gamzigrad. The complex belongs to a special category of monuments of Roman court architecture, linked to the form of imperial rule, known as the tetrarch. The palace was built on the idea of Emperor Gaius Valeria Galeria Maximilian, as a testamentary building and a place where he was buried. The complex was named after Galeri's mother, Romula, whose origin was from these parts. Two fortifications, as well as buildings that are chronologically tied to them, were built in a relatively short period of time, from 297 to 311. Since June 2007, Romuliana has been listed on the World Cultural Heritage List.

**Gamzigrad's spa** - It is located in eastern Serbia at 160 m above sea level in the meandar valley of the lower flow of Black Timok. The spa is surrounded by wooded hills and represents a very pleasant and quiet place for treatment, rest, recreation, sport and fishing, with a fresh and clean air, untouched nature, full of greenery and flowers, landscaped park, away from the urban environment. In the very center of the spa there is the Institute specializing in the rehabilitation of peripheral blood vessels and vibrational disease.

**Grliste's lake** - Artificial reservoir lake was founded in 1989 by the redevelopment of the Grliste's river to 4,5 km upstream from the estuary of the Grliste's river in White Timok. The lake is multipurpose and serves to supply Zajecar with drinking water, which makes it impossible to build tourism facilities, and the use of boats is forbidden.

**Liberation square** - The central city square in Zajecar is a real tourist attraction of this beautiful city in the central part of the Region of Iron gate. On the city square, tourists have the opportunity to get to know history of this region, because in one place you can see the remains of old beautiful buildings dominated by the National Museum building, to modern buildings with contemporary architecture. In the center there is the oldest memorial drinking fountain and clock, then the monuments and fountains and a beautiful park full of greenery and flowers in the shade of centurie-old trees, that will take your breath.

#### 4.10.2 Municipality of Majdanpek

**Lepenski vir** - Lepenski Vir is one of the largest and most important mesolithic and neolithic archaeological sites. It is located on the right bank of the Danube in the Iron gate gorge, in Serbia, in the central part of the Balkan Peninsula. This site, named after the Danube's whirlpool, was residence of one of the most important and most complex prehistoric cultures. Between 1965 and 1970 a fishing hunting settlement was discovered, with the beginnings of cultivation and domestication. During the excavation, seven successive settlements and 136 buildings (both residential and sacral) were discovered, built in the period from between 6500 to 5500 BC. The climate, which was more favorable here than in other parts of the Iron gate, rich hunting and fishing area, the organization of the enlarged human community, the tightness of the area and the pristine religiousness related to the river pebble, enabled the urbanization of the settlement, characteristic architecture and monumental stone sculpture. Considering all that is said, Lepenski Vir is one of the most important prehistoric sites in Europe.

**Rajko's cave**- Rajko's cave, an extremely important speleological, geomorphological and tourist rarity and attraction, is located only three kilometers from Majdanpek, at the source of the Mali Pek river. According to its speleological characteristics, especially by type and quality and appearance of cave's jewelry (snow white, sparkling, coral), by hydrological and climatic characteristics, Rajko's cave is the biggest discovery and unique phenomenon in the karst of the Balkan. In the cave there is a constant temperature of 8 ° C and humidity of air is 100%.

**Beli Izvorac** - It is located about 14km from Majdanpek and 2km from the main road. One of the attractive beauties of the Majdanpek region creates its source from the cave, creating the bigrene cascades and waterfalls.

#### 4.10.3 Municipality of Knjazevac

**Church of St. The Virgin** - It is located 15 km east of Knjazevac. It was built on the left, elevated coast of Trgovski Timok, in the 14th century by an unknown ktitor. Iconography is mostly preserved, and it

was done by two masters. Many compositions on frescoes in Donja Kamenica represent works of exceptional artistic value. First of all, the composition of the ktitor with the family, the performance of the Virgin of the Blessed One, as well as the unique, remarkable figures of two embraced horsemen, holy warriors, Theodore Tyrone and Theodore Stratilat, in the south of the gate.

**Old town** – It is a true park and monument of cultural heritage of Knjazevac region. It is distinguished by an authentic look that, as if it was not changed at least 2 centuries, and show a characteristic architecture with objects that can tell a story about the origin of this place. Tourists are offered a tour and shopping opportunity in old shops.

Waterfall Bigar and monastery in Stanjinc – Waterfall bigar is located near the village of Stanjinac and is twenty meters high. About a kilometer from the turning for Stanjinac, going along the main road towards Pirot, there is a modest, barely visible signpost that points to the monastery dedicated to St. Onufriju. Following the signpost, very interesting and colorful so called Panta's bridge number 3 is being crossed, above the Stanjinac's river. Monastery Sv. Onufrius mentions two records in one handwritten psalter in the Plovdiv Library. In 1576, Psaltir was renewed by the hieromonk Nifon, thanks to the efforts of the Provider Dimitrius of Osmak and Pope Flower from. In 1663, he was connected by hieromonk Athanasius, who mentioned the older monk Zivko from the temple of St. Onufria. This psalter was probably taken by visitors to Plovdiv "ot Koprivstica ot Filipe", and they put their signatures on Temska monastery wall in 1975." The church itself has been rebuilt several times, and according to the data of the Spiritual court in Nis, the church of Sv. Onufria was rebuilt in 1868. According to the priest Rajko Glisovic, the local parson, the monastery dates back to the 13th century.

**Stara Planina – Babin Zub** - Babin Zub is a specific morphological form where the western side (Knjazevac's side) is characteristic by the vertical sections of the wall, where one detachment is distinguished by a shape that resembles an old tooth, which is how it was named. Its height is about 200m and is only accessible to alpinists. From the south side Babin Zub is slightly abrasive and descends towards the villages Topli Do and Zaskovci, on the side of the municipality of Pirot. The whole area is rich in springs and water. In addition to the mountain home, there is the spring from which the Trgovski Timok is created, and the mountaineers used this water for drinking from ancient times. In addition to this forest source on Midzor, there are also Kaludjerske vode (1780m) and Tri Kladenca (over 1800m) that are rich in water throughout the year. There is a ski resort on Stara Planina with a total of 13 km of trails connected with the system of lifts and complete infrastructure.

**Archeo-ethno park in Ravna** - It is located next to Knjazevac and is a complex of open-air museum with typical houses of traditional architecture of Knjazevac region. Within this park are: the research station, in the village school, is intended primarily for teams of students, experts and scientists of different profiles (ethnologists, archaeologists); lapidarium with exposed Roman stone monuments found during archaeological research; an ethno-park in which a rural household was reconstructed at the end of the 19th and early 20th centuries with the aim of presenting and nurturing the traditional construction of the region. This household consists of - a house from Gornja Kamenica, in whose cellar there is a Museum of Wine with a wine cellar, a house from Bercinovac, amber and a kettle for baking

brandy from Stara Planina; The Museum of traditional outdoor economy is still a process in work. The park is part of the Serbian Wine Route organized by TOS.

#### 4.10.4 Municipality of Sokobanja

**Vacationland Lepeterija** - It is located 1500m from the center of Sokobanja. There is, at the very site, an apartment complex with a restaurant, a decorated beach on the river Moravica, a decorated park complex for children with a large number of wooden props for playing, as well as special places for fire building along the Moravica River. In the vicinity of this excursion site there is also the Church of St.Petki, as well as a number of marked churches. A cave with the image of the Presveta Bogorodica with Jesus in her arms can be seen from the excursion site in the direction of the high rocks across the river, and represents a special natural phenomenon. At 400m upstream of Lepterija, there is a medieval fortress Sokograd, which can be reached by a marked hiking trail.

**Park on Banjica** - Park on Banjica, with the same name bathroom, is located on the left bank of the Moravica, with arranged hiking trails and a quay beside the river. On the periphery of the park, upstream, there is the most famous Sokobanja's beach "Zupan", with a spacious pebble beach. Attraction in the park is one ill tree of the old platan, with knots, for which is said to be the Tree of Wishes. Often we can see walkers touching the platan, thinking of a wish, believing that it will be fulfilled.

Mountain Ozren - Ozren is a mountain on whose southern slopes lies the town of Sokobanja and represents a unique complex with a number of attractive tourist sites: waterfalls "Ripaljka", Ozren's cave, sanatorium "Ocno", excursion "Kalinovica", park in the complex of the Special Hospital "Ozren", monastery Jermenčić from the XIV century dedicated to Arhangelu Mihailu, the resort "Vlasina" on the plateau of the same name, the peak of the "Ostra cuka" 1117m. In this complex there is a beautifully landscaped park, terrains for small sports, football, basketball, handball, tennis, trout lake on the very source of the river Gradasnica, next to which there is a restaurant with a summer garden. About 200m downstream from the source there is waterfall "Ripaljka", one of the most beautiful and largest waterfalls in Serbia. Through the complex of the Special Hospital, there is a road leading to the Jermenčić Monastery, 3.5km from the hospital. If you continue, after entering the complex, down the asphalted road towards the Jezero village, after 2km you arrive at the picnic "Ocno" and "Kalinovica", which have well-equipped fire places and drinking water from the surrounding mountain sources so that they are especially suitable for picnics and all-day excursions. 3km from there, there is the plateau "Vlasina" which is about 1000m above sea level, a resort of extraordinary ambient values, of which at 800m there is the peak Ozren "Ostra cuka" 1117m above sea level from which you can look at the picturesque Sokobanja basin.

**Vacationland Borici** - The resort "Borici" is located 250m from the center of Sokobanja The resort is reached by the Vojvoda Misic Street from the hotel Park, on the marble walkway, through the summer stage Vrelo, from where the path leads along the Sokobanja's waterfall from 1934, the memorial of

the Hajduk Veljko's fountain and arrives on a paved pine forest known as the "BORICI". The resort includes a grassy field for small sports and a children's park with teteers, swings, climbing and other props for children. It has a mini bar with a summer garden and decorated fire places suitable for picnics and day trips.

**Bovan's lake** – Bovan's lake is located on the tenth kilometer of the regional road Sokobanja – Aleksinac. Artificial reservoir lake on the Moravica river is made for the water supply of Aleksinac, which due to its emerald green color of water and the attractive nature surrounding it, represents a special tourist attraction. During summer, many swimmers, fishermen and campers seek refreshment and rest on many beaches and bays of the "Sokobanja's sea". The most beautiful beach can be found near the village of Bovan, where there are boats and pedalines for rent, several catering facilities and several private weekend - houses where accommodation can be found.

#### 4.10.5 Municipality of Negotin

**Rajacke pivnice** - The pubs are located near the village of the same name, on the hill next to Timok. They represent a unique architectural complex of wine cellars built from the mid-18th to the 1930s. The complex consists of 270 pubs around the central square with a fountain. They were built of stone, often carved, of logs or bondruk, thick walls, often over 60 cm. Basements are partially buried in the ground so that the temperature varies very little over the year, and there are rooms for staying at the time of harvest and wine cultivation on the first floor.

**Vratanj's gates** - Near the Vratna Monastery, on a mountain river, clear and suitable for fishing, there are huge stone doors-gates, made by nature. The first gate is named VELIKI PRERAST, the other is MALI PRERAST, and the third SUV PRERAST. The whole complex of the Vratna, the village, the monastery and the gate, is surrounded by rivers and forests and is one of the most interesting tourist destinations of Negotin region. The Vratna river canyon has been known since ancient times by stone gates and unusual whirlpools, the wonders of nature. These are stone arches or gates, above the river, that in the distant past were caused by the collapse of the caves of the tunnel's type. Geographers call these stone wonders prerasti. Near the third gates, three unexplored caves have been discovered so far. They are "real arts of nature". The beauty of the Vratnjan's gates is complemented by the medieval Vratna Monastery, as well as the same name hunting ground with a large flock of mouflon and a deer of the deer paddle.

**Vrelo Sarkamen** - Imperial Palace Sarkamen - Late Antique residential memorial complex built at the end of the 3rd and early 4th centuries, in the period of Roman reign, known as tetrarchy - the reign of the four. The palace is located in the village of Sarkamen, 25 km west of Negotin, and was built by the Roman Emperor Maksimin Daja, who wanted to leave a mark in his hometown and something to be remembered by. Like Galerio who built Gamzigrad's Felix Romuliana, and Daja in his homeland began to build a palace that will show his greatness. One of only four Emperors' palaces outside Rome was found in Sarkamen. Imperial Palace, just like today, was far from the trade routes, communications.

The research was carried out on one of the five visible objects - Mausoleum of the Emperor's mother, in which a set of golden imperial jewelry was discovered in 1996 (located at the National Museum in Belgrade), from the period of Galerio and Maksimin Daje (293-1311).

**Central city square** – It is a remarkable tourist attraction, because it offers exceptional architecture and facilities that show the centuries-old history of this city, which was the head of the former Negotin region. The square is dominated by a monument to Hajduk Veljko, a hero from Serbian history, and across the street there is an old church. The whole complex is today a pedestrian zone and it is the starting point for all tourist groups coming to visit a city full of history and tradition.

**Monastery Bukovo** - It is located three kilometers west of Negotin, surrounded by forest. It is believed that it was built during the time of King Milutin, at the end of the 13th or the beginning of the 14th century, and that it was done by the Archbishop Nikodim. According to the architectural and stylistic characteristics, the monastery church of St. Nikola has similarities with the Morav's style of construction that is characteristic of the period of Serbian Despotovina (XV century). The oldest and most valuable frescoes are: Virgin with Christ - on the vault and fresco of Arhandjela Mihaila at the entrance to the Church. The last layer of the painting was made in 1902 in a romantic manner according to the design of Steva Todorovic. Frescoes were done by his associate, a painter from Knjazevac, Milisav Markovic. The bell was given to the monastery by Knjaz Milos Obrenovic, in the thirties of the XIX century.

#### 4.10.6 Municipality of Bor

**Zoo** - It is located in the city, with parking, a café and additional accompanying amenities

**Veliki i Mali Krs** - Veliki Krs is a mountainous area that rises to a height of 1,148 m, and is located ten kilometers northwest of Bor. Mali Krs continues from Veliki Krs to the north, and the highest peak is Garvan (929 m). It is 6 km long and 2 km wide. This is one of the favorite routes for cyclists from all over Europe, and the landscapes are incredible.

Bor's mine - a copper mine, with a beautiful view of the deepest artificial hole in Europe

**Brestovac's spa** - It is known as a spa from Roman times, and systematic use for treatment and relaxation began in the 19th century.

**Mountain Stol** - Mountain Stol is one of the most beautiful places in this part of Serbia, with a peak at 1.155 meters above the sea level, from where the Danube can be seen when the weather is clear. At the foot of Stol is a beautiful lake and a mountain house.

**Zlot's caves** - Not far from the village of Zlot near Bor, there is a huge cave system, one of the largest in Europe, consisting of ten caves, and the best known are Lazareva and Vernjikica (and best explored).

**Bor's lake and mountain Black Peak** – Bor's lake is an artificial lake created in 1959 by lifting the dam. The lake is at the foot of the mountain Black Peak, and the swim season lasts more than two months. At the end of the lake there is a hotel "Jezero".

**Lazar's Canyon** – Lazar's canyon is one of the most beautiful and deepest canyons in Serbia. The canyon is about 4.5 km long and 500m deep. The minimum width of the riverbed (canyon) is 3-4 m, and the walls are very steep, mostly vertical.

#### 4.10.7 Municipality of Boljevac

**Mountain Rtanj** – Its like a real pyramid with a peak at an altitude of 1566 m, from where it is possible to see the Danube, Avala, Kopaonik and Stara planina, the city of Vidin in Bulgaria, etc..

**Bogovin's cave** - The protected natural area, and with the length of more than 6000 meters, it is one of the longest caves in Serbia.

#### 4.10.8 Municipality of Veliko Gradiste

**Silver lake** – It is located two kilometers from Veliko Gradiste, where the Danube meanders are. It was created by putting the dam on the Danube as protection against groundwater. The lake is 14 km long, and it is one of our biggest lakes. Also, the lake is rich in fish and is a true paradise for fishermen. Here, 45 kg carp was caught, which broke Ginis's world record.

**Fortress Ram** - On the rocky cliff downstream of Smederevo, there are remains of the medieval fortress Ram. Today's remains of the fortress originate from the period of the Ottoman emperor Bajazit II, and they were built in place of a much older fortress.

#### 4.10.9 Municipality of Golubac

**Golubac's fortress** – Its a medieval fortified town on the southern side of the Danube River, 4 km downstream from today's Golubac. The fortress, most probably built during the XIV century, was divided into three parts, which were built in stages. It has ten towers, and several of them have received multiple reinforcements with the appearance of firearms.

#### 4.11 Tourist indicators

The number of tourists in the Region, over the last few years, can be seen in the following table:

Table 10: The number of tourists and number of overnight stays in the Region for the period of 2010-2015

Number of Tourists			Number of overnight stays				Average number		
Year	Domestic	Foreign	Total	Year	Domestic	Foreign	Total	of overnig	
	tourists	tourists			tourists	tourists		Domestic	Foreign
2010	139.148	12.678	151.826	2010	574.575	29.069	603.644	4.2	2.3
2011	146.602	14.833	161.435	2011	605.096	6.096	611.192	4.7	2.5
2012	149.782	14.953	164.735	2012	597.869	32.651	630.520	4.1	2
2013	139.979	18.975	158.954	2013	560.721	40.304	601.025	3.9	2.2
2014	120.521	23.571	144.092	2014	427.468	59.935	487.403	3.5	2.6
2015	131.253	30.733	161.986	2015	436.757	71.244	50.8001	3,4	2,3

Source: Statistical office of the Republic of Serbia

Table 11: Overview of basic data on the number of tourists in the Region for 2016

Municipality	Nu	mber of touri	sts	Number of overnight stays			
wunicipanty	Total	Domestic	Foreign	Total	Domestic	Foreign	
Bor	14.862	11.158	3.704	36.389	26.483	9.906	
Kladovo	25.651	21.719	3.932	50.187	42.219	7.968	
Majdanpek	24.774	20.023	4.751	44.245	33.635	10.610	
Negotin	4.971	4.492	479	14.043	12.715	1.328	
Zajecar	13.438	8.389	5.049	41.703	33.960	7.743	
Boljevac	5.997	4.222	1.775	11.114	8.135	2.979	
Knjazevac	15.439	10.922	4.517	55.014	41.611	13.403	
Sokobanja	45.918	42.725	3.193	219.224	212.213	7.011	
Veliko Gradiste	17.891	15.755	2.136	52.861	46.378	6.483	
Golubac	3.186	2.470	716	4.540	3.606	934	
TOTAL	172.127	141.875	30.252	529.320	460.955	68.365	

Source: Statistical office of the Republic of Serbia

Table 12: Overview of basic data on the number of tourists in the Region for 2017:

Municipality	Nu	mber of touri	sts	Number of overnight stays			
Wullicipality	Total	Domestic	Foreign	Total	Domestic	Foreign	
Bor	16.652	12.875	3.777	43.152	33.133	10.019	
Kladovo	32.043	26.937	5.106	73.250	61.200	12.050	
Majdanpek	27.605	22.662	4.943	51.330	41.812	9.518	
Negotin	6.547	5.396	1.151	21.613	17.770	3.843	
Zajecar	15.292	9.502	5.790	47.758	34.885	12.873	
Boljevac	6.036	4.433	1.603	11.030	8.464	2.566	
Knjazevac	16.850	13.339	3.511	57.584	46.727	10.857	

Sokobanja	53.915	51.268	2.647	261.930	255.150	6.780
Veliko Gradiste	25.681	22.280	3.401	69.228	58.473	10.755
Golubac	3.061	1.806	1.255	4.509	2.752	1.757
TOTAL	203.682	170.498	33.184	641.384	560.366	81.018

Source: Statistical office of the Republic of Serbia

Table 13: The volume of tourist traffic on the territory of Kladovo municipality (period 2007 - 2017)

DEDIOD	NUN	BER OF ARRIV	'ALS	NUMBER OF OVERNIGHT STAYS			
PERIOD	total	domestic	foreign	total	domestic	foreign	
2007.	22.517	20.411	2.106	57.302	51.357	5.945	
2008.	23.120	21.592	1.528	45.913	42.717	3.196	
2009.	27.199	24.741	2.458	69.127	64.596	4.531	
2010.	30.542	28.158	2.384	85.855	80.310	5.545	
2011.	31.566	28.230	3.336	87.637	79.526	8.111	
2012.	25.524	22.875	2.649	66.972	60.657	6.315	
2013.	23.746	20.610	3.136	63.577	55.715	7.862	
2014.	16.050	13.293	2.757	39.102	30.757	8.345	
2015.	22.347	18.791	3.556	49.326	40.810	8.516	
2016.	25.651	21.719	3932	50.187	42.219	7.968	
2017.	32.043	26.937	5.106	73.250	61.200	12.050	

Source: Statistical office of the Republic of Serbia - Department in Zajecar

Table 14: Number of tourists in the municipality of Kladovo by their countries (2017)

	Number of	Number of		
Country	tourists	overnight	Average stay	
Total	32043	<b>stays</b> 73250	2.3	
Total				
Foreign tourists	5106	12050	2.4	
Austria	164	330	2.0	
Belgium	16	31	1.9	
Bosnia and Hercegovina	377	847	2.2	
Bulgaria	617	880	1.4	
Greece	7	8	1.1	
Denmark	45	159	3.5	
Italy	63	95	1.5	
Lithuania	1	2	2.0	
Luxembourg	1	1	1.0	
Hungary	199	212	1.1	
Germany	198	305	1.5	
Norway	4	4	1.0	
Poland	63	69	1.1	
Portugal	2	2	1.0	
Republic of Macedonia	176	571	3.2	
Romany	1669	3573	2.1	
Russian Federation	161	2479	15.4	

Slovakia	11	27	2.5
Slovenia	600	942	1.6
Turkey	4	7	1.8
United Kingdom	13	26	2.0
Ukraine	37	57	1.5
Finland	1	1	1.0
France	122	314	2.6
Holland	74	191	2.6
Croatia	94	226	2.4
Montenegro	75	205	2.7
Czech Republic	14	15	1.1
Switzerland and Liechtenstein	51	83	1.6
Sweden	19	52	2.7
Spain	20	22	1.1
Other European countries	30	33	1.1
Other African countries	1	2	2.0
Canada	9	20	2.2
United States	15	35	2.3
Other countries of North America	2	2	1.0
Brasil	3	3	1.0
Other countries of South and Central America	1	2	2.0
Israel	63	122	1.9
Japan	5	5	1.0
China (including Hong Kong)	15	16	1.1
Other Asian countries	3	3	1.0
Australia	60	68	1.1
Other countries of Oceania	1	3	3.0
Domestic tourists	26937	61200	100.0

Source: Statistical office of the Republic of Serbia - Department in Zajecar

In addition to this statistics, a significant number of tourists come to Donji Milanovac from cruise ships. Ships stop only for a few hours, and the number of tourists is given in the following table:

Table 15: Number of tourists from cruise ships

Year	2012	2013	2014	2015	2016
Number of Ships	67	60	101	116	113
Passengers	8.301	7.546	11.544	13.867	13.806
Crew	2.659	2.277	3.785	8.945	4.687
Total	10.960	9.823	15.329	22.812	18.493

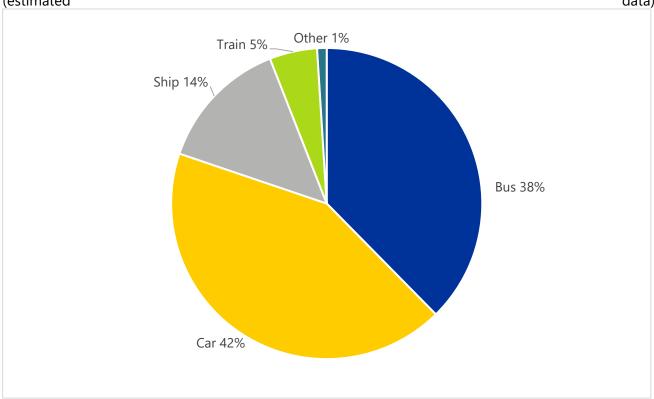
Source: Tourist Organization Majdanpek

Table 16: Overview of the number of tourists and the number of overnight stays per tourist destination 2016

Municipality	Number of Tourists			Number	of overnigh	Average number of overnight stays		
	Total	Domesti c	Foreign	Total	Domestic	Foreign	Total	Domesti c
Spa (Serbia тотаl)	477102	391085	86017	2085044	1831205	253839	4,7	3,0
Gamzigrad's spa	1750	1675	75	20844	20518	326	12,2	4,3
Sokobanja	45918	42725	3193	219224	212213	7011	5,0	2,2
Mountain places (Serbia тотаl)	522424	425793	96631	1928533	1641427	287106	3,9	3,0
Majdanpek	2220	1476	744	3729	2489	1240	1,7	1,7
Stara planina	15465	11009	4456	54035	41138	12897	3,7	2,9
Other touristic places (Serbia тотаl)	605136	369032	236104	1216312	763017	453295	2,1	1,9
Bor	12456	9350	3106	28574	20458	8116	2,2	2,6
Donji Milanovac	13978	10684	3294	20296	14951	5345	1,4	1,6
Zajecar	6293	4029	2264	10504	4666	5838	1,2	2,6
Karatas	3186	2470	716	4540	3606	934	1,5	1,3
Kladovo	22554	18547	4007	40516	31146	9370	1,7	2,3

Source: Statistical Office of the Republic of Serbia

Graph 6: Percentage of tourists according to type of transport they use to travel car / train / bus / boat (estimated data)

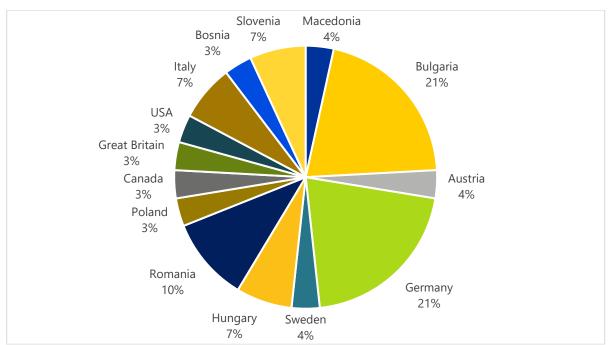


The following table shows the structure of income from tourism (in thousands of dinars):

Table 17: Review of income in thousands of dinars made on the territory of the Region from foreign and domestic tourists in the period from 2011 to 2014

Year	Domestic	Foreign	Total
2011	4.005.792	466.315	4.472.107
2012	4.443.243	506.757	4.950.000
2013	4.038.235	722.965	4.761.200
2014	3.581.291	894.714	4.476.005

Source: Statistical Office of the Republic of Serbia



*Graph 7:* Structure of tourists coming to the territory of the Region for the period 2010-2015. year, by countries

Looking at the whole region, it can be concluded that tourism contributes very little to total national income and new working places. The reason for this is domination of large systems (copper mines in Bor and Majdanpek with associated activities and hydroelectric power plant Iron gate) that very much influence statistical data Besides, tourism is not always shown and clearly visible in official statistical data, because figures related to tourism are hidden in several other activities (hotels and restaurants, shops and other services).

Tourism is certainly not the most important branch of economy in Kladovo and the region, but the potential for its further development is undoubted, and the importance for diversifying the local economy is remarkable because it creates a lot of opportunities for small private initiatives, but also a major economic investments.

#### 5. Existing mobility services for tourists

The level of development of the mobility services in the Region is relatively low. There are not enough tourist packages based on mobility services, and the only offer for cycling tourists is the possibility to rent bicycles in some municipalities (but they must return them to the same place), ie the existence of marked biking routes to a certain level.

Tourist information centers exist in each municipality and they are part of the local tourist organizations. Info centers do not have their own special websites, but basic informations about tourist destinations are available on the website of tourist organizations, with the problem that there is usually no information on how to reach them.

Within the development of the EuroVelo 6 bicycle route and overall sustainable mobility, DCC has established cooperation with the local transport company Arriva from Pozarevac, which has several bus lines throughout Serbia. DCC donated bicycle carriers, which were installed on buses on the line connecting Belgrade with Kladovo, which stops at Golubac and Donji Milanovac. Buses have the option of transferring up to 4 bicycles, which allows one family or group of cyclists to easily reach attractive destinations in the Iron gate Region. This is the first regional line of this type in the territory of Serbia.

# 6. Key participants identified in the Region

- 1. Local tourist organizations (which exist in each municipality formed by the municipalities for promotion of tourism)
- 2. Ten local self-governments in the Region: Zajecar, Bor, Negotin, Knjazevac, Kladovo, Majdanpek, Sokobanja and Boljevac
- 3. Institutions involved in the management, promotion and protection of the Region and / or individual regions within the Region National Park Iron gate, Public Enterprise "Stara Planina", Regional Development Agency Eastern Serbia RARIS, Danube Competence Center-DCC
- 4. Tourism economy (restaurants, hotels and entrepreneurs involved in the tourism industry
- 5. Tourist agencies in the Region
- 6. Carriers (bus operators, taxi, Serbian Railways, Lucka kapetanija etc)

## 7. Transport network and sustainable transport systems

### 7.1 Traffic connections of the municipality of Kladovo

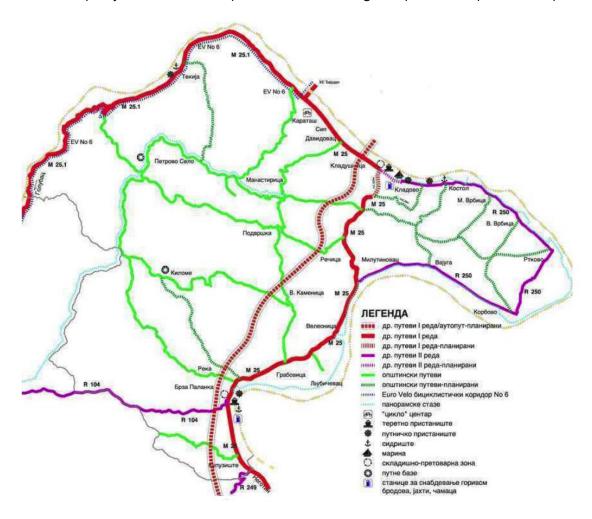
The Municipality of Kladovo is located on the important traffic corridor VII, directly on the waterway and on important EuroVelo bicycle corridors. When it comes to sustainable traffic, the basic characteristics of the municipality of Kladovo are:

- A port for landing passenger boats has been registered
- Bicycle paths exist within the pedestrian paths, and in the town of Kladovo there are 12 parkings for bikes on 12 locations
- The hiking infrastructure is well developed, there are built hiking trails around the lake in Kladovo, a walking path along the quay, wide sidewalks for pedestrians and one pedestrian zone in the center of Kladovo.

In Kladovo on pedestrian communications - sidewalks there are built ramps for people with disabilities, also at important public institutions like: Hospital, Health Center, Cultural Center, Youth Center and High school.

Of the planning documents, which affect traffic, in Kladovo municipality there are: Spatial plan of Kladovo Municipality and Plan of general regulation Kladovo.

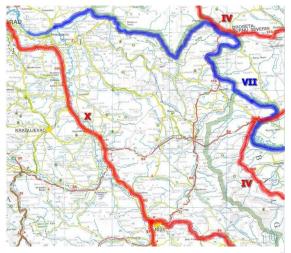
There is a Department for economic and social activities that also deals with traffic in the Municipality of Kladovo. The municipality of Kladovo is responsible for financing one part of the public transport



Picture 3: Planned network of roads in the municipality of Kladovo

#### 7.2 Road infrastructure

The territory of the Region is characterized by proximity to European road corridors X and IV and river corridor VII which represents the northern border of the Region.



Picture 4: The position of the pan-European corridors

Iron gate Region is connected with other parts of Serbia through a network of roads. The road network of Republic of Serbia, which is 40.485km long, consists of:

- 5.525 km of main roads (first priority)
- 11.540 km of regional roads (second priority)
- 23.780 km of local roads (third priority)
- 498 km of highways with toll booths
- 136 km of roads that have more modern infrastructure, but are not highways

Looking at the whole road network, 2/5 roads do not have an asphalt surface. In Serbia, 32% of roads of the first and second priority are older than 20 years, and only

14% were built or reconstructed in the last 10 years.

The region of Iron gate has:

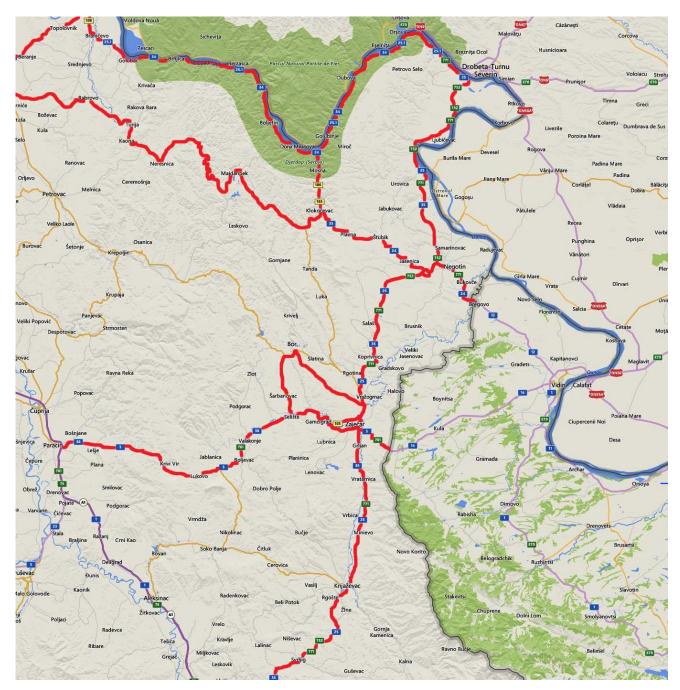
- 418 km of main roads
- 815,5 km of regional roads and
- 484,0 km of local roads

The relation between the length of the roads in Serbia and the Timok region is shown in the following table:

Table 18: The relation between the lenght of the roads in Serbia and the region of Djerdap of 2014

Territory	Highway [km]	State road [km]	Regional roads [km]
Serbia	634	5.525	11.540
Djerdap region	0	418	815,5
%	0	7,6	7,1

Source: Statistical Office of the Republic of Serbia



Picture 5: Main roads network in the region of Iron gate

Due to lack of investments in maintenance and reconstruction of roads, the current network of roads in the Region is not up to standards. Out of the total number of tunnels, 4 of them are on the state road of the first B line - 36 Paracin-Zajecar, and 18 of them are on the road 34 Pozarevac-Porec's bridge. Of the total of 22 tunnels in the Region of Iron gate, only two are illuminated - Strmen and Grza on the road 36. There are several major roads in the Region (first B priority):

- 1. 36 Paracin Zajecar Vrska Cuka
- 2. 35 Nis Zajecar Kladovo Iron gate
- 3. 34 Porecki most Donji Milanovac Veliko Gradiste Pozarevac
- 4. 33 Negotin Majdanpek Pozarevac
- 5. 37 Zajecar Bor Seliste

There are also three important roads of the second A class in the Region:

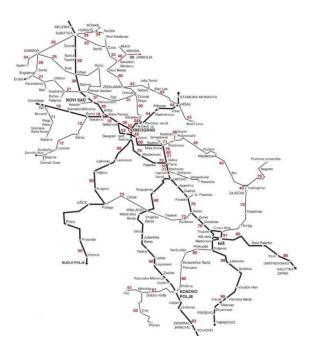
- 1. 217 Vukanja Aleksinac Sokobanja Knjazevac,
- 2. 221 Knjazevac Kalna Pirot Dimitrovgrad
- 3. 165 Porecki most -Klokocevac-Miloseva Kula-Zagradje-Rgotina-Vrazogrnac- Zajecar-Zvezdan

Table 19: Network of roads in the Region of Djerdap (2015)

Municipality	Total Asphalt		State roads 1. category		State roads 2. category		Municipalities's roads	
		<b>,</b> , , , , , , , , , , , , , , , , , ,	Total	Asphalt	Total	Asphalt	Total	Asphalt
Bor	365,67	267,77	37,37	37,37	172,6	155,5	155,7	74,9
Kladovo	246,24	133,24	62,24	62,24	40,0	30,0	144,0	41,0
Majdanpek	405,89	226,99	117,61	117,61	87,68	87,68	200,6	21,7
Negotin	476,38	366,68	80,18	80,18	144,2	112,5	252,0	174,0
Zajecar	520,103	409,338	94,95	94,95	197,5	162,0	227,653	152,388
Boljevac	244,01	168,55	38,85	38,85	79,86	64,4	125,3	65,3
Knjazevac	491,4	409,4	30,5	30,5	187,0	167,5	273,9	211,4
Sokobanja	169,12	142,77	-	-	83,6	72,6	85,52	70,17
Veliko Gradiste	256,97	232,17	56,56	56,56	102,66	99,86	97,75	75,75
Golubac	219,982	205,108	87,08	87,08	74,7	74,7	58,202	43,328
TOTAL	3395,765	2562,016	605,34	605,34	1169,8	1026,74	1620,625	929,936

Source: Municipalities in Serbia, 2016

#### 7.3 Railway infrastructure



Picture 6: Railway network in Serbia

Of the total length of the railway network in Serbia, which is 3,808 km, there are 240 kilometers of the railway line in the Iron gate Region. While there are a total of 1,196 km of electrified railways in Serbia, there is no electric railroad in the region. The rail network is not satisfactory - the speed limit ranges from 40 km / h to 80 km / h, the quality of trains and their timetables are not up to standards. In 2014, the railway transported around 600,000 t of goods and 456,000 passengers.

The largest volume of traffic was achieved at the stations "Prahovo's terminal" (106.000 t) and Bor (173.000 t). Railway transport and the possibility of its further development can play an important role in the development of the transport system of Region Iron gate, but significant investments and modernization of existing railroads will be needed.

#### 7.4 River traffic

According to the European Economic Commission (EEC) classification, the Danube in the Iron gate Region is the VII class waterway, for vessels 285m long, 33.0 to 34.2 m wide and 2.5 to 4.5 m deep, with capacity between 14500 and 27000 t.

Port Prahovo is located on the right bank of the Danube (861 km). The daily average capacity of the port is 12,000 t with the simultaneous processing of 7 vessels. The port has three parallel lines with a total length of 971 m, which allows the possibility of simultaneous processing of



Picture 7: Corridor 7

160 wagons. It is characterized by an outdated technical equipment and infrastructure. It is the last port on the territory of Serbia and is located 4 km downstream from "Iron gate II". It is connected by railway and road traffic with the rest of Serbia.

There are ports, in this part of the Danube, that primarily serve as ports for passengers ships used for tourism – Donji Milanovac, Tekija and Kladovo, as well as a large number of small and unorganized anchorages for ships.

One of the obstacles for further expansion of water transport is the large number of sunken ships near Prahovo, from the Second World War, because they can slow down navigation.

#### 7.5 Air traffic

There are 39 officially registered airports in Serbia, but only 5 are on the list of airports with IATA code (IATA Airport Register).

Airport Bor (ICAO code: LY89) is an unused potential of the Timok region that could be used to improve the accessibility of the entire Region. The airport has one take-off and landing path (dimensions 1086 x 30m), with a tower, a terminal building and a hangaroon. At the airport there is a terminal for 8 smaller planes with heliodrom.

There are two smaller airports important for the Region, which are mainly used by the so-called " Low Cost companies, but who have a steady increase in the number



Picture 8: Airports in Serbia

of lines and passengers - Konstantin Veliki Airport in Nis and the airport in Craiova, Romania.

#### 7.6 Bicycle routes



Picture 9: Euro Velo 6

Euro Velo 6 enters the northern border of Serbia near the town of Backi Breg. In the south, near the Serbian-Croatian state border, the route follows the Danube. This region (Gornje Podunavlje) covers large swamps along the left bank of the Danube. Following the flow of the river, the biggest national park in Serbia passes, National Park Iron gate.

Euro Velo 13 is the second route that passes through the Region. While the roads along the Hungarian and northern Romanian borders are quite flat, the route tracks the border between southern Romania and Bulgaria through several mountain massifs. Passing through Iron gate is a special experience. From there the route follows the slopes of Stara Planina, on the Bulgarian-Serbian border.

Euro velo 6 is a cycling route that goes through the region of Iron gate, which covers a length of over 665 km - from the Hungarian border near Apatin to the Bulgarian border near Negotin. Route marks can be found everywhere. The most beautiful part of the route is the road through Iron gate, which is very atractive and not overburdened with traffic.



Picutre 10: Euro Velo 13

#### 7.7 Borderlines

There are following borderlines in the Region:

- With the Republic of Romania on the state road M 25.1 "Iron gate 1" on the dam Iron gate 1;
- With the Republic of Bulgaria on the state road M-24 "Mokranje" and
- With the Republic of Bulgaria on the state road E761 M-5 "Vrska Cuka".

Two more borderlines are under preparation: Iron gate 2 with Romania (on the Danube) and "Kadibogaz" with Bulgaria, near Knjazevac.

#### 8. Usability and accessibility of transport systems

The characteristics of the existing traffic system in the Iron gate Region are:

- The density of the main roads in the Region is above average, while the density of local roads is below the average for Serbia;
- The accessibility of the settlement is satisfactory
- In the total traffic, cars are dominant with more than 80%, while trucks have an average of 18%
- Traffic is increasing in urban and large settlements;
- The achieved level of individual motorization is below the average of the Republic. Only Kladovo has the level of motorization at the level of the republican average.
- Public passenger transport exists, but is not satisfactory, especially when it comes to the local network lines. Although all the cities in the Iron gate Region have built bus stations in the centers of the settlements, they are rather old and lack the necessary equipment.
- Bus transportation is not easy to organize due to the indentation of the territory and a small number of passengers. There are a large number of operators in the Region of Iron gate that connect it with Nis and Belgrade, but also settlements within the Region, however, the frequency is not great;
- The timetable information is not always available
- The only way to buy public transport tickets is "on-site" and in most cases it is not possible to pay with a credit card. It is not possible to buy tickets online.
- Public transport is generally not accommodated for people with disabilities.

#### 9. Existing plans at the national level

At the national level, there are several documents that directly or indirectly address mobility issues in the Region. Besides law, the following strategies are important:

- Water transport development strategy (2015-2025)
- Road safety strategy for the period from 2015 to 2020

Serbia has also accepted a partnership with Austria in promoting sustainable cycling, along with 56 countries that have decided to establish a pan-European master plan for the promotion of cycling.

The National Action Plan for transport, environment and health is under preparation, with a plan of activities for the realization of the goals of the Paris Declaration.

It was also announced that the National plan for biking, with the support of the PEP program, will be prepared.

Due to the fact that there is no regular shipping line on the Danube, RARIS has developed a Feasibility Study for the introduction of a river line on the Danube, which should connect Belgrade with Tekija (near Kladovo). Preparatory activities for this project are in progress.

While tourism is recognized as a priority in almost all local (municipal) strategies, mobility concepts are not presented in these documents. The two main regional documents dealing with mobility are the Master Plan of the Donje Podunavlje and the Regional Development Strategy of the Timok region.

#### 9.1 Master Plan of the Donje Podunavlje

Master Plan of Donje Podunavlje was prepared at the request of the Government of Serbia in 2007. The key objective of this plan is to serve as a basis for the tourist valorization of the natural ecological and cultural resources of the area, as a basis for sustainable development.

As stated in the plan, one of the priorities for the lower Danube region is the activation of public transport.

The intention is to improve the public transport and increase the mobility of tourists. One of the measures is to organize public transport during the tourist season or increase the number of lines during the season.

The plan is stating that the public transport is not developed at this time, mainly because villages and towns along the Danube coast are small, both spatially and demographically, and in the past there was no economic need to activate public transport or taxi services.

According to the plan, the expected results should be:

- Creation of a tourist transport system with the offer of several routes and services within the area;
- Connecting the Donje Podunavlje area to adjacent areas;
- Increasing the mobility of tourists and local people;
- Reducing the risk of excessive use of private cars during the tourist season

#### Action plan:

- Creating tourist bus lines: these lines should connect all important tourist places within the tourist area of the Donje Podunavlje and neighboring countries.
- Introduction of a river communication line along the Danube settlements, from Veliko Gradiste to Kladovo (it is necessary to prepare appropriate tourist infrastructure which will enable easy and efficient access to ships, as well as access for land users). Ships should communicate at regular intervals or according to a specific schedule during the tourist season.
- Establishment of taxi services in tourist areas: there is a need for such public transportation, especially considering the need to increase the mobility of tourists. During the tourist season it is necessary to intensify this service.
- Introduction of integrated payment systems for public transport (eg Integrated cards that would enable tourists and local residents to travel in different modes of transport: by bus, by boat, by taxi)

#### 9.2 Regional Development Strategy of Timok's Region for the period 2011-2018

The preparation of the Regional Development Strategy of Timok's region started as part of a wider process aimed at improving the capacity of local self-government unit and providing support to the Timok's region institutions with the regional development.

One of the priorities defined in the Strategy is "Accessibility and traffic in the region (quality of movement freedom)"

Goal of this priority: To increase the level of accessibility of the Timok's region. Indicators are:

- Length of repaired roads
- Length of newly constructed roads
- Length of reconstructed railways
- The quantity of loaded and unloaded goods in the port
- Number of passengers in public transport
- Number of tours
- The number of ships stopping in the region (staying longer than 6 hours)
- Length of bicycle paths built.

#### Measures and activities:

1. Improvement of existing and construction of new transport infrastructure

- 1.1. Provide conditions for the construction, reconstruction, equipping and maintenance of state roads of the first and second categories, as well as other transport systems (spatial plannig, fundraising...)
- 1.2. Harmonization of the development of traffic infrastructure with the planned urbanization process, by developing urban centers and settlements
- 1.3. Accelerate the reconstruction of existing municipal roads, roads of the first and second category and construction of new roads
- 1.4. Start building bypasses around centers of municipalities
- 1.5. Support the reconstruction of technical and other railway elements in accordance with European requirements
- 1.6. Analyze the possibilities of revitalization and modernization of the port "Prahovo" as the intermodal center of the Timok region
- 1.7. Provide conditions for construction, reconstructions, equipping and operation od marinas docks on the Danube
- 1.8. Provide conditions and prepare construction of the bicycle paths
- 1.9. Analyze the possibilities of modernization and technical equipping of Bor airport and improvement of air traffic in the region.
- 2. Improving the quality of public transport systems
  - 2.1. Develop a public transport planning system that includes aspects of the geographical distribution of activities, destinations, settlements, etc.
  - 2.2. Analyze the needs of the region and the potential for improving public transport
  - 2.3. Introduce a coordination mechanism for public transport providers
  - 2.4. Prepare a set of activities to support providers of public transport service
- 3. Introduction of a multimodal freight transport system
  - 3.1. Develop the concept of multimodal freight transport
  - 3.2. Initiate the first steps (analyze readiness of the project documentation, potential sources of financing...) realization of multimodal transport system.

#### 10. Existing plans and projects in the municipality of Kladovo

10.1 Sustainable Development Strategy (2010 - 2020)

In Sustainable Development Strategy of Kladovo, the priorities are divided by the areas, so in the part related to the economy the following GENERAL OBJECTIVE is defined: Creating conditions for investing in existing and newly formed economic entities, increasing employment and quality of life, strengthening the competitiveness of the economy on the domestic and foreign markets, especially in the fields of tourism, agriculture, industry and transport.

Within it, PRIORITY 1 is defined: Planed development of all types of tourism and tourist services on the Danube, Miroc and in the surrounding, with the aim of: Increased number of domestic and foreign tourists and retention time by 50%.

To achieve this goal, among other things, the following activities are necessary:

- Arranging and placing archaeological and cultural-historical sites in the function of tourism development
- Marking and promotion of archaeological and cultural-historical sites by traffic-tourist signaling
- Improving the quality of existing and expanding the range of tourist offer:
  - Marking recreational and tourist tracks
  - Completion of infrastructure capacities for the development of nautical and diving sports tourism
  - o Ship-museum, restoration and setting up for visits
  - Establishing a local tourist fleet
- Planning, designing and constructing info-points, viewpoints and visitor centers
- Promotion and positioning of the municipality of Kladovo as an ideal destination for the needs of congress tourism
- Organization of tourist-cultural and sports with the aim of enriching tourist offers

Also important from the point of view of this Plan is PRIORITY: 4 Improving all types of traffic

In the area of infrastructure, PRIORITY 2 is "Utilizing the Danube Potential and Improving the potential through segment of development policies", and within it is Objective 1: Infrastructure conditions created for the unification of different types of transport.

PRIORITY 3 in the infrastructure is "Development and improvement of traffic and communal infrastructure of the municipality", and goal 1: Removed transit traffic from the city center, reduced air pollution and noise, increased safety of road users and built quality network of roads.

#### 10.2 Spatial plan of municipality Kladovo

The spatial plan of Kladovo municipality defined the goal of development of the transport system in the municipality.

This goal includes the following tasks:

- improving the spatial organization of the transport and transport system, by increasing the quality of space-time relations in the territory of the Plan, and improving the time component in that relation by improving existing and creating new communication capabilities, such as revitalization and modernization of existing state roads I and II class
- modernization of municipal and non-classified roads between settlements and the surrounding gravitational area;
- improvement and development of river, passenger and freight traffic;
- ensuring a higher degree of efficiency, rationality and economy in the transport of people and goods, creating the conditions for faster and safer traffic with shorter travel time, etc.;
- reservation and protection of the space for improvement of the local elements of the transport infrastructure;
- development of transport infrastructure, as the basic factor of spatial organization, so
  that high level of passenger transport services is enabled through well organized public
  transport of passengers, combined (road-river) transport of passengers, merchandise
  and goods, optimization of time travel, etc.;
- the realization of a network of public passenger transport lines which enables and encourages the planned organization of the settlement system;
- Increasing the overall population mobility with a relative increase in the number of trips within the boundaries of the gravity zones of individual central settlements;
- Improving the overall level of the transport and transport system services by improving
  the appropriate technical elements of the transport infrastructure, with particular
  reference to the negative impacts of traffic on other subsystems and the environment;
- Spatial connection of Kladovo with neighboring municipalities, region and border towns and settlements in Romania.

The Plan proposes the construction of the following panoramic routes: between the Danube and the roads M 25 and R250 from Brza Palanka to Fetislam, so called "Danube Riviera" and panoramic track from Podvrska to Petrov's village (Planinice), ie Miroc.

According to the plans of the European Cyclists' Federation, in the area of the municipality of Kladovo, in the corridor M 25.1, it is necessary to provide a corridor for the Euro Velo Bike route route No 6. The final points of this route are in France (Nantes) and Romania (Constanta) and in Serbia it stretches along the Danube, from Backi Breg to Kladovo.

In the past few years, cyclotourism has been expanding in the countries of Western Europe. Euro Velo 6, on the part of the route through Serbia, is included in all European maps of cycling routes as the Danube route.

According to the Spatial plan, the Danube cycling route should be covered and treated during the elaboration of project documentation for the reconstruction of the M 25.1 road, in terms of defining the spatial requirements in transport and the traffic-tourist bicycle signaling.

Within the existing tourist capacities in Karatas, according to Plan, on the route of the bicycle corridor 6, it is necessary to form the so-called. "cyclo center" to provide the necessary facilities for cyclotourists, which include: accommodation facilities, parking lots for bicycles, tourist information center and other facilities.

Strategic priorities in forming the road network, according to the Plan, are:

- good connection between the territory of the municipality of Kladovo, its center and all its parts, with neighboring territories and wider areas;
- good connectivity of all parts of the territory, every inhabited place, with the municipal center and regional centers, both in the territory of Serbia and with the cities in the territory of Romania.

#### 10.3 Projects

Municipality of Kladovo has made the main project of the pedestrian-biking route from Kladovo to the populated town of Kostol. The length of the track is 850 m and the width is 2.0 m.

The Main Project of the track from Kladovo to the populated place Kladusnica, 2400 m long and 2.0 m wide, is still in progress.

#### 10.4 SWOT analyses

Strength	Weakness
• Proximity of corridors X, VII and IV. Near the	• Lack of mobility projects and planning
Region are the European road and rail corridor X	documents. In the Region there are not enough
- highway Subotica - Novi Sad - Belgrade - Nis -	prepared and developed projects that could be
(Dimitrovgrad) - Presevo and corridor VII on the	financed immediately if the funds are available.
Danube. In Bulgaria, which is in close proximity,	• Lack of a regional fund for the preparation and
there is Corridor IV.	implementation of joint projects. Large regional
	infrastructure projects are generally expensive

- Existence of a waterway on the Danube. The Danube River, the largest waterway in Europe, is a maritime pan-European Corridor VII
- Having 3 border crossings in the Region. The region borders with the Republic of Bulgaria and there are two crossings Mokranje, near Negotin and Vrska Cuka, near Zajecar, and with the Republic of Romania, where the border crossing is on the Iron gate 1 dam near Kladovo. All of them are on state roads of the first order.
- The existence of an airport in the Region. Nearby Bor there is a registered airport (LY89) that can be used for sports and commercial airplanes up to 5700 kg. The length of the asphalt runway is 1086 m and the width is 30 m, and besides, there is a 900 m long and 40m wide grass runway.
- Network of state roads. The Iron gate region is covered with 418 km of main roads and 815.5 km of regional roads.
- Network of national railways. The region of Iron gate has 240 km of railway line.
- Port in Prahovo, as well as terminal for all types of fuel for all river vessels in Kladovo
- Telecommunication and transport infrastructure - relatively good quality and dispersion of communication and transport infrastructure
- Energy facilities (electricity and water)
- Already built tourism infrastructure Existing capacities that support tourism infrastructure

- and require the preparation of extensive documentation for implementation. Extensive documentation is expensive, and municipalities do not have joint funds from which preparation can be financed or co-financed.
- Insufficient municipal budgets for infrastructure financing. The lack of funds has caused further deterioration of the infrastructure, and the accumulated needs require even more funds.
- Lack of multi-year infrastructure development programs. Large projects for the construction of regional infrastructure take more than a year, so it is also necessary to plan the budget for the multi-year period that is lacking today.
- Lack of by-passes around settlements. The main roads pass through populated places, and in these places speed decreases to 50 km / h, which increases the negative impact on the environment, poses a risk for pedestrians, and the length of travel is increased.
- River transport potential is unused. Except for the port in Prahovo on the Danube, there are no other docks or marinas. There are no centers for intermodal transport, although there are potentials.
- Air traffic resources are unused. Although there is an airport, it is not sufficiently exploited. It is necessary to analyze and prepare the project of expansion and improvement of the use of the Bor airport and its connections with traffic -roads, railways and waterways.
- Lack of cooperation between municipalities. Collaboration is an ad-hoc type.
- Poor connections with pan-European corridors. Although the Region is close to the corridor, there is not good enough access.
- Lack of electrified lines. The railway in the Region is not in good condition wiht no railways electrified.
- Poor road conditions. Although the road network is developing, it is necessary to overhaul most of the roads.

#### **Opportunities**

 Joining the EU will provide access to infrastructure development funds and set standards

#### Threats

• IPA Component for Regional Development is not yet available. The delay in Serbia's entry into the EU leads to the fact that some very important

- Danube strategy. The Danube Strategy in a wider context includes the whole Danube Basin in Serbia.
- Domestic funds. Some ministries have their resources to finance and prepare projects
- Spatial plan of RS is determining the spatial development of the Republic of Serbia and is providing instructions for improvement of the main infrastructure corridors. The Spatial Plan also sets out the basics for infrastructure construction.
- Spatial plans of a lower level that define future development and potential projects in the field of infrastructure and mobility.
- Ability to take advantage of other's experiences. Countries in the region Romania and Bulgaria, as EU members, have undergone a process of EU accession, and their experience can be used in the preparation and development of projects.

- funds are not yet available.

   Lack of interest from the state. It is possible that the development of infrastructure financed by the state will not treat all regions equally, especially when it comes to transport
- Projects financed from the state budget can depend on political will. The policy in Serbia is of great influence.
- Annual budgeting. Funds are planned on an annual basis rather than on a long-term basis.
- Slow decentralization. While the country has officially been devoted to decentralization, little has actually been done on that matter. The infrastructure in the distant regions is neglected by the state.
- Lack of national strategy for the development and improvement of rail and water transport, and adequate infrastructure.

#### 11. VISION AND GOALS OF THE PLAN

Mobility is one of the basic human characteristics and needs. Because of that, the Municipality of Kladovo and RARIS - Regional Development Agency Eastern Serbia have initiated the process of drafting the Strategic Plan for Sustainable Mobility in Tourism in the Municipality of Kladovo (with a view of the wider Iron gate Region) in order to encourage the use of sustainable transport, while removing negative impacts on the environment, safety and health of residents and guests of the Region.

The strategic plan for sustainable mobility in tourism in the municipality of Kladovo is essentially a long-term strategy for the development of transport and mobility in the function of tourism development.

Better mobility involves all forms of sustainable mobility, such as public transport, non-motorized travel modes (use of bicycles and walking), while reducing the use of private vehicles.

By adopting this Plan, the municipality of Kladovo and the wider region of Iron gate became rare examples of European good practice, which will make it easier for them to obtain the necessary funds from European funds.

The development of the Plan is a step towards the future of the municipalities of Kladovo and Region Iron gate. We all want Kladovo and Iron gate Region to be:

- Places where children play safely and go to school,
- Places with a clean air,
- Places where we can go shopping by bikes or walking,
- Places where every citizen can easily and quickly go to work,
- Oases of greenery,
- Filled with tourists who enjoy our hospitality,
- An example of a successful economy where everyone wants to come or live.

Considering all this, we have a clear Vision:

#### 11.1 Vision of Iron gate region

Kladovo and Iron gate Region, as well as their rich touristic offer, are easily accessible to all inhabitants and guests of the region by sustainable transport, in a safe way, which preserves the environment.

#### 11.2 Goals of the STRMP

The aim of this Plan is to make Kladovo and the Region of Iron gate a dynamic regional center, in which sustainable transport will enable residents and tourists to have better mobility and

accessibility with cost reduction, economic development and environmental protection, and a better and healthier environment.

The strategic objectives of the Plan are:

- Kladovo and the Region of Iron gate are leaders in the region and among the leaders at the national level in the application of sustainable mobility;
- Increase the availability of tourism by sustainable means of transport;
- Enable greater use of non-motorized travel modes;
- Improve the infrastructure for non-motorized travel modes;

#### 11.3 An integral principle

An integral planning principle implies the necessity of considering a wider range of possible impacts on the implementation of the envisaged measures for achieving the Plan's objectives, both horizontally and vertically. Separately implemented measures can cause more harm than benefits, if the principles of integration are not respected.

#### 11.3.1 Horizontal integration

In order to ensure sustainability not only of this Plan, but also of the measures it envisions, ie achieving the set goals, it is necessary to observe a whole range of local economic, social and environmental criteria. This requires the integration of appropriate policy areas at the local and regional level. Horizontal integration is a process that will improve the quality of tourist services in the municipality of Kladovo, but also in the region, by integrating tourist offer and transport infrastructure with the principles of environmental protection. In other words, the implementation of all measures relating to the promotion of mobility for tourists must take into account both the plans and principles of the development of tourism, that is, transport, as well as the principles of environmental protection.



Picture 11: Example of horizontal integration.

The scheme shows how should be established a horizontal integration between interventions in the field of ecology, tourism and transport. If in the region there are clearly defined rules related to environmental protection, which impose an obligation on citizens and visitors to protect nature using sustainable tourism methods (which do not affect biodiversity, do not interfere with local plant and animal species, do not pollute the environment, etc.) and use sustainable means of transport (hiking, cycling, electric vehicles and public transport), the result of this horizontal integration will be a tourism that has a positive impact on environmental protection.

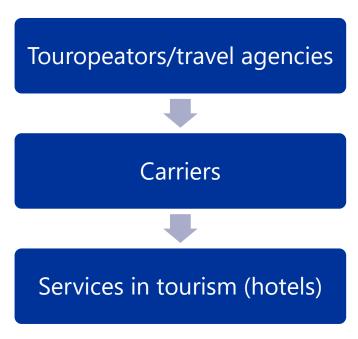
An example of horizontal integration could be intermodal integration, because the planning of measures in the Plan should ensure and establish clear links between different types of transport and provide conditions for creating a unique transport network in which it is easy to combine public transport for reaching the touristic destination and sustainable transport means for moving within it.



Picture 12: Horizontal intermodal integration

#### 11.3.2 Vertical integration

The tourism industry consists of multiple, interconnected business sectors, but often there is a lack of cooperation between them. In our country, the link between tourism and transport is not adequately addressed, and the planning process for these sectors is done separately, without any connection. The usual (bad) practice is to build a road network that connects cities with tourist sites that have the value of natural and / or cultural heritage, as well as the construction or renovation of tourist facilities, without thinking about sustainable mobility. In tourist brochures and in tourist places, it is never shown how to reach a place by public transport. It is understood that visitors should use private cars or taxi services, with the explanation that there are adequately equipped and large enough parking lots, and this is most often not the case at all.



Picture 13: Vertical integration in tourism

To remedy this negative practice, it is necessary to network the tourist and transport sectors, which is the key to improving the tourist offer and bringing more tourists, as well as improving the quality of life of the locals. Networking these business sectors is called vertical integration. Vertical integration encourages the integration of hotels, carriers and travel agencies. This allows companies to reach the market in the tourism sector and / or provide continuity providing complete tourism services to clients as well as standardizing the quality of the service.

# 12. RECOMMENDATIONS FOR SUCCESSFUL IMPLEMENTATION OF THE PLAN

In order to create preconditions for the successful implementation of the Plan in the municipality of Kladovo, it is necessary to create a real and feasible concept of managing the implementation of the Plan so that all relevant stakeholders know at any time who, what and when they work on a particular project or measure. A possible solution is to form a team (for management), which is responsible for the relevant tasks related to sustainable mobility and implementation of this Plan. The team should consist of the main interest groups in the tourism sector (and mobility) including representatives of the public and private sectors.

Taking into account the implementation of the Plan as a major project, the role of the "leader" of the project becomes very important. Examples of good practice point to the need for the establishment of a special team or project management unit within the local self-government.

This team should implement all important measures to the municipality of Kladovo.

The municipal team should consist of:

- 1. Representative of the political leadership of the municipality
- 2. Representatives of municipal administration in charge of transport and tourism
- 3. Representatives of the Tourist Organization Kladovo
- 4. Other stakeholders representing the business sector (primarily in the field of tourism and transport)

Additionally, regional institutions such as: Iron gate National Park and RARIS National Park should also be included. Participation in the Municipal and Regional Team should also be offered to national institutions such as: JP Putevi Srbije, Lucka Kapetanija, etc.

The decision to form a municipal team for the implementation of the Plan should be made by the Municipal Council of Kladovo.

Defining the institutional framework for the implementation of the Plan in the Iron gate region will be a more complex task, as it is necessary to involve a larger number of partners from the territories of several municipalities. It is necessary to devise a realistic and feasible concept of managing the implementation of the Plan, and in analogy with the approach for the municipality of Kladovo, and for the region of Iron gate, it is possible to form a team (for management). The team should consist of main interest groups from the tourism sector (and mobility) including representatives of the public and private sector from the region.

#### 13. MEASURES

The main point of SRTMP is a set of efficant measures. Only well-chosen measures will ensure that the defined goals are achieved. The selection of measures was built through a participatory approach involving all relevant participants, and taking into account the experience of other cities and regions with significant experience in this field. The measures are so set out to exploit mutual synergy as much as possible. Basically, the measures should respond to questions: what, how, where and when?

The identification of the measures (package of measures) was done by checking the the possibility of implementation in the Region, and taking into account the defined joint standards:

- Tourist attractions (interest points POI) in the Region
- Existing sustainable mobility services
- Distance to traffic nodes
- Possibilities of coming from important traffic nodes to facilities providing tourism services (hotels, restaurants, etc.) and tourist attractions (eg bus services, taxi services, flexible transportation systems, rental schemes)
- Possibilities for obtaining information about these services (information in tourist information centers, information brochures, mobile applications, etc.).

In order to fulfill the objectives of the Plan, 3 main areas of action are defined:

- 1. Institutional framework;
- 2. Public transport
- 3. Hiking and bicycle traffic

#### Note:

Measures for the implementation of this Plan are separately presented for the municipality of Kladovo and separately for the Region of Iron gate.

The main reason for this presentation is the fact that, by adopting this Plan, the municipality of Kladovo will take over the implementation of those measures that have been chosen for the Kladovo municipality itself.

For the Region of Iron gate, the Regional Implementation Body should be established first. The moment of formation of the Regional body can not be precisely defined, because it depends on several factors that are beyond the control of the municipality of Kladovo and RARIS.

#### 1. Institutional framework

Institutional framework implies all institutional changes that need to be implemented in order to implement the Plan. This primarily relates to defining the way of implementing the Plan, ensuring the participation of all institutions, bodies and other stakeholders in the sectors of transport and tourism, in charge of planning, financing, management, maintenance of infrastructure, services and transport.

The implementation of the Strategic Plan for Sustainable Mobility in Tourism in the Municipality of Kladovo represents a complex interdisciplinary task that requires the coordination and cooperation of all relevant institutions.

This plan is also specific because it deals not only with the municipality of Kladovo, but also with the entire region of Iron gate.

Cooperation on the implementation of this Plan is necessary at different levels:

- Territorial: on the local and regional level;
- Professional: between all institutions, departments and sectors that are in any way engaged in tourism and transportation

Therefore, the municipalities of Kladovo and RARIS, as initiators of this Plan, should define the way of its implementation.

The key roles and responsibilities of the team in charge of the implementation of the Plan would be:

- coordination with all relevant public enterprises and institutions in the municipality of Kladovo from the process of planning measures to the determination of the manner of participation of public enterprises and institutions in the implementation of the Plan;
- coordination of the procurement process related to the planned projects;
- analysis of additional opportunities for inclusion of private partners;
- communication and coordination with institutional partners from the regional and national levels, such as line ministries and public enterprises, and above all on harmonization of the process of planning and implementation of measures, and compliance of local, regional and national activities;
- securing the Plan funds;
- communication and coordination with other municipalities in the Region of Iron gate on harmonization of activities;
- involvement of citizens in the preparation and implementation of the Plan,
- informing the public about activities related to the Plan;
- implementation of education in the segment of sustainable mobility;
- harmonization of responsibilities and manner of implementation of measures;
- take into account the horizontal and vertical alignment of the Plan with other spatial planning documentation;
- resolving any possible disputes between stakeholders related to the Plan
- collecting, monitoring, analyzing data and evaluating indicators related to the implementation of the Plan and presenting the results (evaluation of the Plan).

In addition, all other organizational changes and other changes that need to be introduced for the implementation of the Plan are important in this area.

Key measures in the area of the institutional framework for the implementation of the Plan are:

#### 1.1 Establishment of the "Mobility center" in Kladovo

(It is necessary to ensure that all tourists and residents can in one place get all the necessary information about sustainable transpor, tourist attractions and how to reach them through sustainable transport.

The Center for Mobility should be established as part of the Tourism Organization of Kladovo with the support of RARIS that will prepare and systematize all necessary information. RARIS will also establish a website that will contain all the necessary information available in several languages)

#### 1.2 Raising of awareness and building capacity for sustainable mobility

(It is necessary to raise awareness first with the decision-makers and then with the citizens about the importance of sustainable mobility. It is also necessary to educate and familiarize with examples of good practice in order to further improve sustainable mobility in Kladovo.)

#### 1.3 Parking policy

(Parking management is one of the most effective measures for regulating private vehicles traffic. In order to discourage the use and, above all, the entry of private vehicles into the city center, it is necessary to change the parking policy. Parking policy can be regulated, for example: by reducing the number of parking spaces for private vehicles, while increasing the number of parking spaces for bikes, as well as pricing policies and parking charges.)

#### 1.1. MEASURE: Establishment of the "Mobility Center" in Kladovo

Description of the	(Regional) Mobility Center (Information Center) is an object that offers
measure in short	information and services in the field of mobility and all sustainable modes of transport. The mobility center is a unique information point
	for all issues related to sustainable mobility and transport.
	The main objective of the Mobility Center is to make it easy for clients to access the information about public transport and provide
	information and services on alternative, sustainable modes of transport

	and services, for example, car rental, joint driving by car, bicycle rental and ticket sales service.
	The Mobility Center in Kladovo will be part of the existing tourist info center.
	RARIS will provide an information base and training for employees.
Estimated impact of the measure and its contribution to achieving the overall goal	The target groups of the Mobility Centers are users and potential users of public transport, but also people who do not use public transport at all. They can be from the region itself or maybe those who come to visit the region. This way, the Mobility Center will, in addition to direct gathering and providing information, create better conditions for sustainable mobility in municipality of Kladovo.
Estimated	0 – implementation
implementation costs including promotion	10.000 € - promotion
Financial resources	Project "Transdanube.Pearls",
	INTEREG IPA CBC Serbia – Romania
	INTEREG IPA CBC Serbia – Bulgaria
	Other sources
Deadline	2018-2019
Organizations and	Municipality of Kladovo
institutions that should	TO Kladovo
be included in the implementation	RARIS
Organization responsible for implementation	TO Kladovo
Priority	High

## 1.1. MEASURE: Raising awareness and capacity building for sustainable mobility

Description of the measure in short	Citizens and tourists have little knowledge about the use of public transport or have a wrong idea about using bikes and walking. In addition, there is a lack of information on these modes of transport. Therefore, it is necessary to provide informations about services through campaigns.
	This is especially important in the case of public transport, where the lack of information about where, when and how these services function can be a major barrier to their use. Besides providing information about more suitable modes of transport, the campaign can help raise awareness to reduce the number of cars. Restrictive

	measures and initiatives for using eco-friendly modes of transport will be better accepted when people realize the reasons for such actions.
	Campaigns should not be carried out independently, but combined with other actions or measures in cooperation with the police or other state or local authorities, which aim to efficiently and effectively achieve certain goals, which require a change of mind and habits in traveling. In any case, the integration of several different complementary actions enhances their impact and increases the chances of success. A campaign that promotes, for example, the use of public transport will have a better chance of success if combined with significant improvements in the quality, availability and reliability of public transport services.
Estimated impact of the measure and its contribution to achieving the overall goal	Raising awareness of citizens, as well as strengthening capacities within the local self-government are crucial for the successful implementation of the Plan.
Estimated implementation costs including promotion	n/a
Financial resources	Own sources;
	External donor programs, private company campaigns;
	EU Fonds
Deadline	2018
Organizations and	Municipality of Kladovo
institutions that should be included in the	TO Kladovo
implementation	Police
'	State authorities
	Private sector
	Civil society organizations
Organization responsible for implementation	Municipality of Kladovo
Priority	High

## 1.1. MEASURE: Parking policy

Description of the measure	The inability of long-term solving of traffic problems in parking and
in short	expensive construction, but also the problems of development in

	conditions of limited resources and increasing concern about environmental protection, force the change of the concept.
	The former concept of "adapt city to traffic" was replaced by the concept of "adapt traffic to city".
	Parking management is one of the most effective measures for regulating traffic in private vehicles. In order to discourage the use and, above all, the entry of private vehicles into the city center, it is necessary to change the parking policy. Parking policy can be regulated, for example: by reducing the number of parking spaces for private vehicles while increasing the number of parking spaces for bikes, as well as pricing policies and parking charges.
	All this must be accompanied by an adequate control system. The system of control and sanctioning of parking violations includes the activities of the control authorities in order to mantain parking regime. The control and sanctioning of the offense serve to sanction the offenders in an appropriate manner in order to behave according to the parking policy.
Estimated impact of the measure and its contribution to achieving the overall goal	Automobile traffic, besides numerous advantages, is characterized by serious disadvantages. Namely, he engages large areas for movement and parking and leads to pollution of air, water, noise, etc. These influences are much higher for the passenger car than for other means of transport.
	Parallel with increasing motorization, there are traffic problems, which are manifested by traffic congestion and irregular parking, as well as a large number of indirect negative effects. Changes in parking policy discourage the use of cars and encourage the use of sustainable means of transportation.
Estimated implementation costs including promotion	n/a
Financiar resources	Own resources;
	External donor programs, private company campaigns;
	EU Fonds
Deadline	2018
Organizations and	Municipality of Kladovo
institutions that should be included in the implementation	TO Kladovo
	Police
	State authorities
Organization responsible for implementation	Municipality of Kladovo
Priority	Medium
	·

#### 2. Public transport

Public transport is one of the backbone of sustainable transport, primarily due to the high operational capacity compared to the private car, the opportunities for use by the largest number of residents and tourists, as well as spatial, ecological and economic rationality. Public transport per transported passenger occupies the least space, has the lowest transport costs and the least pollute the environment. In doing so, it should be kept in mind that the main advantages of private cars are shorter travel time and more travel comfort.

Most tourist destinations face excessive use of private vehicles.

This fact leads to:

- ignificantly increasing infrastructure costs for an increasing number of vehicles;
- Increasing noise levels and environmental pollution;
- reducing traffic safety, or increasing the number of traffic accidents;

In tourist destinations it additionally:

- makes driving and especially parking difficult;
- reduces the attractiveness of the destination itself due to increased environmental pollution, as well as visually due to the enormous number of vehicles
- makes it difficult to carry out sports and physical activities, etc..

Therefore, one of the goals of sustainable mobility in tourism becomes a redistribution of travel from private cars to public transport or non-motorized transport wherever possible.

Key measures in the public transport segment are:

- 2.1 Development of a public transport study in the municipality of Kladovo.

  (This study should analyze in detail the development of public transport in the municipality of Kladovo, with a special emphasis on connecting tourist sites)
- 2.2 Introduction of "water" taxis or similar means of the public transport on the Danube (It is necessary to take advantage of the Danube river and analyze the possibilities of introducing public transport on the Danube)
- 2.3 Creating a sustainable mobility plan for the needs of employess in municipal administration and public enterprises and institutions (This plan aims to reduce the use of private vehicles by employees of the municipal administration and its public enterprises and institutions. The plan would propose a series of measures aimed at stimulating employees to use the principle of sustainable mobility for the purpose of coming and going to work. These may be measures such as for example:
  - Providing quality and guarded bicycle parking;
  - Subsidizing bike purchasing or services;

- Providing parking only for vehicles that are used by more than one worker together for transportation;
- After a pilot application in the case of a municipality, they can be applied more widely.)

#### 2.4 "Public car" service – Carsharing

(Carsharing is one of the options to use joint driving by car, and is based on the use of a car owned by a third party (business entity). Carsharing allows users not to drive their vehicle, but a common car that is lifted through standard cards at specially designated terminals, with defined compensation. This measure can be started through the design and implementation of a public city car project that could be used by employees of municipal administrations, companies and institutions.)

#### 2.5 Carriage by call.

(Carriage by call is an advanced, user-oriented mode of public transport characterized by a flexible route and the use of small or medium-sized vehicles that transport between locations in accordance with the needs of passengers. This type of transport is especially useful for tourist purposes, since it allows more tourists to access tourist sites.)

#### 2.6 Tourist train.

(Analyze the preconditions and legal requirements for the establishment of a tourist train in Kladovo)

#### 2.1 MEASURE: Preparation of a public transport study in the municipality of Kladovo

Description of the measure	The public transport study should analyze thoroughly the
in short	development of public transport in the municipality of Kladovo, with
	particular emphasis on connecting tourist sites. There are numerous
	problems that make public transport more difficult than it should be.
	This study should identify critical points and offere solutions.
	The study should analyze the current situation in public transport, to
	collect information on the number of passengers, the structure of
	transport, the quality of the means of transport, the costs of the
	carrier and to form a single database, and to offer solutions. The
	study should anticipate short-term and long-term interventions in
	terms of improving public transport (eg more active role of local self- government, control, line alignment)
Estimated impact of the	By a detailed analysis of the studies, it should determine critical
measure and its	problems in public transport, offer solutions and thus create
contribution to achieving	conditions for better public transport that will meet the needs of
the overall goal	citizens and tourists. The study should also assess the possibilities of
3	introducing different organizational models of transp
Estimated implementation	- Making a Study: 4.000
costs including promotion	- Iviaking a Study. 4.000
costs including promotion	

Financial resources	<ul><li>- Municipal budget</li><li>- External sources of financing</li></ul>
Deadline	- 2019-2020
Organizations and institutions that should be included in the implementation	Municipality of Kladovo, Private sector
Organization responsible for implementation	Municipality of Kladovo
Priority	Medium

2.2 MEASURE: Introduction of "water" taxi or similar mode of public transport on the Danube

Description of the measure	A "water taxi" or some similar type of public transport is useful for
in short	tourist purposes, as it allows tourists to access the tourist sites on
	the Danube, as well as a quick crossing to the Romanian side.
	Advantages of "water" taxi are:
	Significant increase of tourist mobility for movement on destination
	2. Increasing availability of interesting tourist locations on the Danube,
	3. Creating a new tourist product
	4. Filling the void in water transport.
	The "water" taxi service should be provided by the private sector, and the local self-government unit should create conditions for its performance, ie eliminate any administrative and other obstacles, as well as to consider the possibility of some type of subsidization. Users are:
	- Tourists - Residents
Estimated impact of the measure and its contribution to achieving the overall goal	The introduction of a "water" taxis directly contributes to the Plan's goal, as it enables better mobility and accessibility for residents and tourists. The possibility of using this service would represent an additional tourist offer.
Estimated implementation costs including promotion	n/a
Financial resources	Municipial budget
	Private initiative
Deadline	2019
Organizations and institutions that should be	Municipality of Kladovo, private sector

included in the implementation	
Organization responsible for implementation	Municipality of Kladovo
Priority	Medium

# 2.3 MEASURE: Developing a sustainable mobility plan for the needs of municipal administration employees and employees of public enterprises and institutions

Description of the	The development of a sustainable mobility plan for the needs of
measure in short	municipal administration employees and employees of public enterprises and institutions in Kladovo municipality aims to reduce the use of private vehicles by them. The plan would propose a series of measures aimed at stimulating employees to use the principle of sustainable mobility for the purpose of coming and going to work. These may be measures such as:
	Providing quality and guarded parking for bicycles;
	Subsidizing bike purchasing or bicycle service;
	• Providing parking only for vehicles that are used by more than one worker together for transportation;
	After a pilot application in the case of a municipality, they can be applied more widely.
Estimated impact of the measure and its contribution to achieving the overall goal	The plan would analyze opportunities and propose interventions in order to reduce the use of private cars for going to work by government employees and employees of public companies. It would also serve as a model and an example to other citizens and institutions.
Estimated implementation costs including promotion	Making a Plan: 2.000
Financial resources	<ul><li>Municipal budget</li><li>External sources of financing</li></ul>
Deadline	2019-2020
Organizations and institutions that should be included in the implementation	Municipality of Kladovo
Organization responsible for implementation	Municipality of Kladovo
Priority	Low

## 2.4 MEASURE: "Public car" service – Carsharing

Description of the measure in short	Carsharing is renting a car for personal use for a short time after which the vehicle is left on marked parking lots. The car sharing system or "Carsharing" proved to be successful in a number of world cities, primarily for drivers who do not want or do not have the conditions for a personal car, and it is also suitable for travelers and tourists who come to the destination by public transport (with a more complicated registration system). This measure can be started through the design and implementation of a public city car project that could be used by employees of municipal administrations, companies and institutions  In order to use "Carsharing", registration is required, and through the application on the smartphone, it is possible to reserve a driving term and unlock the nearest car.  The application can also find the closest parking place where the
Estimated impact of the measure and its contribution to achieving the overall goal	vehicle can be left.  The introduction of "Carsharing" directly contributes to achieving the goal of the Plan, as it allows the residents and tourists to have better mobility and accessibility, a better and healthier environment while reducing costs and protecting the environment.
Estimated implementation costs including promotion	- Establishment of the service "Carsharing": 10,000 - 150,000 depending on whether the service is provided by the public sector or transferred to a private operator
Financial resources	If the service is provided by the public sector then external sources of funding should be look for, such as:
	<ul> <li>The Ministry of Environment and the Environment Fund</li> <li>INTEREG IPA CBC Serbia - Romania</li> <li>INTEREG IPA CBC Serbia - Bulgaria</li> </ul>
Deadline	2021
Organizations and institutions that should be included in the implementation	Municipality of Kladovo, private sector
Organization responsible for implementation	Municipality of Kladovo
Priority	Low

#### 2.5 MEASURE: Introduction of "Carriage-by-call" service

## Description of the measure in short

Carriage by call is especially useful for tourists, since it allows more tourists to access tourist sites. There are multiple names for carriage by call (synonyms) transport in English: Demand Responsive Transport or Demand-Responsive Transit (DRT), Demand Responsive Service, Dial-a-ride and Flexible Transport Services.

Advantages of carrage by call are:

- 5. significant increase of tourist mobility for movement on destination
- 6. increasing accessibility and social equity,
- 7. reducing transportation costs,
- 8. increasing the number of users due to greater satisfaction with the service
- 9. reducing the need for using a private vehicle
- 10. filling the gaps between private cars and conventional public transport.

Costs for implementation are: capital cost (vehicles and procurement of vehicle management center and call center), operating cost (salaries of drivers and call center employees, vehicle maintenance, fuel and insurance) and administrative costs: marketing campaigns and staff costs). If the main purpose is to establish a "carriage-by-call" service in tourism, it is possible to entrust this business to the Municipal Tourist Organization or to a private partner through a public-private partnership. In the case that the basic purpose is transportation from rural areas, then the vehicles can be managed by drivers - volunteers. There are a number of examples in Europe where cars are driven by drivers - volunteers from the villages in which these lines are established.

#### Users are:

- Tourists
- Residents primarily in rural areas, as well as in times of reduced demand (eg evening and night transportation services).

#### It's necessary to:

- Make the Study on the establishment of the "Transport as needed"
- Introduce the service in accordance with the solutions from the Study

Estimated impact of the measure and its contribution to achieving the overall goal

The introduction of "Carriage-by-cal" directly contributes to achieving the Plan's goal, as it allows the citizens and tourists to have better mobility, accessibility, and a better and healthier environment, while reducing costs and protecting the environment for the lives of all residents and guests.

Estimated implementation costs including promotion	<ul> <li>Preparation of the Study on the establishment of the "Transport as needed" service: 4,000</li> <li>Establishment of the "Transport as needed" service: 10,000 - 150,000 depending on whether the service is provided by the public sector or transferred to a private operator</li> </ul>
Financial resources	The Study should be funded by the municipal budget.  If the service is provided by the public sector then external sources of funding should be sought, such as:  - the Ministry of Environment and the Environment Fund  - INTEREG IPA CBC Serbia - Romania  - INTEREG IPA CBC Serbia - Bulgaria
Deadline	<ul> <li>Making of the Study on the establishment of the "Transport as needed" service: 2019</li> <li>Establishment of the service "Transport as needed": 2021</li> </ul>
Organizations and institutions that should be included in the implementation	Municipality of Kladovo
Organization responsible for implementation	Municipality of Kladovo
Priority	Medium

#### 2.6 MEASURE: Tourist train.

2.0 MEASURE: TOURIST ITAIN.	
Description of the measure	The tourist train is attractive and for tourists always an interesting
in short	mode of transport that is suitable for connecting two points which are from each other distanced 5-6 kilometers at the most, that is, for circular journeys. In addition to enabling tourists movement within the destination in an attractive and fun way, it contributes to the attractiveness of the destination itself.  The introduction of a tourist train can be an additional service provided by the public sector, and it can also be left to the private sector. Certainly, the obligation of local self-government unit is to examine the conditions, that is, ensure the provision of adequate permits.
Estimated impact of the measure and its contribution to achieving the overall goal	The introduction of a tourist train directly contributes to achieving the Plan's goal, as it allows the citizens and tourists to have better mobility, accessibility, and a better and healthier environment, while reducing costs and protecting the environment for the lives of all residents and guests Also, the introduction of a tourist train is an addition in the tourist offer.

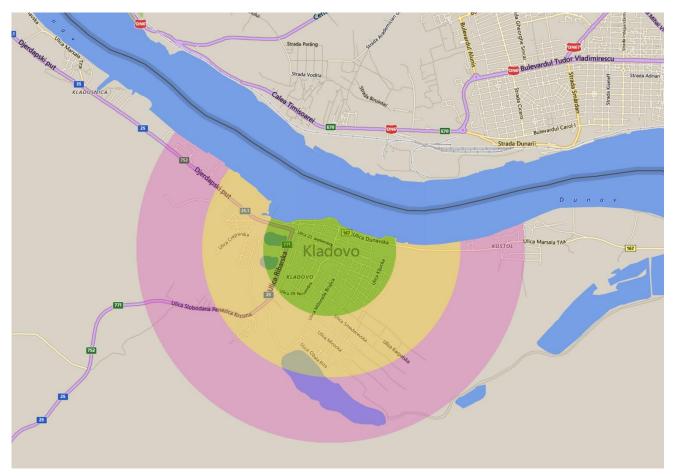
Estimated implementation costs including promotion	Establishment of the service of the "tourist train": 10,000 - 15,000 depending on whether the service is provided by the public sector or given to the private operator
Financial resources	If the service is provided by the public sector then external sources of funding should be sought.
Deadline	2021
Organizations and institutions that should be included in the implementation	Municipality of Kladovo , private sector
Organization responsible for implementation	Municipality of Kladovo
Priority	Low

#### 3. Hiking and bicycle traffic

Hiking is the best choice for sustainable mobility to overcome short distances (up to 10 minutes walking). For daily trips in urban areas of up to five kilometers, the bicycle represents the optimal and simplest way of traveling, because it represents a quick and easy route from the starting point to the destination. Non-motorized traffic does not pollute the environment, and the necessary traffic infrastructure does not take up a lot of living space, as is the case with motor vehicles. In addition, day-to-day walking and cycling have a positive impact on the health of the population or tourists.

Non-motorized traffic creates a more efficient, safer and more attractive infrastructure for the movement and stay of pedestrians and cyclists. Such traffic infrastructure contributes to better integration of interesting touristic points, provides space for communication, expressing opinions, conducting leisure time of citizens and tourists, reviving trade in the centers of the settlement and making the center of the city a more humane space.

Kladovo is, with its size and field configuration, ideal for the development of pedestrian and bicycle traffic for everyday and tourist needs, since most of the services and major tourist attractions in the city are available within 5-10 minutes.



Picture 14: Availability from the center of the city by bike in the time of 5, 10 and 15 minutes, calculating the speed of 15.5 km

Key measures in the segment of pedestrian and bicycle traffic are:

- 3.1 Reconstruction of existing bicycle infrastructure in Kladovo. (It's necessary to:
  - Develop a study on the improvement of cycling infrastructure in Kladovo
  - Build and edit cycling and hiking trails
  - Install parking spaces for bicycles

For parking spaces, in accordance with the available conditions and means, also provide cabinets for temporary storage of items.)

- 3.2 Improvement plan for pedestrian infrastructure in Kladovo (This Plan should analyze the development of pedestrian infrastructure in the municipality of Kladovo in detail, with particular emphasis on connecting tourist sites.)
- 3.3 Reducing the intensity of using private cars
  (Reducing the intensity of using private cars in the city center and near tourist attractions will contribute to increasing traffic safety in general and in particular to better conditions for pedestrians and cyclists.)
- 3.4 Introduction of a public bicycle system and / or Park-and-Ride (P + R)

(It is necessary to establish a system that will enable tourists to use bicycles for moving through the destination (Kladovo and Iron gate). Such a system would allow tourists, who commit themselves not to use their cars in a destination, to use public bikes at affordable prices or for free .)

#### 3.5 Promotion of non-motorized traffic

(It is necessary to raise public awareness of the benefits of non-motorized traffic, and above all walking and cycling. It is necessary to make all information about sustainable traffic available to guests and residents)

#### 3.6 Creating a digital map of hiking and biking trails

(All data on existing hiking and biking trails need to be made available to tourists as well as residents. In addition, make a map of the cycling route around Ključ on the route Kladovo-Kostol-Rtkovo-Korbovo-Vajuga-Milutinovac-Kladovo)

#### 3.7 Establishing a bicycle rental system in Kladovo

(RARIS prepares the previous Study for the feasibility of establishing a bicycle rental system in the municipality of Kladovo and in the Djerdap region. Based on the solution from this study, it is necessary to implement a bicycle rental system)

#### 3.1 MEASURE: Reconstruction of existing bicycle infrastructure in Kladovo

## Description of the measure in short

When it comes to cycling infrastructure in Kladovo, it is necessary to:

- Develop a study on the improvement of cycling infrastructure in Kladovo (this study should analyze in detail the development of cycling infrastructure in the municipality of Kladovo with special emphasis on connecting tourist sites.)
- Build and edit cycling-pedestrian path Kladovo-Kladusnica in the length of 2.4 km
- To build and edit the cycling-pedestrian track Kladovo (from St. Sava Street) Kostol in the length of 800m
- Mark the bicycle trail on the Danube quay, connecting the routes Kladovo-Kladusnica and Kladovo-Kostol and arrange the crossing across the road at the points where the trails meet
- Arrange a bicycle hiking trail around the lake
- Place parking spaces for bikes in locations:
  - -Fetislam,
  - -Dijana,
  - -Archaeological Museum,
  - -Church of st. George,
  - -Beach,
  - -Community Health centre
  - -Tourist organization,

	-Bus Station.
	For parking spaces, in accordance with the available conditions and means, also provide cabinets for temporary storage of items.
Estimated impact of the measure and its contribution to achieving the overall goal	The organization of bicycle infrastructure directly contributes to achieving the Plan's goal, as it allows the citizens and tourists to have better mobility, accessibility, and a better and healthier environment, while reducing costs and protecting the environment for the lives of all residents and guests.
Estimated implementation costs including promotion	It will be known after completing the study of bicycle infrastructure improvement in Kladovo
Financial resources	Municipality of Kladovo
	Resources of the Ministry
	EU Funds (cross-border, transnational)
Deadline	- Development of a bicycle infrastructure improvement study in Kladovo: 2018, 2019
	- Improvement of bicycle infrastructure in Kladovo: 2018
Organizations and	Municipality of Kladovo
institutions that should be included in the implementation	Tourist organization Kladovo
Organization responsible for implementation	Municipality of Kladovo
Priority	Medium

### 3.2 MEASURE: Improvement plan for pedestrian infrastructure in Kladovo

Description of the measure in short	This Plan should analyze in detail the development of pedestrian infrastructure in the municipality of Kladovo with special emphasis on connecting tourist sites. It needs to analyze in detail the needs for arranging hiking trails as well as the sidewalks in the city.
Estimated impact of the measure and its contribution to achieving the overall goal	The organization of pedestrian infrastructure directly contributes to achieving the Plan's goal, as it allows the citizens and tourists to have better mobility, accessibility, and a better and healthier environment, while reducing costs and protecting the environment for the lives of all residents and guests.
Estimated implementation costs including promotion	Making a plan: 3000-5000  The costs for arranging the pedestrian infrastructure will be known after the development of the plan.

Financial resources	<ul> <li>Municipality of Kladovo</li> <li>Resources of the Ministry</li> <li>EU Funds (cross-border, transnational)</li> </ul>
Deadline	<ul> <li>Making a plan: 2018, 2019</li> <li>Improvement of pedestrian infrastructure in Kladovo: 2018</li> </ul>
Organizations and institutions that should be included in the implementation	Municipality of Kladovo  Tourist organization Kladovo
Organization responsible for implementation	Municipality of Kladovo
Priority	Medium

3.3 MEASURE: Reducing the intensity of using private cars

Description of the measure in short	Reducing the intensity of using private cars in the city center and near tourist attractions will contribute to increasing traffic safety in general and in particular to better conditions for pedestrians and cyclists.  Introduce reduced speed zones (limit of 30km / h) in accordance with the Technical Traffic Regulation Project.  Adjust the signaling to the needs of pedestrians and cyclists by setting up signalization and marking the existing pedestrian zone.  Continue the construction of the sidewalk (29 November street - Old cemetery -electro distribution and other in accordance with
	existing projects and plans) Conduct campaigns for healthy living and sustainable mobility
Estimated impact of the measure and its contribution to achieving the overall goal	The effects of reducing the use of private cars are multiple, as in addition to reducing noise and pollution, space that is normally occupied by cars is being given to people, enabling residents and tourists to be more mobile with increased security.
	The city is becoming a pleasant and comfortable place to live.
Estimated implementation costs including promotion	n/a
Financial resources	<ul> <li>Municipality of Kladovo</li> <li>Resources of the Ministry</li> <li>EU Funds (cross-border, transnational)</li> </ul>
Deadline	2018
Organizations and institutions that should be included in the implementation	Municipality of Kladovo Public enterprises and institutions Private sector Civilian sector

Organization responsible for implementation	Municipality of Kladovo
Priority	Medium

	uction of a public bicycle system and / or Park-and-Ride (P + R)
Description of the	It is necessary to establish a system that will enable tourists to use
measure in short	bicycles for moving through the destination (Kladovo and Iron gate).
	Such a system would allow tourists, who commit themselves not to use
	their cars in a destination, to use public bicycles at affordable prices or
	for free. These examples are not rare in the developed tourist
	destinations of Western Europe. Public bicycle rental systems are
	relatively inexpensive, with the possibility of rapid implementation as
	a new alternative mode of transport that can provide different benefits
	(economic, health, safety, mobility and quality of life). Combined with
	other modes of transport, such systems can provide a fundamental
	shift in the way people move and make transport decisions.
	Implementation of this measure may be done by local self-government
	unit, or it can be left to the private sector, and it is possible to
	implement it through a public private partnership. Often similar
	projects involve large companies that are willing to invest in exchange
	, , , , , , , , , , , , , , , , , , , ,
Estimated impost of the	for advertising space on bicycles or parking spaces.
Estimated impact of the	A public bicycle system can be a good for:
measure and its	Expansion and improvement of existing transit services.      Deduction decorates as a service at the servi
contribution to achieving	Reducing dependence on car transport.
the overall goal	New cyclists and affirmation of the benefits of cycling.
	Promotion of the municipality of Kladovo
	Reducing the total cost of transport for households.
	• Improve physical and mental health and reduce health care costs.
	Reducing emissions of harmful gases and greenhouse effects.
Estimated implementation	20.000-120.000
costs including promotion	
Financial resources	- Municipality of Kladovo
i maneiai researees	- Resources of the Ministry
	- EU Funds (cross-border, transnational)
	- Private investments
Deadline	2020
Organizations and	Municipality of Kladovo
institutions that should be	Private sector
included in the	
implementation	
Organization responsible	Municipality of Kladovo
	' '
for implementation	

Priority	Medium

## 3.5 MEASURE: Promotion of non-motorized traffic

Description of the measure in short	Raising public awareness of the benefits of non-motorized traffic and, above all, walking and cycling is an extremely important prerequisite in order to create a critical mass to support the implementation of the measures envisaged by this Plan, and at the same time, in order to gradually change awareness, reduce the negative impacts of using cars on nature and population health. It is necessary to make available all information on sustainable traffic to guests and residents and through information campaigns constantly influence the changing habits and public mindset.
Estimated impact of the measure and its contribution to achieving the overall goal	The change of mindset and habits is a long-term process, but it is necessary to conduct campaigns constantly and provide information to the population on the benefits of reducing motorized traffic, in order to get full support and cooperation in the implementation of the measures envisaged by this Plan.
Estimated implementation costs including promotion	n/a
Financial resources	<ul> <li>Municipality of Kladovo</li> <li>Resources of the Ministry</li> <li>EU Funds (cross-border, transnational)</li> <li>Private investments</li> </ul>
Deadline	2018
Organizations and institutions that should be included in the implementation	Tourist organization Kladovo RARIS
Organization responsible for implementation	Municipality of Kladovo
Priority	Medium

# 3.6 MEASURE: Creating a digital map of hiking and cycling trails

Description of the	It is necessary to make all data on existing hiking and cycling trails			
measure in short	available to tourists as well as residents. For its simple use, this ma			
	should be based on one of the common digital maps. When creating			
	digital maps, take care of already existing maps and tours (e.g			
	http://irongatecycling.com )			
	In addition, make a map of the cycling route around Kljuc on the route			
	Kladovo-Kostol-Rtkovo-Korbovo-Vajuga-Milutinovac-Kladovo. Maps			
	should, at least, be available on the Internet, in accordance with			
	available resources, and on smartphone applications.			

Estimated impact of the measure and its contribution to achieving the overall goal	The availability of digital maps of cycling and hiking trails directly contributes to achieving the Plan's goal, as it allows the citizens and tourists to have better mobility, accessibility, and a better and healthier environment, while reducing costs and protecting the environment for the lives of all residents and guests.
Estimated	n/a
implementation costs	
including promotion	
3 1	
Financial resources	- Municipality of Kladovo
	- EU Funds (cross-border, transnational)
Deadline	- 2019-2022
Organizations and	Tourist organization Kladovo
institutions that should	RARIS
be included in the	IVANIS
implementation	
Organization responsible	Municipality of Kladovo
for implementation	Wallicipality of Nadovo
Priority	Medium

3.7 MEASURE: Establishment of a bicycle rental system in Kladovo

3.7 MEASURE: Establishment of a bicycle rental system in Kladovo			
Description of the measure	The goal of introducing a bicycle rental system in the municipality of		
in short	Kladovo is to contribute to the development of tourism through		
	increasing competitiveness by introducing a new tourist product.		
	The demand for this service has been steadily increasing in recent		
	years and it is necessary to provide this service to the visitors of		
	Kladovo.		
	In 2018, RARIS will develop a study on the possibility of setting up a		
	bicycle rental system in the Iron gate Region.		
	The study includes an analysis of similar systems, the state of local		
	conditions, different scenarios and future operational data, and as		
	such serves the interested parties to decide on the establishment of		
	a bicycle rental system.		
	The study should answer key questions:		
	Who will manage and how will be managed the future rent a bike		
	system;		
	Does the future rental system need to use classic or electric bikes or		
	a combination of both types?		
	What kind of equipment and infrastructure is necessary for		
	establishing a bicycle rental system?		
	Price policy and sustainability?		
	- In addition, DCC will separately analyze the possibility of		
	linking Kladovo and Turn Severin through a bicycle rental		
	system		

Estimated impact of the measure and its contribution to achieving the overall goal	The introduction of the Bicycle Rental System directly contributes to achieving the Plan's goal, as it allows the citizens and tourists to have better mobility, accessibility, and a better and healthier environment, while reducing costs and protecting the environment for the lives of all residents and guests.	
Estimated implementation costs including promotion	<ul> <li>It will be known after completion of the Study on the possibility of establishing a bicycle rental system in the Iron gate Region.</li> </ul>	
Financial resources	The Danube program finances the Study through the Transdanube Project.	
	Procurement of necessary equipment will be possible through external sources of financing, such as:	
	- INTEREG IPA CBC Serbia - Romania	
	- INTEREG IPA CBC Serbia - Bulgaria	
Deadline	- Development of Study on the possibility of establishing a bicycle rental system in the Iron gate Region .: 2018	
	- Establishment of bicycle rental service: 2020	
Organizations and institutions that should be included in the implementation	Tourist organization Kladovo RARIS	
Organization responsible for implementation	Tourist organization Kladovo	
Priority	Medium	
L		

## 13.2 MEASURES for the implementation of the Plan in the Iron gate Region

### 1. Institutional framework

Institutional framework implies all institutional changes that need to be done in order to implement the Plan.

This primarily refers to the implementation of the Plan, ensuring the participation of all institutions, bodies, bodies and other stakeholders in the sectors of transport and tourism, in charge of planning, financing, management, maintenance of infrastructure, services and transport.

The implementation of the Strategic Plan for Sustainable Mobility in Tourism in the Municipality of Kladovo represents a complex interdisciplinary task that requires the coordination and cooperation of all relevant institutions.

This Plan is additionally specific because it processes the entire Region of Iron gate.

Cooperation on the implementation of this Plan is necessary at different levels:

Territorial: at the local and regional level;

Professional: between all institutions, departments and sectors that are, in any way, engaged in tourism and transport

Therefore, all the municipalities of the Region and RARIS should define the way of implementation of the Plan.

The key roles and responsibilities of the team in charge of the implementation of the Plan would be:

- coordination with all municipalities, relevant public enterprises and institutions in the Iron gate Region from the process of planning measures to the determination of the manner in which public enterprises and institutions participate in the implementation of the Plan;
- coordination of the procurement process related to the planned projects;
- analysis of additional opportunities for inclusion of private partners;
- communication and coordination with institutional partners from the regional and national level, such as line ministries and public enterprises, primarily on harmonization of the process of planning and implementation of measures, and compliance of local, regional and national activities;
- securing funds for the Plan;
- communication and coordination with other municipalities from the Region of Iron gate on harmonization of activities;
- involvement of citizens in the preparation and implementation of the Plan,
- informing the public about the activities related to the Plan;
- conducting education in the segment of sustainable mobility;
- harmonization of the responsibilities and manner of implementation of measures;
- considering the horizontal and vertical alignment of the Plan with other spatial planning documents;
- resolving any possible disputes among stakeholders related to the Plan
- collecting, monitoring, analyzing data and evaluating indicators related to the implementation of the Plan and presenting the results (evaluation of the Plan).

Also, all organizational and other changes that need to be introduced for the implementation of the Plan are important in this area.

Key measures in the institutional framework for the implementation of the Plan are::

1.1 Establishment of "Mobility Centers" in the Iron gate Region
(It is necessary to ensure that all tourists and residents can in one place get all the necessary information on sustainable transport as well as about tourist attractions and how to get them through sustainable transport. The Mobility Center should be established as part of the Tourist organizations of the municipalities of the Region with the support of RARIS which will prepare and systematize all necessary information.)

#### 1.2 Parking policy

(Parking management is one of the most effective measures for regulating traffic in private vehicles. In order to discourage the use and, above all, the entry of private vehicles into the city center, it is necessary to change the parking policy. Parking policy can be regulated, for example: by reducing the number of parking spaces for private vehicles, while increasing the number of parking spaces for bikes, also by pricing policies and parking charges.)

## 2. Public transport

Public transportation is one of the backbone of sustainable transport, primarily due to: high operational capacity compared to private car, the ability to use the largest number of residents and tourists, and spatial, ecological and economic rationality. Public transport per transported passenger occupies the least space, has the lowest transport costs and the least pollute the environment.

It should be kept in mind that the main advantages of private cars are shorter travel time and more travel comfort. As a result, most tourist destinations face excessive use of private vehicles.

#### This fact leads to:

a significant increase in infrastructure costs for an increasing number of vehicles; increasing noise levels and pollution of the environment; reducing traffic safety, or increasing the number of traffic accidents;

#### In tourist destinations it also:

makes it difficult to move around the destination and, in particular, park; lower the attractiveness of the destination itself due to increased environmental pollution, and visually due to the enormous number of vehicles it makes it difficult to carry out sports and physical activities, etc.

Therefore, one of the goals of sustainable mobility in tourism is the redistribution of travel from private cars to public transport or non-motorized transport wherever possible.

Key measures in the public transport segment are:

- 2.1 Public Transport Study in the Iron gate Region (This Study should analyze thoroughly the development of public transport in the Iron gate Region with special emphasis on connecting tourist sites.)
- 2.2 Improving the bus infrastructure in the Iron gate Region (It is necessary to improve the bus infrastructure in all the municipalities of the Iron gate Region. This task should be taken over by individual municipalities with mutual coordination within the Regional Team for the Implementation of the Strategic Plan for Sustainable Mobility in Tourism )
- 2.3 Introduction of "water" taxi or similar means of public transport on the Danube (It is necessary to exploit the potential of the Danube River and analyze the possibilities of introducing public transport on the Danube)

#### 2.4 Tourist train

(Analyze the prerequisites and legal requirements for the establishment of a tourist train)

2.5 Carriage by call.

(Carriage-by-call is an advanced, user-oriented mode of public transport characterized by a flexible route and the use of small or medium-sized vehicles that transport between locations in accordance with the needs of passengers. This type of transport is especially useful for tourist purposes, since it allows more tourists to access tourist sites. This service is needed at the regional level - at the level of Iron gate.)

## 3. Hiking and bicycle traffic

Hiking is the best choice for sustainable mobility to overcome short distances (up to 10 minutes walking). For daily trips in urban areas of up to five kilometers, the bicycle represents the optimal and simplest way of traveling, because it represents a quick and easy route from the starting point to the destination. Non-motorized traffic does not pollute the environment, and the necessary traffic infrastructure does not take up a lot of living space, as is the case with motor vehicles. In addition, day-to-day walking and cycling have a positive impact on the health of the population or tourists.

Non-motorized traffic creates a more efficient, safer and more attractive infrastructure for the movement and stay of pedestrians and cyclists. Such traffic infrastructure contributes to better integration of interesting touristic points, provides space for communication, expressing opinions, conducting leisure time of citizens and tourists, reviving trade in the centers of the settlement and making the center of the city a more humane.

There are excellent conditions for the development of cycling and hiking in the entire region of Iron gate. The opportunities for the development of cycling traffic within the Region of Iron gate also represent a chance for the development of cycle tourism.

Key measures in the segment of pedestrian and bicycle traffic are:

- 3.1 Reconstruction of existing bicycle infrastructure in the Iron gate Region
- 3.2 Study on the improvement of bicycle infrastructure in the Iron gate Region (This Study should thoroughly analyze the development of cycling infrastructure in the Iron gate Region with special emphasis on connecting tourist sites.)
- 3.3 Plan for the improvement of pedestrian infrastructure in the Iron gate Region. (This Plan should analyze the development of pedestrian infrastructure in the Iron gate Region in detail, with particular emphasis on connecting tourist sites.)
- 3.4 Improving the cycling infrastructure in the Iron gate Region (Based on the proposed solutions from the Study on the Improvement of Bicycle Infrastructure in the Region of Iron gate, the Regional Team for the Implementation of the Strategic Plan for Sustainable Mobility in Tourism should define the steps for their operationalization.)
- 3.5 Introduction of a public bicycle system and / or Park-and-Ride (P + R)

(It is necessary to establish a system that will enable tourists to use bicycles for moving through the destination (Kladovo and Iron gate). Such a system would allow tourists, who commit themselves not to use their cars in a destination, to use public bikes at affordable prices or for free.)

#### 3.6 Promotion of non-motorized traffic

(It is necessary to raise public awareness of the benefits of non-motorized traffic, and above all walking and cycling.)

## 3.7 Creating a digital map of hiking and biking trails

(It is necessary to make all data on existing hiking and cycling trails available to tourists as well as residents. For easy use, this map should be based on one of the common digital maps.)

## 3.8 Establishing a bicycle rental system in Kladovo

(RARIS prepares the previous Study for the feasibility of establishing a bicycle rental system in the municipality of Kladovo and in the Iron gate region. Based on the solution from this study, it is necessary to implement a bicycle rental system)

## 14. RESPONSIBILITY FOR IMPLEMENTATION

Implementation of the Plan is a continuous process of change management that will certainly affect the movement of population and tourists and the way it changes on the territory of the Plan. These changes will also reflect human resource management, organizational culture, and mobility procedures and policies.

Implementation of the Plan is the process of transforming the shaped strategy into sustainable mobility, so it is necessary to:

- compare the existing organizational structure with the goals of new strategic solutions
- "break" defined strategy in a series of specific steps in order to undertake all necessary activities for the implementation of measures
- It is necessary to define critical points of success
- special attention should be paid to defining objectives for short periods of time and link the way of realization to critical success factors
- The implementation process should be constantly monitored and supervised in order to determine the relation between the planned and the realized, in order to diagnose in time the need for modification

The municipality of Kladovo is responsible for the implementation of the Plan. In order to ensure its implementation, the Municipality of Kladovo has to precisely share the responsibility for the implementation of the plan.

Although, primarily, operational responsibility lies with the Department of Urban Planning, Construction and Administrative Supervision, due to the specificity of the Plan itself, measure 1.1. defines an institutional framework for the implementation of the Plan. This measure formulates the necessity of a real and feasible concept of managing the implementation of the Plan, so that all relevant stakeholders know at any time who, what, and when is working on a particular project or measure. The proposed solution is to form a team (for management), which is responsible for relevant tasks related to sustainable mobility and implementation of this Plan. The team should consist of main stakeholders from the tourism sector (and mobility) including public and private sector representatives.)

The monitoring team would be formed by a special act by the Municipal Council.

### 15. FINANCING PLAN

The measures envisaged by this Plan are set up to be realistic and feasible, while at the same time the total cost of their implementation is not high and unrealistic. On the other hand, the implementation of measures should be achievable for a limited period of time.

When it comes to measures related to the institutional framework, they should be done with their own efforts and resources, but without rejection of the possibility of applying for some of the EU funds or donor programs. On the other hand, if they were to apply exclusively to EU funds (for example, the cross-border program), the timing for implementation would be considerably prolonged. Because of this, and because of the past experience and possible quick realization, the municipal budget would be the first priority for providing funds, especially if it is considered that the amount of these funds is minimal.

Also, the resources of the ministries can be used for all measures, but it should be known that the ministries work according to the annual programs, so that in the coming years it can not be safely foreseen whether funds will be available for these purposes or not.

The cross-border cooperation program can be used for the implementation of various projects, but the next public call for these funds should wait for at least a few years. The method of application and the principles by which funds could be provided will have to be decided by the project promoter in accordance with the rules of the public invitation for these programs, when they are published.

As for the activities of concrete infrastructure construction according to the proposed measures, infrastructure funds can be provided from their own funds as well as commercial loans, as well as loans from the European Investment Bank (EIB) and KfW Bank, or the European Bank for Reconstruction and Development (EBRD). It is also possible to implement some activities through a public private partnership, and for some types of infrastructure, grants can be used, which are publicly announced by the Ministry through, for example, program "Building Together".

For some segments of the infrastructure, it could also be applied through public calls from the EU funds - the cross-border cooperation program, but it would also be necessary to explain these activities in accordance with the rules of the public call and to place themselves within a wider context that would follow the priorities of the program. A possible source is also the means of a transnational (eg, Danube) program, but with the need to involve a larger number of partners from several countries.

The construction and establishment of commercial content (eg renting systems) should, above all, be left to a private investor, but some form of public private partnership should not be excluded. Realization by budget funds should be an alternative, if the municipality fails to find a private investor.

When considering the future financing of the implementation of the measures of this Plan, the best would be to combine its own funds with donations and commercial credit funds. This will ensure optimal combinations of financial resources, in order to make the most of the benefits and disadvantages of each source.

The basic advantages of commercially available funds are:

- Higher amounts can be borrowed.
- Suitable for long-term investments.
- The loan provider does not impose rules on how the money is spent.

The loan is repaid in a certain longer period

## Disadvantages:

- Securing funds is necessary, and for local governments there are also indebtedness limits
- The borrowed amount must be repaid at the exact time agreed.
- Interest is charged, which is often quite high.
- Loans negatively affect the project's cost-effectiveness projection.

Grants also have their own advantages and disadvantages.

#### Advantages:

- Grants do not have to be repaid.
- Obtaining grant is cost free (or costs are minimal).

### Disadvantages:

- Grants are given under certain limitations and regulations imposed by the provider
- Not all organizations are authorized to apply for public competitions, which depends on the competition to the competition and the grantor
- Grants are created by public calls and therefore there is strong competition, as many organizations / institutions apply for the same funds, which lower the chance of winning them

As previously stated, there are several sources of funding available for implementation of the measures. Funding is needed for a variety of different activities, so different activities can target different sources of funding - which are most appropriate for them. When selecting the appropriate source of financing, some factors must be taken into account such as::

- the amount of money needed for a particular activity
- the urgency for the funds
- costs of funding sources (as well as time and resources needed to provide funds)
- risk
- duration of activity

For the implementation of measures, all listed financial sources can be used, but there is more to consider for the realization of the project.

Funds are available from different sources, but each source has its own price, rules and advantages. It is important to choose an appropriate and inexpensive source of funding for the smooth realization of each activity individually. Which source is to provide funds for an activity is on municipality to decide, which must proactively refer to possible ways of financing in order to maximize the effects and ensure the implementation of all envisaged measures.

## 16. MONITORING AND EVALUATION

Monitoring and evaluation activities are the basis for monitoring the implementation of this Plan, affecting the achievement of the basic objectives set out in the Plan and the effectiveness of the proposed measures, leaving the possibility for timely response by the responsible implementers of the Plan, with the aim of improving the quality of the proposed measures.

For the successful implementation of monitoring and evaluation of the Plan, it is necessary to develop a separate Monitoring and Evaluation Plan, which should be based on the basic principles on which the development of monitoring instruments is normally based:

- Implementation of the Plan is a process a large number of measures provided by the Plan have a long-term effect, both in the process of its implementation and in their effects. So, there is a risk of incorrect assessment of the impact of particular measures in relation to the projected goal, as well as the inability for quality consideration of the projected effects.
- Comprehensive and continuous dedication to the implementation of the Plan the Municipality of Kladovo, by adopting this Plan, has set up sustainable mobility as one of the priority tasks in order to stimulate the development of tourism and generally create better conditions for the life and work of its residents. Through this proactive approach, the Plan provides maximum participation of all institutions in the implementation of the sustainable mobility policy in for the development of tourism.
- In the process of monitoring and evaluation, participation of all institutions of the system, or close cooperation of all implementers of the Plan, is necessary it is a document primarily focused on tourism and mobility. This means that through the institutional monitoring system for the implementation of the Plan, as well as the evaluation process, it is necessary to ensure the participation of all identified key participants (see Chapter 6. Key participants identified in the Region), who should play an active role in assessing the achievement of the objectives of this Plan, all through the submission of proposals and suggestions for removing obstacles in the implementation of individual measures, how to improve their effectiveness and propose new ones. The same activities are expected from other Strategy implementers.

Implementers of the Plan (mentioned institutions) have a key role in the process of monitoring and evaluation. In order to successfully implement this process it is necessary to separately define the periods for the evaluation reports, as well as the body responsible for their preparation, and it is recommended to prepare and submit these reports once a year to the Municipal Assembly of Kladovo.

# **Partners on the project:**

AGENCY AUSTRIA <b>umwelt</b> bundesamt <sup>®</sup>	<b>LP</b> Environment Agency Austria	EAA	AUSTRIA
donau.büro ulm	ERDF PP1  Danube Office Ulm/Neu-Ulm	DOULM	GERMANY
DONAU	ERDF PP2 WGD Danube Upper Austria Tourism Ltd.	WGDOOE	AUSTRIA
RNB Region dramagement Day around Gold!	ERDF PP3 Regionalmanagement Burgenland Ltd.	RMB	AUSTRIA
BRATISLAVA REGION	<b>ERDF PP4</b> Bratislava Self-Governing Region	BSGR	SLOVAKIA
westpannon	ERDF PP5  West Pannon Regional and Economic Development Public Nonprofit Ltd	WESTPA	HUNGARY
	ERDF PP7 City of Vukovar	CIVUK	CROATIA
RASI RAZVOJNA AGENCIJA SINERGIJA DEVELOPMENT AGENCY	ERDF PP8  Development agency Sinergija	RASIN	SLOVENIA
	<b>ERDF PP9</b> Regional Administration of Vidin Region	VIDIN	BULGARIA
Club Sustainable Development of Civil Society	ERDF PP10  Club "Sustainable Development of Civil Society"	CSDCS	BULGARIA
INCOT	ERDF PP11  National Institute for Research and Development in Tourism	NIRDT	ROMANIA
ADO	ERDF PP12  The South-East Regional Development Agency	SERDA	ROMANIA

EARANA MEOVE	ERDF PP13		HUNGARY
	Government of Baranya County		
	IPA PP1	DCC	SERBIA
d CC danube competence center	Danube Competence Center		
	IPA PP2	RARIS	SERBIA
Regional a agencia a razvoj intočne dobije Regional Development Agency Entern Berba	Regional Development Agency Eastern Serbia		

# Transdanube.Pearls is supported by associated partners (ASP):

ASP1	Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management	BMLFUW	AUSTRIA
ASP2	Federal Ministry for Transport, Innovation and Technology	BMVIT	AUSTRIA
ASP3	Neusiedler See Tourism Ltd.	NTG	AUSTRIA
ASP4	Regional Government of Burgenland	BGLD	AUSTRIA
ASP5	Rail Tours Touristik Ltd.	RTA	AUSTRIA
ASP6	Destination Marketing Association German Danube	DMAGD	GERMANY
ASP7	Supreme Building Authority – Part of the Bavarian State Ministry of the Interior, for Building and Transport	STMI	GERMANY
ASP8	Panonsko more d.o.o. / Panonian sea Ltd.	PANON	CROATIA
ASP9	Győr-Sopron-Ebenfurt Railway Corp.	GYSEV	HUNGARY
ASP10	Government of Baranya County	BARCO	HUNGARY
ASP11	Association of Szigetköz Tourism	SZTDM	HUNGARY
ASP12	Association of Tourism Development in Moldova	ADTM	MOLDOVA
ASP13	National Authority for Tourism	NAT	ROMANIA
ASP14	Administrative Territorial Unit Tulcea County	TULC	ROMANIA
ASP15	Railways of the Slovak republic	ZSR	SLOVAKIA
ASP16	Ministry of Transport, Construction and Regional Development of the Slovak Republic	MINDOP	SLOVAKIA
ASP17	Bratislava City - Capital of Slovak Republic	ВА	SLOVAKIA
ASP18	Pomurje Tourist Association	PTA	SLOVENIA
ASP19	Ministry of Agriculture and Environmental Protection	MAEP	SERBIA
ASP20	Development Agency of Serbia	DAS	SERBIA
ASP21	Municipality of Kladovo	MKLAD	SERBIA
ASP22	Ministry of Tourism	BMT	BULGARIA
ASP23	Association of Danube River Municipalities "Danube"	ADRM	BULGARIA
ASP24	Municipality of Ruse	RUSE	BULGARIA