

# SUSTAINABLE URBAN **MOBILITY** PLAN

**SUMP**  
**2020-2028**  
MITROVICA SOUTH



INCLUSIVE DEVELOPMENT PROGRAMME  
PROGRAMI PËR ZHVILLIM GJITHËPËRFSHIRËS  
PROGRAM SVEOBUH VATNOG RAZVOJA

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[www.unhabitat.org](http://www.unhabitat.org)  
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Municipality of Mitrovica South  
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## ACKNOWLEDGMENTS

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### MAIN AUTHORS:

Mevlan Bixhaku, Niklas Sieber, Zana Sokoli

### REVIEW:

Gwendoline Mennetrier

### MAIN CONTRIBUTOR:

Fjollë Caka

### OTHER CONTRIBUTORS:

Mehmet Bajrami, Gjylferije Ademi, Fisnik Ibrahimimi, Hajrush Salihu, Nexhmi Hasani, Florent Abrashi, Sebahate Tahiri, Bahtir Maxhuni, Blerim Mehulli, Agron Sylejmani, Irfan Peci, Ruzhdi Ujkani, Ramiz Isufi, Sejdi Berisha, Nijazi Gërguri, Skender Sadiku, Artan Ibishi, Modest Gashi, Kenan Beqiri

### DESIGN AND LAYOUT:

Zana Sokoli



## SUSTAINABLE URBAN MOBILITY PLAN (SUMP)

Mitrovica South, 2020



**INCLUSIVE  
DEVELOPMENT  
PROGRAMME IN  
MITROVICA SOUTH**

**DRAFTING THE MUNICIPAL DEVELOPMENT  
PLAN- MDP**

**INTEGRATED DATABASE**

**SUSTAINABLE URBAN MOBILITY PLAN**

a) Evaluation of the municipal development plan (2008-2025)

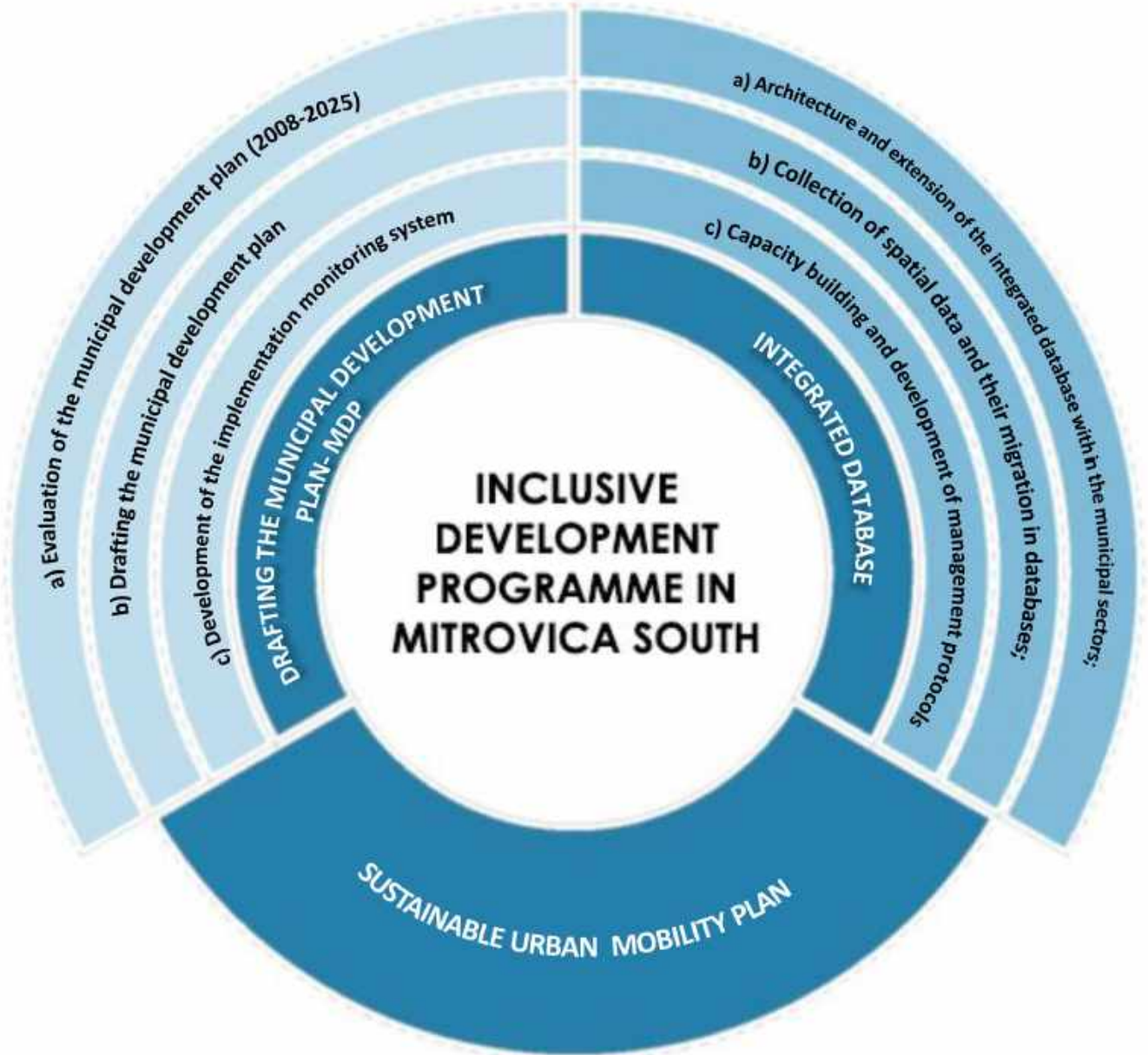
b) Drafting the municipal development plan

c) Development of the implementation monitoring system

a) Architecture and extension of the integrated database with in the municipal sectors;

b) Collection of spatial data and their migration in databases;

c) Capacity building and development of management protocols





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## LIST OF ABBREVIATIONS

CBD- Central Business District  
DPSI- Department of Public Services and Infrastructure  
DPU- Department of Planning and Urbanism  
EBRD- European Bank for Reconstruction and Development  
EC- European Commission  
EU- European Union  
ICU- Intersection Capacity Utilization  
KAS- Kosovo Agency of Statistics  
MEE- Ministry of Economy and Environment  
MI- Ministry of Infrastructure  
MPT- Municipal Planning Team  
NGO- Non-Governmental Organization  
PPP- Public-Private Partnership  
SDG- Sustainable Development Goals  
SUMP- Sustainable Urban Mobility Plan  
TEN-T- Trans-European Transport Network  
UDP- Urban Development Plan  
URP- Urban Regulatory Plan  
WBIF Western Balkans Investment Framework

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Table 26. Summary of Parking Management Measure Implementation

Table 27. Summary of Traffic safety Measure Implementation



**The appointed Coordinating Group for Improving the Mobility Service and Public Transport (SUMP Coordinating Group) for the city of Mitrovica South composed of:**

1. Faruk Mujka, Deputy-mayor of the Municipality
2. Naser Muja, Director for the Department of Public Services and Infrastructure
3. Shukri Gashi, Director for the Department of Finance and Economic Development
4. Hysni Ahmeti, Director for the Department of Inspection

**SUMP Working Group for Developing the Action Plan for Improving the Mobility Service and Public Transport (SUMP Working Group) in the city of Mitrovica South:**

**Department of Public Services and Infrastructure:**

1. Mehmet Bajrami- SUMP Coordinator
2. Fisnik Ibrahim
3. Hajrush Salihu
4. Gjylferije Ademi-Kadriu
5. Fellona Hasani (Intern)

**Department of Planning and Urbanism:**

6. Nexhmi Hasani
7. Florent Abrashi
8. Sebahate Tahiri

**Department of Education:**

9. Skofiar Syla

**Department of Protection and Rescue:**

10. Bahtir Maxhuni

**Department of Inspection:**

11. Agron Sylejmani
12. Artan Ibishi (Intern)

**Department of Environmental Protection:**

13. Irfan Peci

**Department of Geodesy, Cadaster and Property:**

14. Ruzhdi Ujkani

**Kosovo Police:**

15. Ramiz Isufi
16. Arsim

**Technical High School 'Arkitekt Sinani':**

17. Sejdi Berisha
18. Nijazi Gërguri

**Ministry of Infrastructure:**

19. Skender Sadiku

**UN-Habitat:**

20. Zana Sokoli
21. Fjollë Caka
22. Modest Gashi

**CBM:**

23. Kenan Beqiri

Local and central government actors involved in SUMP and their role in Mitrovica Souths.		
Gov. Level	Department/Institution	Role
Local	Department of Public Services and Infrastructure	Project coordination
	Department of Geodesy, Cadaster and Property	Substantial contribution
	Department of Finance and Economic Development	Substantial contribution
	Department of Environmental Protection	Substantial contribution
	Department of Planning and Urbanism	Substantial contribution
	Department of Education	Substantial contribution
	Department of Health	Secondary contribution
	Department of Agriculture and Rural Development	Secondary contribution
	Department of Protection and Rescue	Secondary contribution
	Department of Culture, Youth and Sport	Secondary contribution
	Department of Inspection	Secondary contribution
	Department of European Integration and Social Welfare	Secondary contribution
Central	Ministry of Infrastructure	Secondary contribution
	Ministry of Environment and Spatial Planning	Secondary contribution
	Kosovo Police	Secondary contribution
	Kosovo Customs	Secondary contribution

Other contributing stakeholders for Mitrovica South include:		
Level	Institution	Role
Civil Society	NGO 'Me dorë në zemër'	Partners in traffic counting phase Workshop participants
	NGO '7arte'	Workshop participants
	NGO 'CDO'	Workshop participants
	NGO 'Mitrovica Guide'	Contributor
Business Institutions	Car rental, Private and public parking, Local and international freight transportation, and insurance companies	Contributors Workshop participants Workshop participants
Municipal Bodies	Kosovo Police, Heads of regional villages and city neighborhoods	Contributors
Transport-related enterprises and organizations	Public Enterprise "Stacioni i Autobusëve" in Mitrovica South, Rail Association "Infrakos", Transportation Association, Cyclist Association, Motorists Association, Visually Impaired Association, HANDIKOS, and auto-clubs	Contributors Workshop participants
Utility service providers	Kosovo Electricity Distribution and Supply, Kosovo Post and Telecommunication, Public Enterprise 'UNITETI' and regional water supply	Contributors Workshop participants
Schools	Technical High School 'Arkitekt Sinani' and Gymnasium 'Frang Bardhi'	Partners in traffic counting phase



Source: Mitrovica Guide





## INTRODUCTION

Sustainable Urban Mobility Plan (SUMP) is a strategic plan in the field of transportation, which aims to improve and harmonize the needs of all traffic participants for free and safe movement while enhancing citizens living comfort and ensuring a better quality of life. It presents a strategy for efficient movement of people and transportation of goods (movement demand management) and potential sources of funding towards the implementation of the foreseen activities by considering social, environmental and energy-saving issues.

SUMP related activities are based on the model of optimal spending and innovation, contributing towards increased urban mobility and accessibility, improved living environments and attractiveness, and improved public health. They are based on informed decisions supported by citizens and stakeholder's involvement. Findings emphasize the need for increased share of public and green areas and for improved public traffic, prioritizing the provision of conditions for bicycle use, restricted traffic areas establishment, parking spaces utilization etc.

Sustainable urban mobility is a new sphere of local government action in Kosovo, although this is a common practice in the European Union (EU). So far, many European cities have implemented such urban plans and have undertaken a range of activities in this regard. The European Commission (EC) actively supports SUMP development and provides guidance on the preparation of this type of planning by ensuring the promotion of good practices and supporting the education of professionals in the field. There are ever greater commitments in the European Union for SUMP (drafted in line with national standards based on EU Guidelines) to be necessary for certain sized cities, while exploring opportunities for developing an EU framework supporting their progressive implementation.



## GOALS AND OBJECTIVES

The Sustainable Urban Mobility Plan (SUMP) of Mitrovica South aims to improve the city connectivity by making the urban mobility system more sustainable. A sustainable urban mobility system is one that satisfies the current mobility needs of the people, without compromising the ability of future generations to meet their own needs. Such a system is well-integrated and provides higher transport accessibility, efficiency and quality for all. It is also more reliable, safer, more affordable and less polluting.

Therefore, main objectives of this SUMP include improvement of the quality of life, social equity, transport accessibility, intermodal integration, economic viability, urban attractiveness, sustainability and environmental quality in Mitrovica South by ensuring that all people, businesses and other affected parties are involved and benefit from this process. As a sustainable urban mobility system is not particularly based on an administrative area but on a "functioning area based on travel-to-work patterns", this SUMP addresses the mobility systems in Mitrovica South based on which findings will attempt to provide long-term and sustainable solutions.



# EXECUTIVE SUMMARY



STRENGTHS



WEAKNESSES

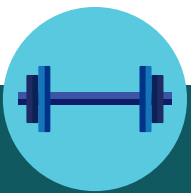


OPPORTUNITIES



THREATS

Existing traffic situation in Mitrovica South, main strengths, weaknesses and an overview of potential opportunities and threats.



STRENGTHS

- Well-connected road traffic with the rest of Kosovo, by routes and railway traffic;
- Well-positioned geographic location to provide a trading interface between north and south. A railway line between Belgrade and Prishtina runs through Mitrovica South, on to Skopje, and down to the Mediterranean Sea and Thessaloniki;
- Traffic and Transport sector seen as priority by local institutions;
- Quick access to central part of the city through higher character roads ("Shemsi Ahmeti", "Mbretëresha Teutë" and "Isa Boletini").



WEAKNESSES

- Congested main roads in the city center;
- Poor road conditions, especially roads that connect the city quarters;
- Loaded traffic intersections on main roads (existing ICU ranges from 70-80%);
- High number of vehicles passing through the city center, while roads on the outskirts of the city (ring roads) are rarely used;
- Bad railway condition;
- Inadequate and insufficient public transport (urban public transport within the city does not exist);
- Unsuitable conditions for pedestrians and bike users (lack of sidewalks, pavements and bike tracks);
- Insufficient parking places in the city;
- Reduced capacity and Level of Service of roads due to illegal parking,
- Significant lack of horizontal and vertical traffic signaling,
- Lack of traffic calming, especially near schools,
- Lack of adequate infrastructure for people with special needs,
- Poor urban traffic management (non-implementation of the Law, has caused the vehicles to park without control in all parts of the roads);
- Proximity of building constructions to the road, leaving no option for road widening.



## OPPORTUNITIES

- New infrastructural projects, including the construction of national road "M2 Prishtinë –Mitrovicë" (Action Plan of the Economic Vision of Kosovo 2011-2014);
- Improved road capacity and safety, by removing illegal parking lots from sidewalks and roads,
- Integrated bus network, linking settlements in both Mitrovicas,
- Balanced land use and transport planning towards the improvement of access to city's assets and green spaces.



## THREATS

- Increased motorized traffic due to lack of public transport development and bad road system;
- Inadequate integration of transport investments in development projects;
- Unavailability and insufficiency of municipal budget and grants.



## Main findings from the traffic counting data for Mitrovica South

Identified main findings deriving from the analysis of (motoric and non-motoric) traffic data (gathered for 27 recording points) in the main intersections in Mitrovica South include:

- **Heavy traffic on main roads linked to the city center-** Traffic congestion has become a major problem for main roads in the city center (often extending outside the normal peak travel periods);
- **Several road junctions and sections are congested,** currently having intersection capacity utilization (ICU) ranges from 70-80%;
- **Inadequate traffic control at intersection-** Uncontrolled, with inappropriately used YIELD or STOP signs considering the prevailing conditions regarding traffic volume, speed, and other factors;
- **Excessive conflicts within or near the intersection,** especially between turning vehicles and crossing pedestrians;
- **Inadequate information for motorists (lack of traffic signaling),** especially of navigation signs and markings at intersections;
- **Inadequate parking in residential areas,** especially on their entrances, main roads and, intersections, which has also reduced the crossroads' traffic capacity.



## Main findings from the Household Survey

The household Mobility Survey for Mitrovica South was conducted online with the 402 citizens living in Mitrovica South and the surrounding area. The characteristics of surveyed respondents are like those of the population in terms of age, gender and other demographic features.

Among the 202 completed interviews, participation by gender is almost equally divided, with female respondents being slightly higher (50.59%) than male respondents (49.11%). Share of respondents by age group is as following: 10-19 years 23.21%, 20-29 years 41.96%, 30-39 years 17.86%, 40-49 years 13.39%, 50-59 years 2.68%, 60-69 years 0.89% and 70-79 years 0.5%. The majority of surveyed respondents have completed high school studies (47.97%), followed by those with a university degree or higher education (37,17%), technical or vocational studies/courses (11,50%), and primary school (3.54%). In addition, most of the surveyed respondents are (full time) students (40.71%), employed full time (33.63%), unemployed (28.32%), employed part-time (5.31%), and disabled or not able to work (0.88%). Additional 200 surveys were conducted in person, targeting specific groups, such as elderly, primary and high school students, and people with physical disabilities (at HANDIKOS) and visually impaired.

The surveying instrument was composed of three parts, collecting respondents and households information on 1) demography, 2) travel behavior, in both typical and atypical trips, and 3) willingness and ability to change their travel behavior. It was designed to understand the mobility and travel behavior of Mitrovica South population. Information regarding mobility was based on trips that are taken on a typical day, and trips not necessarily taken each day. The purpose of the trip, time spent on a trip, and means of transportation used on a trip were among data gathered for each respondent

In general, the two most preferred means of transportation on a typical trip are walking and traveling by car, whereas in atypical trips, the most used mode of transportation is by car. Three most mentioned purposes in typical trips are: going to work, going on a trip during leisure time and going to school. Atypical trips are mostly taken for leisure time purposes and to accompany someone else.

Apart from trips, respondents answered a series of questions about their travelling behavior with a focus on bicycle, public transport and private cars. Among these modes, bicycle is the least used. The difference on the public transport and car usage lies in the frequency of usage. Public transport is used several times a week the most, whereas private car in most cases is used on daily basis followed by those using cars several times a week.

The most frequent reasons declared by respondents for not using the bike is the lack of infrastructure for cyclists (e.g. poor quality of roads for biking, lack of bicycle lanes, lack of parking places etc.). Regarding walking main problems are related to traffic safety (e.g. sidewalks occupied by parked cars, poor quality of sidewalks, lack of enough sidewalks etc.).



### Typical trips – Primary mode of commuting

When asked about the primary mode of transportation in typical trips, 28.50% of respondents declared moving by cars, 25.0% walking, and 24% by private transport (legal/illegal taxis). Less mentioned means of transportation are public transport (13%), bicycles (8%) and motorcycles (1.50%).



### Cycling

The majority of respondents (48.0%) declared that they have never used a bicycle as a transportation mode. Around 27.20% declared using bicycles a few times a year, 16.00% several times a month, 6.40% several times a week, and only 2.40% using it daily.



### Walking

Most of the respondents (73,33%) declared that they walk regularly, with the rest of 26,67% not walking on regular basis. Main reasons for the later include occupied sidewalks by parked cars (67.62%) and shops and selling items placed outside (57.14%), insufficient sidewalks (38.10%), insufficient car free areas (34.29%), poor sidewalks quality (19.52%), and others (10.48%).



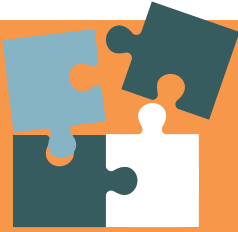
### Public Transport

65.77% declared that the public transport is not functional, while 25.50% declared that it is functional. Main reasons for not using the urban transport include long trip duration (47.55%), lack of comfort (seats, noise, temperature) (41.26%), lack of maintenance/cleaning (39.36%), lack of information on routes and timetable (37.76%), lack of frequency and flexibility (36.36%), etc.



### Private vehicles

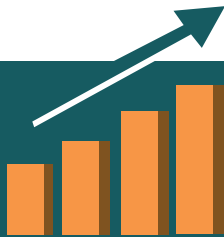
Regarding the car usage, 4.38% declared that they have never used a private car as a means of transportation, while 32.85% declared that they use it daily, followed by those who use it several times a week (37.96%), a few times a month (18.98%) and those who rarely use it (5.84%).



## Road and Transportation Infrastructure Challenges in Mitrovica South

This section addresses the following urban transport and mobility challenges:

- How to make Mitrovica South accessible by railway and road traffic quickly and easily?
- How to make Mitrovica South accessible from within? How to avoid overloaded traffic, traffic congestion at peak hours and lack of parking places? Occupation of sidewalks by cars.
- How to make all roads accessible by everyone regardless social status?
- How to make the public transport more effective?
- How to temporarily solve parking problems until a permanent solution is finally found?
- How to reduce the number of vehicles circulating in most frequented streets of the city?
- How to prepare a basic and detailed design for bike paths and sidewalks for pedestrians?
- How to equip Mitrovica South with mass public transport means which are environmentally friendly and in accordance with the European standards?



## Main Goals, Objectives, SMART Targets and measures for Mitrovica South



### Regional Public Transport System

- Establishing a Joint Regional Transport Association and set up a regular bus service for all northern municipalities.
- Revitalizing the railway transport Prishtina-Mitrovica-Leshak.
- Re-functionalizing the existing railway stations and addition of new ones in: Mitrovica (North/ South), Zvecan, Banjska, Slatina, Leposavic, Leshak, Vushtrri, Prilluzha, Obiliq, Fushë Kosovë.
- Establishing a new multi-modal station (by constructing a new bus station near the railway station)
- Lobbying with central government for the establishment of a light rail system on the existing railway tracks. Trams or light railways may serve several stops within the city that are not served by the long-distance trains.



### Concept for Centre of the City (CBD)

- Creating a new concept for the city center through a new system of rules. It is important to ensure that future policies and decisions minimize the need to travel, encourage walking and cycling, reduce the need for individual vehicles and are in compliance with broader economic, social and environmental objectives.
- Maintaining and further developing the multifunctional character of the city center.
- Parking management with a guiding system to reduce the traffic and free-of charge parking spaces.
- Improving the public transport system which would reduce the number of passenger vehicles with a destination to the city center considerably.
- Locating bus stops close to the city center.
- Development and regulation of the road network, creating new roads and expanding and improving the existing ones.
- Intelligent traffic management preventing transit traffic to cross the city center on the congested roads. Restricting vehicle access to the city center and urban areas.
- Maintaining existing green and public spaces within the city and creating additional public spaces.
- Extending and strengthening of ecological corridors for pedestrians and cyclists along the rivers "Ibër" and "Sitnicë".
- City Logistics Improvements. Improving supply/ transport arrangements/ regulations is important in terms of supporting and facilitating the economic aspect of the city.



### Road Infrastructure and Traffic Management

- Distributing movements on different road axes depending on the traffic structure, such as:  
 transit traffic - heavy vehicles;  
 urban traffic and motorized vehicles;  
 urban traffic and active modes (bicycles and pedestrians); and  
 active modes (pedestrians and cyclists).
- Improving Junction Capacity & Safety Measures, since some intersections on the main roads have congestion issues during peak hours and pose a safety hazard to road users.
- In the short term, it is proposed to establish a new transport link by a ring road - By Pass road, extending to the southern part of Mitrovica South and the city center, providing a new transit traffic link between the routes regional road R-101 and the M2 motorway in Shupkovc.
- Improving the road infrastructure for the development of regional transport through:  
 regular road maintenance;  
 rehabilitation of existing roads in the western region; and  
 construction of new roads (only if major bottlenecks or missing links are observed).





### Bicycle Strategy

- Developing the strategic concept for the creation of the city's cycling network, including adjustments on existing bike lanes, investments on building already planned bike lanes, and designing of new bike lanes.
- Prioritizing areas for bicycle parking spaces concentrated near public buildings in the city center, with likely greater demand.
- Developing and co-implementing a "bike-share" scheme for bicycle rental.
- Developing promotional campaigns and materials to encourage the use of active modes, such as walking and cycling, as healthier modes of transport.



### Urban Public Transport System

- Establishing an urban public transport system, based on the reliability and regularity of bus services across Mitrovica South, with should be one of the top priorities on addressing the congestion problems and providing sustainable ways of transport as attractive and reliable options.
- Urban transport network for the city of Mitrovica South would be achieved with fourfunctional lines:  
Line No. 1 "Center-Iliridë-Gushac";  
Line No. 2 "Zhabac-Center-Train Station";  
Line No. 3 "Center- Shupkoc – Shipol - Lushtë"; and  
Line Nr. 2A "Kushtovë – Zhabar" (serving as a Helpline and operating at a longer interval);
- Establishing an integrated ticketing system;
- Improving taxi operation in the city;
- Establishing a new multi-modal station (by constructing a new bus station near the railway station) that will serve as liaison node not only for the city of Mitrovica South but also for other regions.



### Parking Management

- Developing a Parking Policy for Mitrovica South (implementing a parking management concept);
- Dividing the city into parking zones (depending on the attractiveness and importance of the zones) and creating new conditions and regulations for vehicle parking for the respective zones. Three parking zones are foreseen for the town of Mitrovica South:  
Parking Zone 1 - The central part of the city;  
Parking Zone 2 - The peripheral part of the city;  
Parking Zone 3 - Outside the definitions in Zones 1 and 2, intended for free and unconditional parking of vehicles.
- Drafting a new regulation to manage and control on-street and off-street parking demand;
- Draft a special regulation for parking in residential areas and collective housing;
- Establishing "Area for residents of collective buildings" in residential areas;
- Operation and enforcement of parking rules.



## Traffic Safety

- Developing a strategy for traffic safety to create a safe environment in which all traffic participants can drive, ride/ bike and travel without fear of being involved in a road accident or in any way be at risk of participating in traffic;
- Reducing traffic accidents;
- Increasing the number of students going to school on foot and by bike by promoting sustainable school trip plans development;
- Improving the road design for pedestrians and cyclists;
- Developing traffic calming and safety measures within local areas to reduce vehicle speeds;
- Changing drivers' behavior and improving vulnerable road users safety (pedestrians and cyclists);
- Undertaking road safety initiatives, law enforcement, education and training initiatives;
- Undertaking public awareness campaigns (coordinated actions among institutions for higher impact);
- Traffic calming by creating 20-30 km/h speed zones around schools, educational institutions and residential areas;
- Improving horizontal and vertical traffic signaling;
- Increase staff's professional capacities on traffic safety;
- Installing automatic speed controls and increasing controls with mobile radar stations.



## Future structuring of the SUMP process

- Delivering a coordinated and focused sustainable mobility outcome at both strategic, as well as at the operational level.
- Developing and implementing SUMP to ensure the continual improvement in the development and co-ordination of the sustainable mobility strategy, with a focus on improving delivery of the agreed objectives and targets (and the investment programmes that support these).
- Setting up a SUMP development and oversight team (composed of: Department of Public Services and Infrastructure, Department of Planning and Urbanism, Department of Finance and Economic Development, Department of Geodesy and Cadaster and Property).
- Providing advice/proposals to decision-makers in relation to SUMP funding and investment of SUMP programme measures.
- Applying to EU financial resources, respectively the possibility for tenders for innovative transport, environmental and energy solutions, which increases competitiveness and capacity of available financial resources of Mitrovica South.
- Monitoring and evaluating the SUMP implementation progress and reporting to the City Council/Major.
- Cooperating/coordinating with Mitrovica North and other neighboring municipalities in matters of common interest and in co-implementation of measures.
- Providing the foreseen financial means for the implementation of the package of measures foreseen in this plan.

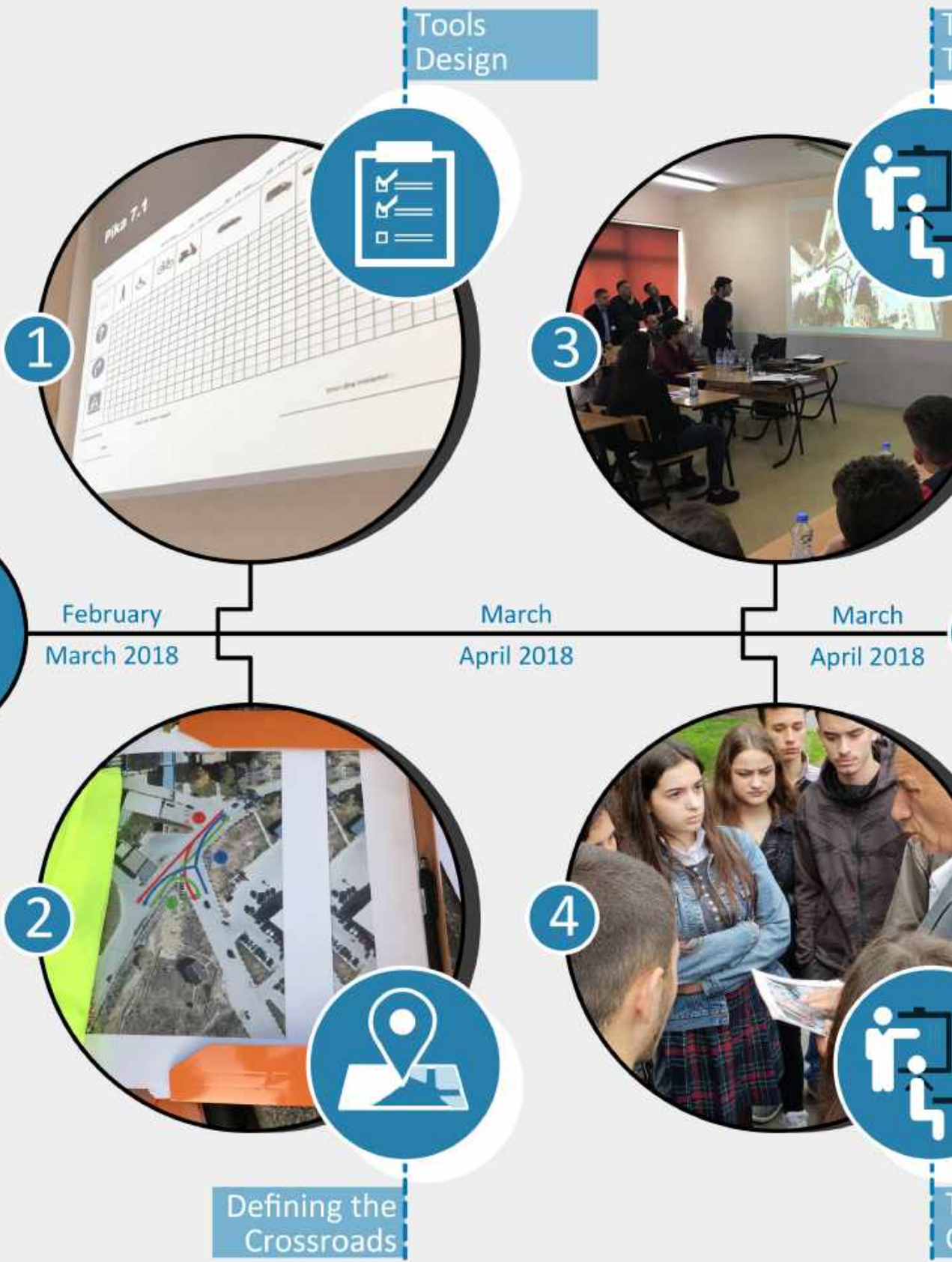




MITROVICA SOUTH



1<sup>st</sup> Traffic Counting  
Period  
(25, 28, 29 April)



TRAFFIC  
COUNTING



**2<sup>nd</sup> Traffic Counting Period**  
(25, 28, 29 July)



**102 trained counters**  
High schools, Youth centers, NGO members

Training with high schools  
Technical School 'Arkitekt Sinani'

1<sup>st</sup> Countings  
in April



6



5

Testing  
the tools

April  
July 2018

ongoing  
process



7

2<sup>nd</sup> Countings  
in July

Training with high schools  
Gymnasium 'Frang Bardhi'

7 May 2020 and on

6 May 2020 and on

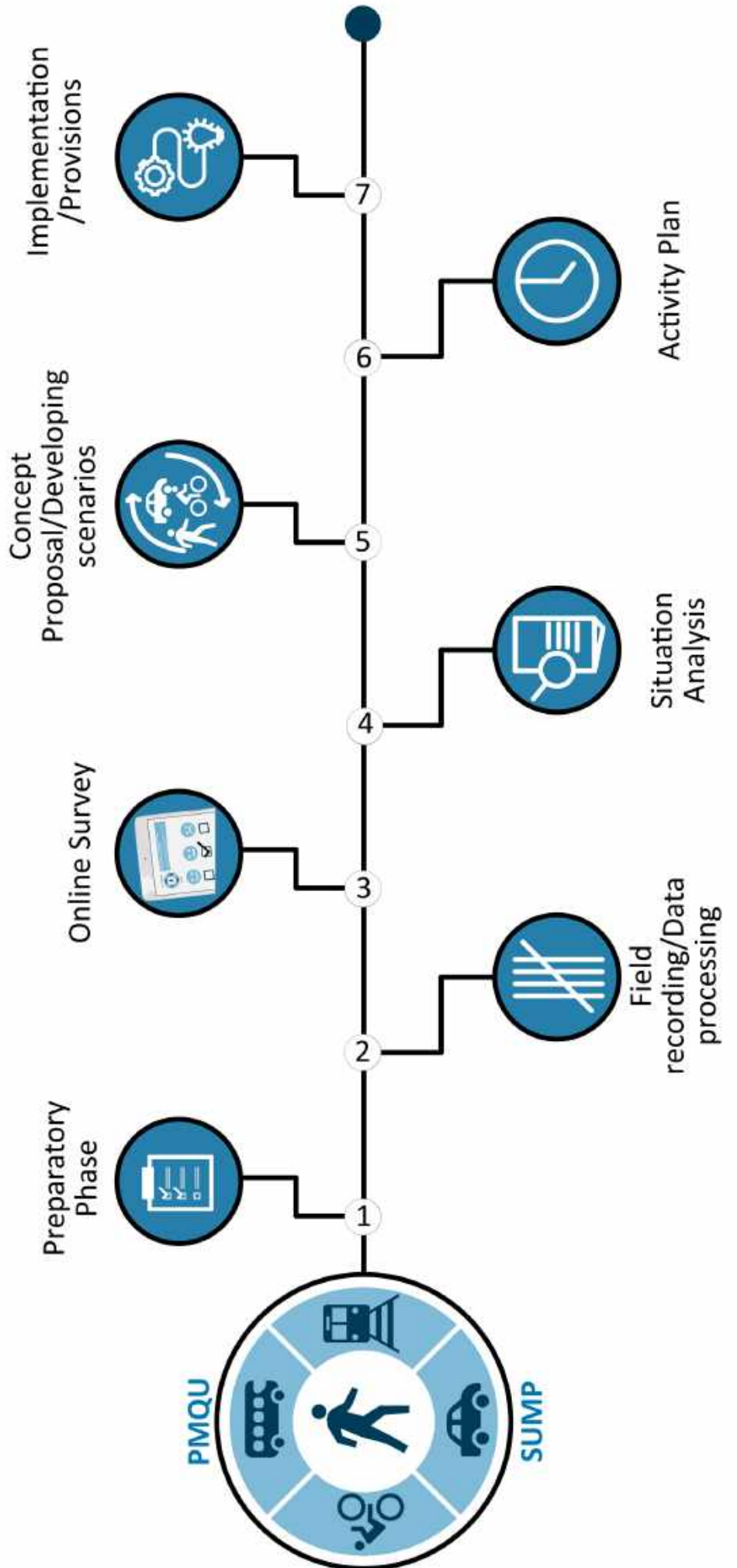
5 November 2019 to April 2020

4 March 2019 to October 2019

3 January 2019 to March 2019

2 April 2018 to December 2018

1 January 2018 to April 2018



# 1. THE METHODOLOGY OF SUSTAINABLE URBAN MOBILITY PLAN FOR MITROVICA SOUTH



## 1.1 Preparation and analysis

The Sustainable Urban Mobility Plan (SUMP) of the Municipality of Mitrovica South has emerged as a priority from the baseline assessment, and was initiated by the Mayor Agim Bahtiri (through the decision No. 01-030/01-0010576/18) with the aim of improving the municipality's mobility system and making it more sustainable. Its main objectives include improvement of the quality of life, social equity, transport accessibility, intermodal integration, economic viability, urban attractiveness, sustainability and environmental quality in Mitrovica South by ensuring that all people, businesses and other affected parties are involved and benefit from this process.

It is a comprehensive strategic document, covering a "functioning area based on travel-to-work patterns" (not the whole municipality's administrative area), drafted through an inclusive process built on partnership with the municipality, central level, stakeholders, civil society and the general community, based in international guidance and best practices.

The methodology of drafting the SUMP of Mitrovica South was based on literature review of international best practices, review of the EU (ELTIS) and UN-Habitat's guidelines, review of spatial planning and mobility related legislation, local plans and policies, city to city exchange, identification of stakeholders, assessment of the current local mobility conditions (through traffic counting and surveys), identification of problems, participatory visioning and goal setting, and identification of related implementing agencies and their duties.

### 1.1.1 Set up working structures

The process started by setting up the municipality's working structures, including ensuring of political and institutional ownership, creation of inter-departmental working groups, and mapping of stakeholders and interested parties. Since the municipality did not have all the professional and operational capacities to conduct the SUMP in-house, there were several external parties engaged, among them local NGOs and high-school students supporting the traffic counting process, as well as two mobility experts (one local and one international) assisting through the current mobility situation analysis (including identification of main issues)

and SUMP development process (including concept proposal, development of scenarios, setting of measures, responsibilities and activity plan, as well as implementation provisions). A SUMP should address all modes and forms of transport within an urban area, including motorized (automobiles, buses, light commercial and heavy-duty vehicles, motorcycles) and non-motorized (walking and cycling), public and private, passenger and freight, moving and parking (ELTIS, 2014). It should also assess needs and priorities of all stakeholders (both public and private), while aiming traffic safety and security, socio-economic efficiency, and reduction of pollution, congestion and use of waste resources (such as energy, gas).

SUMP of Mitrovica South aims to create an urban transport system by addressing – as a minimum – the following objectives:

- Ensuring all citizens are offered transport options that enable access to key destinations and services;
- Improving traffic safety;
- Reducing air and noise pollution, greenhouse gas emissions and energy consumption;
- Improving the efficiency and cost-effectiveness of the transportation of persons and goods;
- Contributing to enhancing the attractiveness and quality of the urban environment and urban design for the benefits of citizens, the economy and society.

### 1.1.2 Determine planning framework

In contrast to traditional transport planning approaches, sustainable urban mobility planning is a long-term, people-oriented, inclusive and multi-sectorial process, which requires a good

coordination of different local government departments and regular monitoring and evaluation. When planning a sustainable urban mobility system, there should be a good policy coordination among the transport, land use, environment, economic development, social policy, health, safety and energy sectors, and a continuous involvement of the citizens and stakeholders in all planning processes. Prior to drafting a SUMP, it is important to make sure that the sustainability principles are well-understood by all the involved parties and considered through the whole planning process.

This stage will define the framework for the development of the SUMP based on the Mobility Plan Guidelines. This follows EU guidelines on SUMP development that are widely followed by Municipalities across Europe. The overall process and the sequential stages for the development of a successful SUMP are set out in Figure 1.

The methodology of drafting SUMP for Mitrovica South is based on literature review of international best practices, review of EU and

Figure 1. Traditional Transport Planning versus Sustainable Urban Mobility Planning





UN-Habitat's guidelines, review of mobility related legislation and local plans and policies, city to city exchange, identification of stakeholders, assessment of the current local mobility conditions (through traffic counting and surveys), identification of problems, participatory visioning and goal setting, and identification of related implementing agencies and their duties.

## 1.2 The SUMP process

### 1.2.1 Time horizon

Usually investments in the transport sector have a lifetime of 20 years and thus feasibility studies are undertaken for at least this timeframe. Therefore, Mitrovica's SUMP Methodology Guidelines rightly proposes a "development strategy for the next 20-30 years, with regular reviews (2-5 years) and measurements (3-10 years) of the implementation process". Since the scenarios for the SUMP shall be based on 2040 or even 2050, data forecasts are needed for socio-economic data of the population, the vehicle

fleet and the economic development. These data are needed as an input for the model calculations as well as for possible feasibility studies to be conducted for major investments. The data must be developed on the basis of the Municipal Development Plan that is about to be finished end of this year.

### 1.2.2 Formulation of targets

Targets are formulated in order to describe the desired future. For example:

- We want to serve all villages by an hourly public transport service by 2025.
- We want to reduce the average time spent in congestion by 20% in 2030 and by 60% in 2040.
- We reduce the number of road fatalities by 80% in 2030.
- We reduce the CO2 emissions from transport by 60% in 2050.

Figure 2. Guidelines- Developing and Implementing a Sustainable Urban Mobility Plan; European Commission



The targets should be SMART: Specific, Measurable, Achievable, Realistic and Time bound.

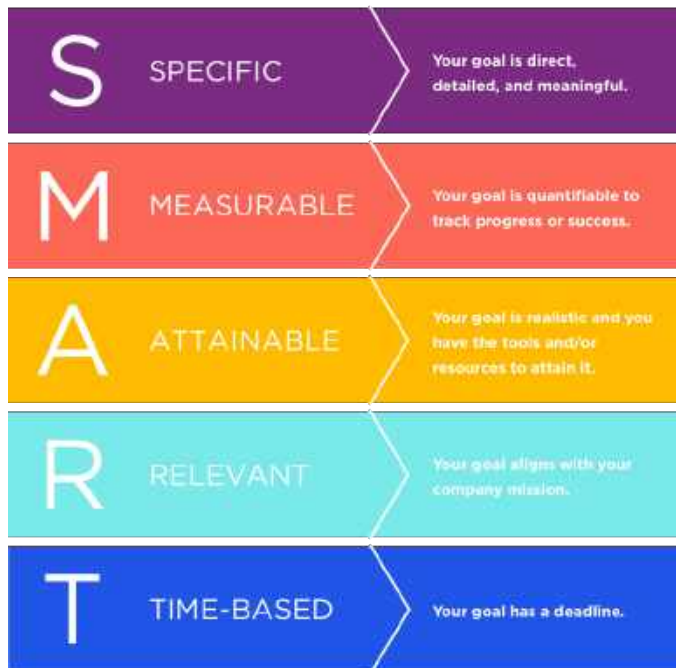


Figure 3. SMART Targets

### 1.2.3 Scenario Development

Since the future is difficult to predict, the scenario methodology helps to conceive different sketches of future developments. Usually three scenarios are developed:

I. Business as Usual BAU, which predicts the future development if present activities are continued and no major policy changes are introduced.

II. One scenario implementing measures to optimize individual motorized transport and reduce their negative effects. Eg 100% electric vehicles, intelligent traffic management, major road construction, large parking spaces, etc.

III. A scenario to enhance the usage of public transport, cycling and walking.

These scenarios may as well be adapted to the local conditions of Mitrovica. Would it make sense to develop scenarios for different political frameworks that reflect:

- i) increased administrative cooperation or
  - ii) no cooperation between the municipalities?
- In any case, each scenario has to be attributed with sets of measures (e.g. implementation of a public transport network, etc.), that fits to the scenario.

### 1.2.4 Adaptation of the SUMP standard process for Mitrovica South/ Mitrovica North

The SUMP process for Mitrovica South (shown in Table 1 along with a rough time schedule) has been structured in two processes, the SUMP Procedure and its Action Plan, developed in parallel. The SUMP Procedure consists a rational planning background for major investments in the transport system, thoroughly designed throughout stakeholder workshops. Whereas, its Action Plan foresees the implementation of immediate measures agreed upon during the 2nd Stakeholders Workshop in November 2019. A rough, but optimistic time schedule foresees the implementation of measures to start in August 2020. While it is the political will in Mitrovica South to quickly develop measures for solving the present transport problems within an activity plan in 2020, the SUMP process is developed for a period of 20 to 30 years (including larger investments procedures, implying additional donor funding that are much slower).

The first two stakeholder workshops laid the foundation of the SUMP development for Mitrovica South. During the 1st Stakeholders Workshop (October 16-17, 2019), the participants were exposed to the preliminary assessed main mobility issues, which they further enriched by jointly identifying related impacts and alternative solutions. Furthermore, they were shown several best practices and benefits of SUMP around the world, which led the development of Mitrovica South's future transport system vision and related short- and long-term SMART goals.

During the 2nd Stakeholders Workshop, the participants were presented the lessons learned from the SUMP of Prishtina; after which, they continued with the respective scenario developments and setting of targets, milestones and activities towards achieving them. In both workshops, group work was done in different thematic fields, covering urban and regional public transport, concept for the city center, road infrastructure and traffic management, parking management, bicycle strategy (and other forms

Package	Parking Management						
Target 1	Implementing a Parking Management Concept						
Target 2	Arrangement of parking areas for new buildings						
Target 3	-						
Responsible Agency for Implementation	T1: Municipal Assembly, Department of Public Services and infrastructure, Department of Planning and Urbanism T2: Department of Planning and Urbanism						
Decision Making Bodies	T1: Municipal Assembly, Department of Public Services and infrastructure T2: Municipal Assembly, Department of Planning and Urbanism						
Authorisation needed from	Ministry: Other: Municipal Assembly						
Documents to be presented to decision making body	T1: Detailed concept plan T2: Urban Regulatory Plan (Neighborhood Regulatory Plan)						
Financial means required (Estimate)	Not known	>10,000 €	10 – 50,000 € T1	50 – 100,000 € T2	100 - 250,000 €	250 - 1,000,000 €	>1,000,000 €
Possible sources of financing	T1: Municipal Assembly T2: Municipal Assembly						
Training needs for staff	T1: The need for staff training and extension of existing staff						
Possible constraints/risks	T1: Political and financial aspect Q2: Failure to comply with the criteria under regulatory plans						
Measures to reduce risks	T1: Ongoing reporting to decision-making bodies T2: Setting strict criteria for the number of parking lots						

of non-motorized traffic), traffic safety and environmental protection (including air pollution remedies and climate change mitigation).

Essential components include:

- A strong **stakeholder participation** during the four workshops, with stakeholders being constantly informed and given the opportunity to participate in the process.
- A **rational decision-making process** which is achieved through model-based calculations and rational prioritization of measure according to cost efficiency of cost effectiveness principles. This is essential to receive donor funding for major investments.
- A strong **political backing** of the SUMP which is achieved through participation in the workshops and decisions made in the municipal councils, especially regarding future budget commitments.
- The development of an **investment plan** over a period of 10 to 20 years that give future directives for public budgets.
- The development of **stable administrative institutions** that ensure the sustainability, e.g. a public transport authority.

Table 1. Defining objectives, milestones and activities towards achieving them during the second stakeholder workshop.

Example: Parking management





## 2. SITUATION ANALYSIS/ ASSESSMENT



### 2.1 Review of Mobility related data (including legal & strategies) and the role of institutions

The legal frameworks and regulations relevant to sustainable urban mobility, at the central level of Kosovo and the local level of Mitrovica South, are as follows:

- Law no. 02/L-70 on Road Traffic Safety;
- Law no. 2003/11 on Roads;
- Law no. 2004/1 and Law No. 04/L-179, 16 May 2013, on Road Transport;
- Law no. 2012/04-L-174 on Spatial Planning;
- Law no. 03/L-160 on Air Protection from Pollution;
- Law no. 03/L-025 on Environmental Protection;
- Law no. 03/L-040 on Local Self-Government;
- Law no. 04/L-076 on Police;
- Law no. 04/L-010 on Inter-Municipal Cooperation;
- Plan of Measures for the Improvement of Air Quality and the Environment Condition in Kosovo (Ministry of Environment and Spatial Planning – 2016).

#### 2.1.1 Review of Laws that are relevant to the SUMP

Traffic safety is governed by the Law no.02/L-70 on Road Safety. The purpose of this law is to govern the rights and obligations in the road traffic system.

In addition to the Law on Traffic Safety, the Law on Police adopted in 2012 governs the traffic issues. On the other hand, the Law on Local Self-Government, Regulation on Municipal Services, as well as other bylaws of Kosovo municipalities cover the field of traffic safety, thus completing the legal basis in this field.

According to Law No.06 / L-068 (amending and supplementing Law No.2003 / 11 on Roads as amended and supplemented by Law No.03 / L-120), public roads depending on their social,

economic and circulation/traffic significance are classified as follows:

- Motorway;
- National road;
- Regional road;
- Local road.

The Ministry of Infrastructure (MI) is responsible for the management, maintenance and construction of motorways, national roads and regional roads, while the Municipality is responsible for local roads.

Exceptionally, with the consent of the Ministry and municipalities in urban zones of which pass the national and regional roads, can be transferred several activities and responsibilities such as:

- Maintenance and protection of roads;
- Preparation of road development plans;
- Preparation of road reconstruction plan;
- Prepare and implement a program of measures and activities to improve the traffic safety;
- Retain data (database) of the roads, road facilities, traffic signs, and to manage the road land and road protection strip;
- Undertake necessary measures to preserve and protect the environment along the road.

According to Law No. 04/L-179 on road transport, Ministry of Infrastructure is responsible for the coordination and regulation of:

- the road transport within the territory of Kosovo;
- transport of passengers outside the territory of Kosovo;
- transport of passengers for access and transit passing into the territory of Kosovo.

Whereas, the Municipality is responsible for coordinating and regulating urban and urban-suburban transport within the administrative boundaries of the municipality.

According to this Law, two municipalities may end up with an agreement for the mutual regulation of the transport of passengers between themselves. The agreement is all-powerful if it is adopted by the Ministry.

Law on Spatial Planning aims at regulating all issues related to the spatial and urban planning. Pursuant to this law, spatial planning should respect principles of protection of Kosovo natural sources and support the sustainable development, and support inclusive and participatory processes and involve all interested parties and communities.

According to the Law No. 03/L-025 on environmental protection, the Government, respectively the Ministry of Economy and Environment (MEE, previously being Ministry of Environment and Spatial Planning), is responsible for improving environmental conditions related to the quality of life and protection of human health.

Municipalities cooperate with the Ministry:

- for protection of environment and sustainable development within their territory according to this law;
- enforce laws and inspect enforcement of the laws related to the protection of environment and sustainable development within their territory;
- prepare and provide information related to the protection of environment and sustainable development for citizens;
- the plan for protection of environment and sustainable development within municipality territory, shall be approved by the respective Municipality Assembly.

### **2.1.2 Relevant Strategic Plans, Policies and Strategies at the national level**

At the national level, there are several important relevant documents including the following:

- Spatial Plan of Kosovo 2010 – 2020+;
- Sectorial Strategy and Multimodal Transport 2015-2025 and the Action Plan for 5 years; and
- Kosovo Road Safety Strategy and Action Plan (2015 – Version 1.6).

At a municipal level, the relevant documents include the following:

- Municipal Development Plan (MDP) 220020-2028+;
- Urban Development Plan (UDP) 2009-2005+; (drafted with the old legal framework- outdated)
- Urban Regulatory Plans for Mitrovica South (URP)- (outdated- some of them still in use)
- Local Environmental Action Plan 2012/2017 for Mitrovica Municipality .

### **Municipal Development Plan (MDP) 20020-2028+**

This is a multi-sector plan that sets out the long-term goals for the city to achieve economic, social and spatial development, with the plan covering the entire municipality area, including both urban and rural areas.

### **Urban Development Plan (UDP) 2009-2005+ (drafted with the old legal framework- outdated)**

This plan is a multisector strategic plan that determines long-term goals for management and development of the urban area. The overall goal is the improvement of conditions within the city through identifying key problems and developing a range of sector action plans to address these.

### **Urban Regulatory Plans for Mitrovica South (URP) (outdated- some of them still in use)**

Urban Regulatory Plans (URPs) set out conditions for the regulation of space as well as the rules for location of buildings on specific urban land plots. The Municipal Development Plan is the basis for any URP.

### **Local Environmental Action Plan 2012/2017 for Mitrovica Municipality**

Studies show that in Mitrovica there is a considerable environmental contamination with lead and heavy metals due to industrial waste landfills from the past and stratification of the dust on the ground. It arrives in the form of pollution and pollutes the land, air, water, and thus the food production chain. There is a great danger to the health of the population, especially for children under age six and pregnant women.

## 2.2 Main findings from the situation analysis in Mitrovica South

### 2.2.1 Basic information

Figure 4 shows to main issues of the Municipality of Mitrovica South. Firstly, the part of Mitrovica North has been cut out of the map, which clearly shows that the geography of Mitrovica is a uniform entity that had been artificially separated. Secondly, the municipality covers a huge area of 350 km<sup>2</sup>, with rural areas as the largest share, while only the south-western part where the town is located has an urban environment. Map provided in Figure 5, shows the land use in the center of Mitrovica town. The city center in orange and an industrial area in the east of the city are the essential features.

Figure 4. Municipality of Mitrovica South

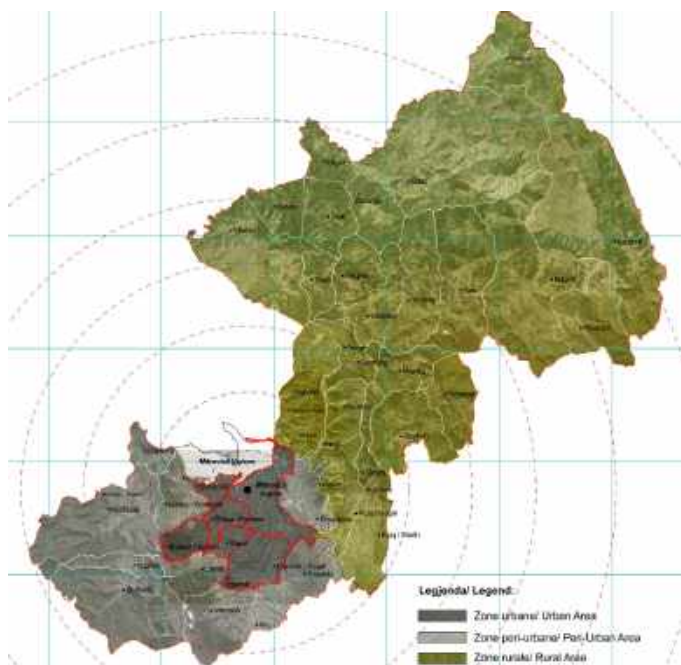
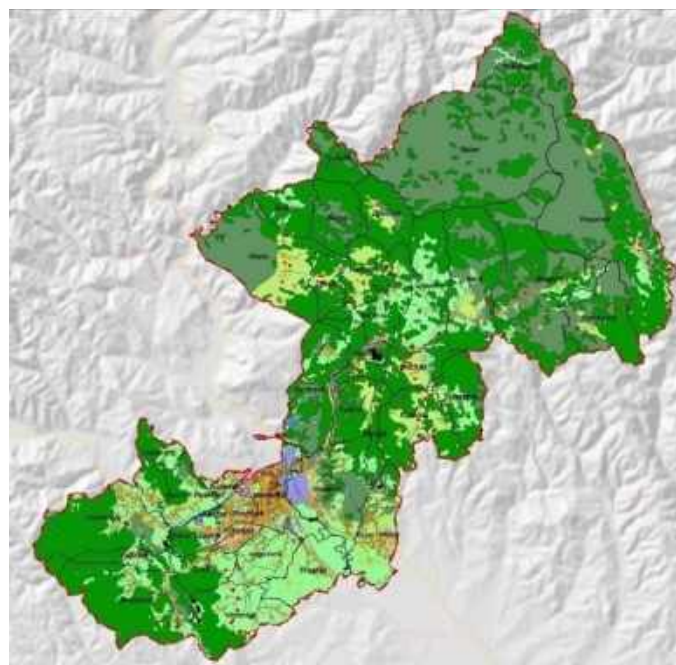


Figure 5 Land Use Map- MDP of Mitrovica South (2020-2028), pg. 135



#### a. Population

The population in the Metropolitan Area of Mitrovica (North and South) amounts to 84,000 inhabitants, with about 69% of the population living in an urban environment. The major demographic feature is a decrease for population by 23% from 1991 due to out-migration. Transport assessments are impeded by seasonal variations of the population. Many out-migrated inhabitants return with their cars for the summertime to spend their holidays in Mitrovica.

Mitrovica is a major source of employment, provider of services and destination for shopping

attracts large numbers of commuters and other terminating traffic. The catchment area is definitely larger than the two municipalities. It is advisable that the SUMP comprises other surrounding municipalities that which have transport linkages to Mitrovica. This might be of importance if public transport systems reach out in the region, e.g. following the example of Karlsruhe<sup>1</sup>, Germany. The municipalities in Leposavic/ Leposaviq, Mitrovica South, Mitrovica North, Zubin Potok, and Zvečan/Zvečan as well as Skenderaj/Srbica and Vushtrri/Vucitrn showed interest in the project. The inclusion of other municipalities would increase the number of inhabitants well above 100,000. definitely larger than the two municipalities.

Mitrovica	Urban Area	Municipality	Share Urban
North	12,326	12,326	100%
South	46,123	71,909	64%
<b>Total</b>	<b>58,449</b>	<b>84,235</b>	<b>69%</b>

Source: Kosovo Agency of Statistics

Table 2. Population in Mitrovica South and North in 2011

It is advisable that the SUMP comprises other surrounding municipalities which have transport linkages to Mitrovica. This might be of importance if public transport systems reach out in the region, e.g. following the example of Karlsruhe<sup>1</sup>, Germany. The municipalities in Leposaviq/Leposaviq, Mitrovica South, Mitrovica North, Zubin Potok, and Zvecan as well as Skenderaj/Srbica and Vushtrri/Vucitrn showed interest in the project. **The inclusion of other municipalities would increase the number of inhabitant well above 100,000.**

Mitrovica South counted 13,173 households in 2011 with an average size of the household of 5.5 Persons. 55% of Mitrovica South’s population are in working age. The population is comparatively young with 38% of the population below 20 years and only 9% above 60.

This reveals an important issue for transport. More than 27,000 persons are less than 20 years old, which is a typical age for riding a bicycle or walking to school.

Figure 6. Geographical position of Mitrovica South in Regional and Kosovo Context

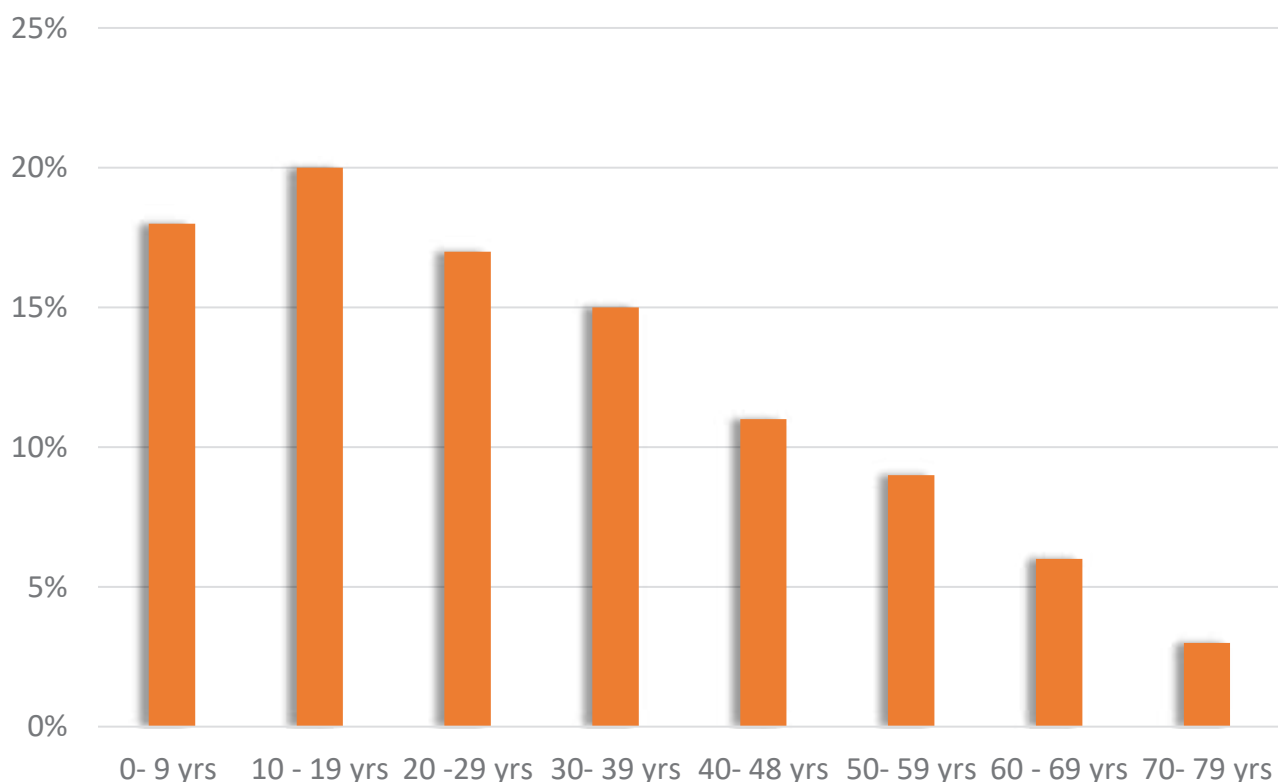
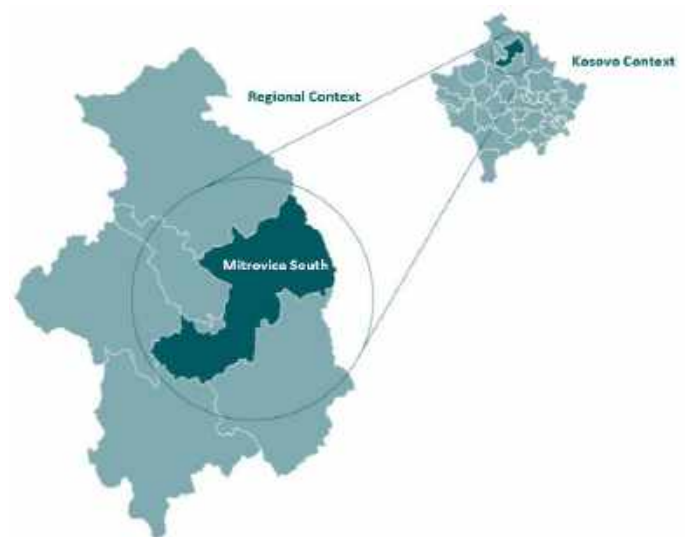


Table 3. Age structure Mitrovica South, KSA



## b. Economy

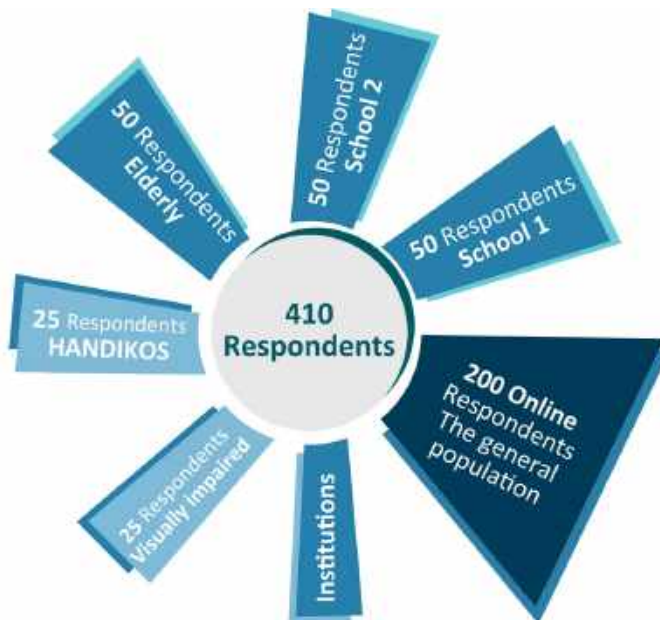
The economy of Mitrovica South municipality is predominantly based on agriculture, trade and small businesses. The large Trepça mining complex, functioning at a limited capacity, remains the largest employer. The future of the company is completely unsure. There are approximately 7,000 registered private businesses operating in the municipality, mainly in trade and services, and approximately. Agriculture has lost its former importance but still exists in the rural parts of Mitrovica South. Mitrovica South clearly is a town in transition from old-style industries to a modern service provider. The main issue is how can the future development of Mitrovica South be influenced by planning activities? Are there any visions or future scenarios? Given the large number of young people in the city, how can the collective intelligence be used to create future employments? Which sector would be most promising: manufacturing industries as suppliers of international companies, information technologies, creative young enterprises, internet related enterprises, modern eco-agriculture, etc.? How can investments be stimulated?

For the SUMP the main question is how a transport system may support the new development. How can a sustainable transport system contribute to creating a livable city, with public squares that invite to stay, with little disturbances by traffic, with attractive green areas and with good accessibility?

## c. Education

As already mentioned above, the young people are Mitrovica's future development potential. According to the OSCE Municipal Profiles (2018) there are 27 primary schools with 12,049 pupils and 1,162 teachers and technical staff, four (4) secondary schools with 4,526 students and 335 teachers and technical staff and one (1) kindergarten with 339 children and 42 teachers. Mitrovica South also hosts the public university "Isa Boletini," with six 6 faculties, providing education for around 4,000 students. The

number of pupils and students can be estimated at 20,600. This is a large potential for the use of bicycles and scooters. In order to prevent students to out-migrate after their studies, it is important to create an attractive living environment in the city. A sustainable transport system is an important part of this.



In 2018 a survey was conducted on the transport/mobility situation in Mitrovica South. The Mobility Survey for Mitrovica South was conducted with 410 respondents, of which 200 were interviewed online. The selection of interviewees was not done according to sociodemographic criteria and thus the sample does not reflect a statistically representation of the population in Mitrovica South. For example, the number of participating students seems to be grossly overrepresented. 69% of respondents claim to have an academic degree. Therefore, the survey rather reflects the view of a young, academic and urban group of inhabitants. However, due to lack of more reliable data, the survey shall be quoted here, but must be interpreted cautiously. Interviews with targeted groups are probably statistically more reliable.

## 2.3 Modal Split

### 2.3.1 Main modes of transport used in Mitrovica South

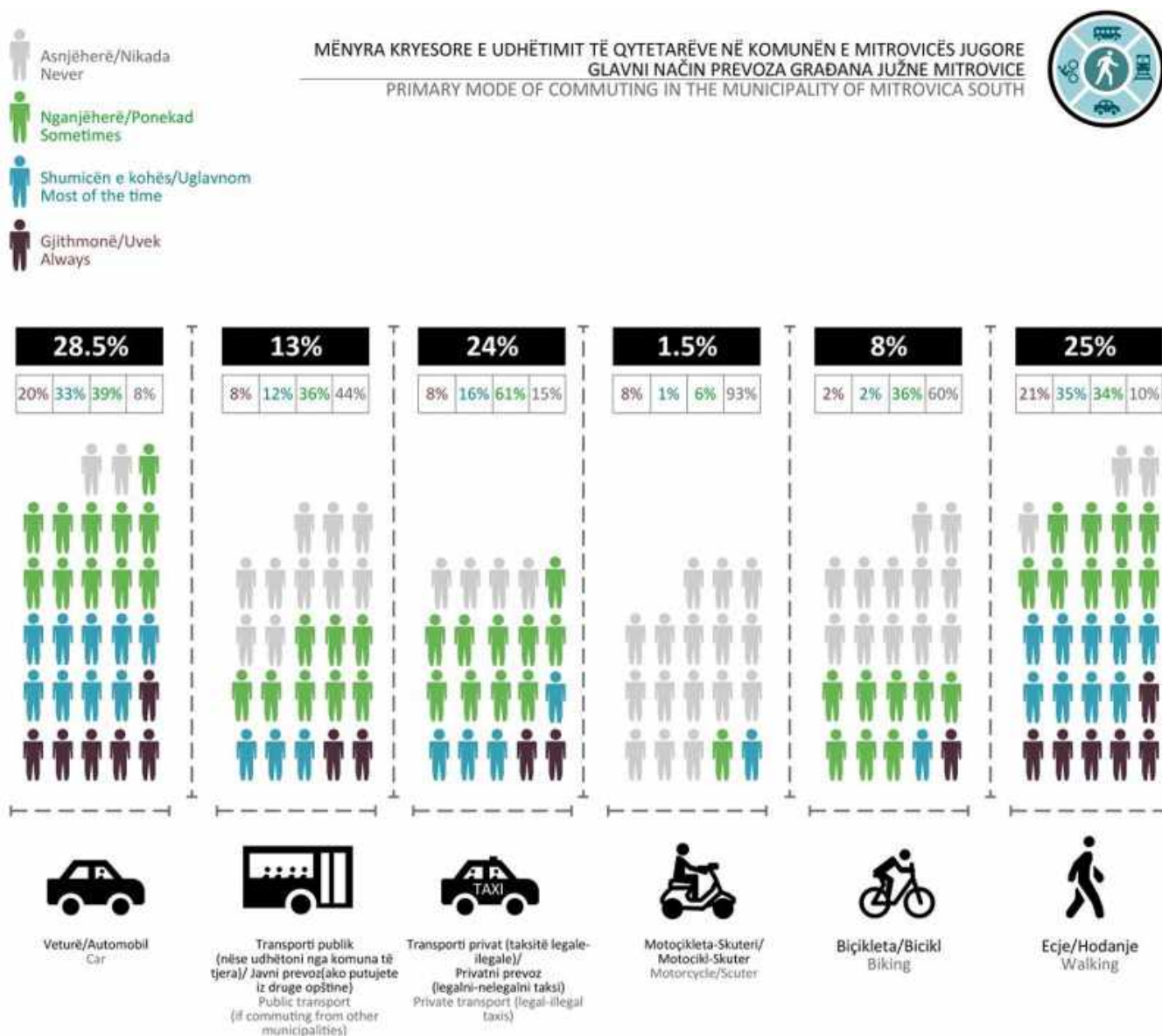
The **modal split** is one of the most significant indicators for a transport system. Environmentally friendly modes make up 46% of the trips undertaken in Mitrovica South. Since car ownership is relatively low, cars and motorcycles make up only 30% of trips. If taxis are considered as public transport, the share would be 37% of the modal split. However, taxis are making up the largest share with 24%. The large number of taxis is an indicator for potentials for improvement. **A good public transport system would increase overall efficiency by being able to transport more passengers per vehicle.**

The usage of road space would decline and thus congestion be reduced. It must be mentioned that the data stem from the survey that is not representative for Mitrovica.



**Cars remain the most widely used means of transport in Mitrovica South**

Figure 7. Main mode of transport used in Mitrovica South



## 2.4 Public Transport

### 2.4.1 Public Transport

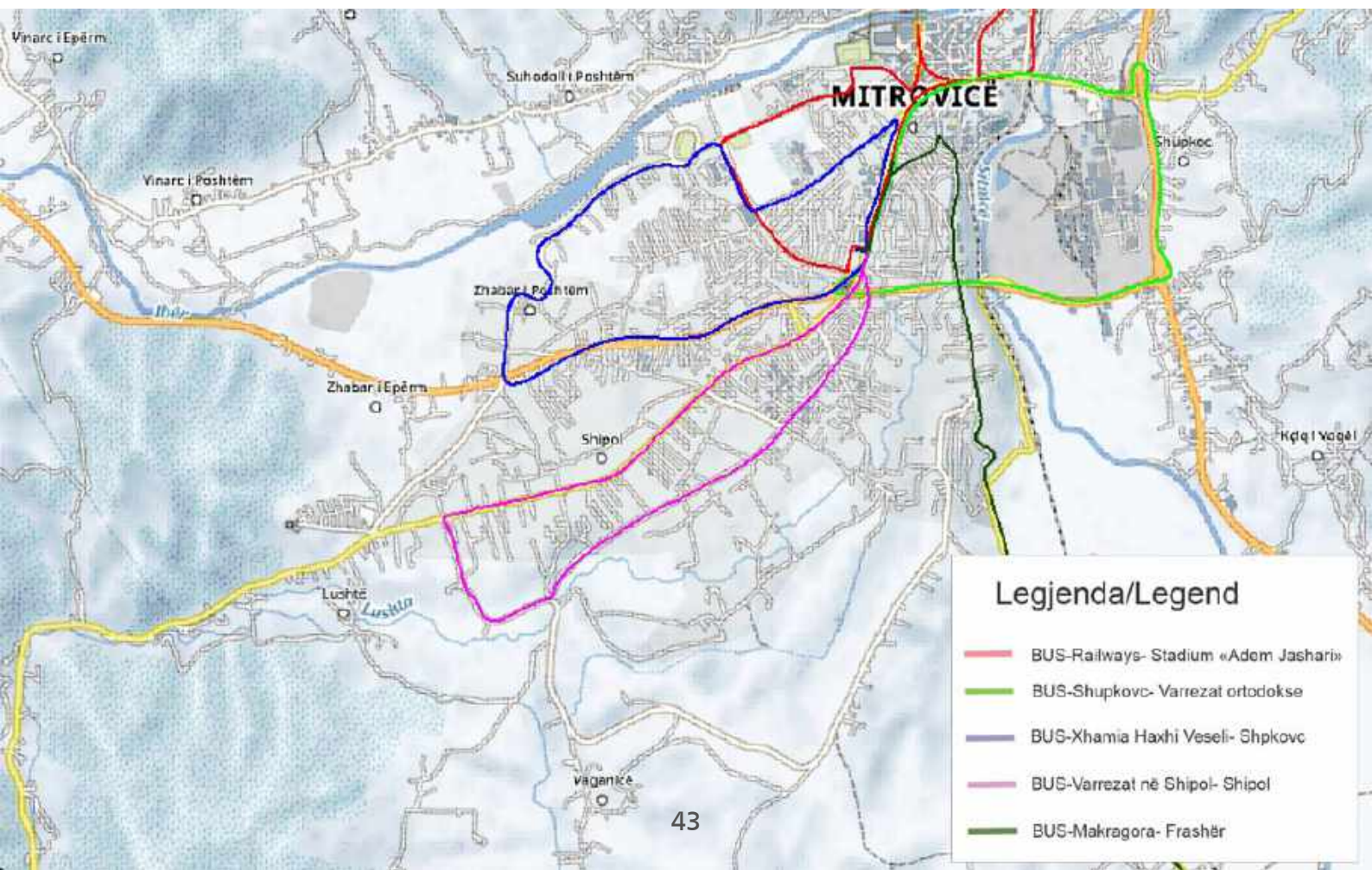
#### a. Bus Networks

Public passenger transport services are provided by private transport operators. The Municipality of Mitrovica South defines the lines, routes and timetables for regular passenger transport in its urban and suburban territory. Currently, no buses are operating in the center of Mitrovica South, however some routes connecting neighboring villages exist. These routes fill in the gap only partially. The informal operation of these buses causes major problems in passenger transport which are enhanced by the malfunctioning of the railway line.

The public perception of the public transport system is generally negative. The Mobility Survey for Mitrovica South revealed that 66% consider that Public Transport is not functional. The UN Habitat Baseline Assessment Report of the Inclusive Development Programme (Summary 2017 p 10) states that "public transport is either non-existent or in poor condition.

Both women and men experience difficulties to access public services. They also experience poor access to public transportation. This severely impacts women's level of mobility, since they have less access to driving and cars, especially rural women". The criticism mentioned in the Mobility Survey for Mitrovica South is long: no information, no schedules, uncomfortable, low frequencies, missing reliability, overloaded buses, and long waiting times before the bus leaves. Whereas, as if Public Transport would meet the needs, about 90% of the interviewees expressed their willingness to use Public Transport instead of personal vehicles. Urban mobility is severely handicapped in the absence of a public transport system. Therefore, the inhabitants of the city are dependent on individual transport and taxis that make up more than half of the trips. Amp of urban lines within the city of Mitrovica South has been compiled within the Department of Public Services. The plan includes five urban routes and is aimed at transport within the city of Mitrovica South.

Figure 8. Proposal of public transport lines within the city of Mitrovica South (DPSI)



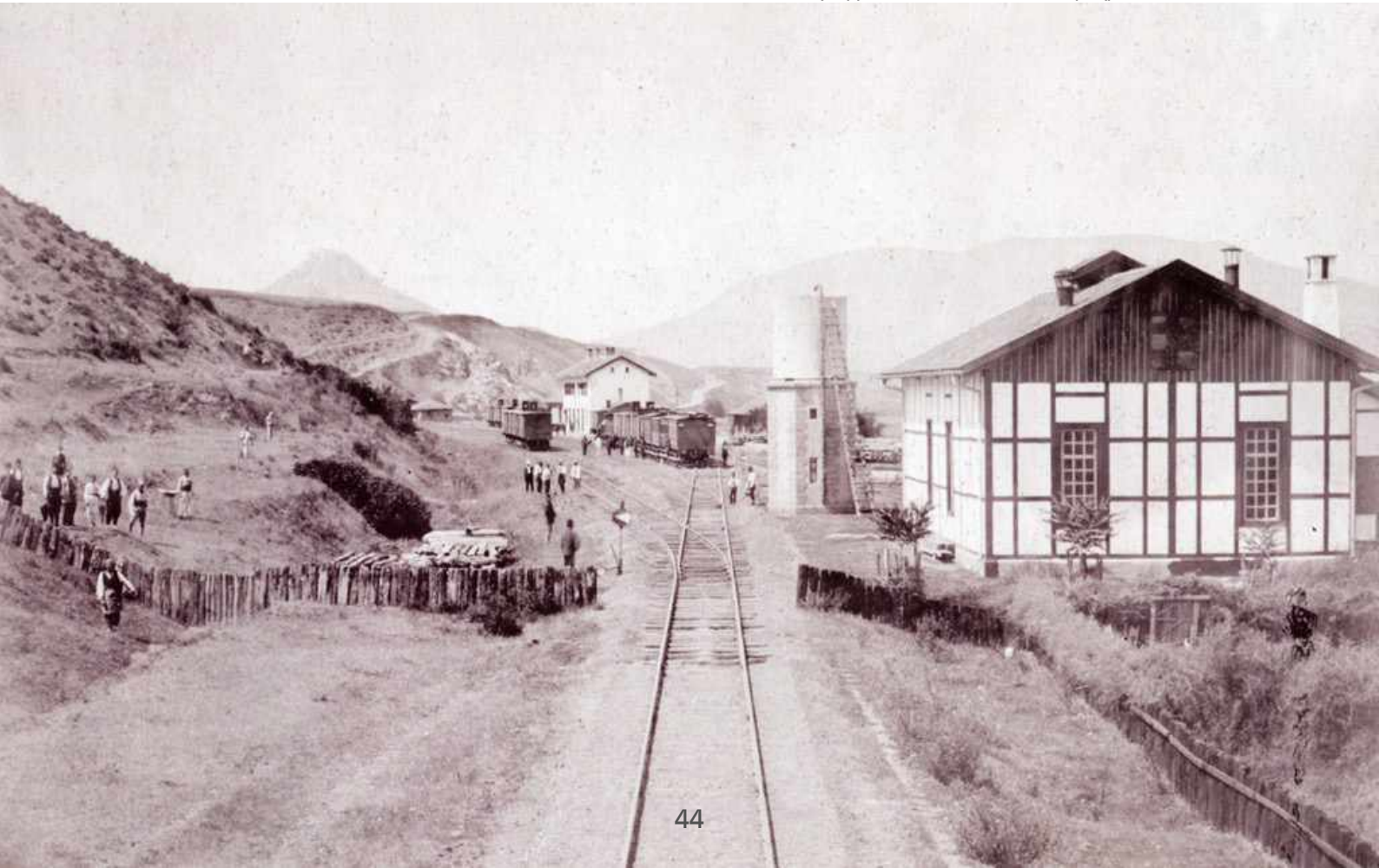
## b. Railways

One major railway line passes the town leading northbound to Zvečan – Leposaviq - Belgrade (Serbia) and southbound to Vushtrri - Fushë Kosovo - Skopje (North Macedonia). It is a single, non-electrified track allowing for a maximum speed of 80 km/h. Railway stations exist in Mitroviça North and South as shown in the map given in the Annex. Presently, only two passenger trains are operating per day in the southern direction. No passenger trains operate northbound. Since the railway only touches the eastern outskirts of Mitroviça South, the importance for urban transport is negligible. However, a future importance may be given by connecting villages along the line to the town: Vushtrri, Zvečan and Leposaviq. For the transport of freight rails are connecting the adjacent industrial areas with a battery and chemical Industry (length 7428 m) and a cement factory (length 1559 m). Due to the decline of the industrial and mining production, the freight traffic on this railway line decreased to nearly nothing.



Figure 9. Railway network in Kosovo  
Source: kosovorailway.com. 2014-03-02.

Figure 10. Railway station in Mitroviça around 1900  
Source: <https://www.wikiwand.com/sq/Treni>

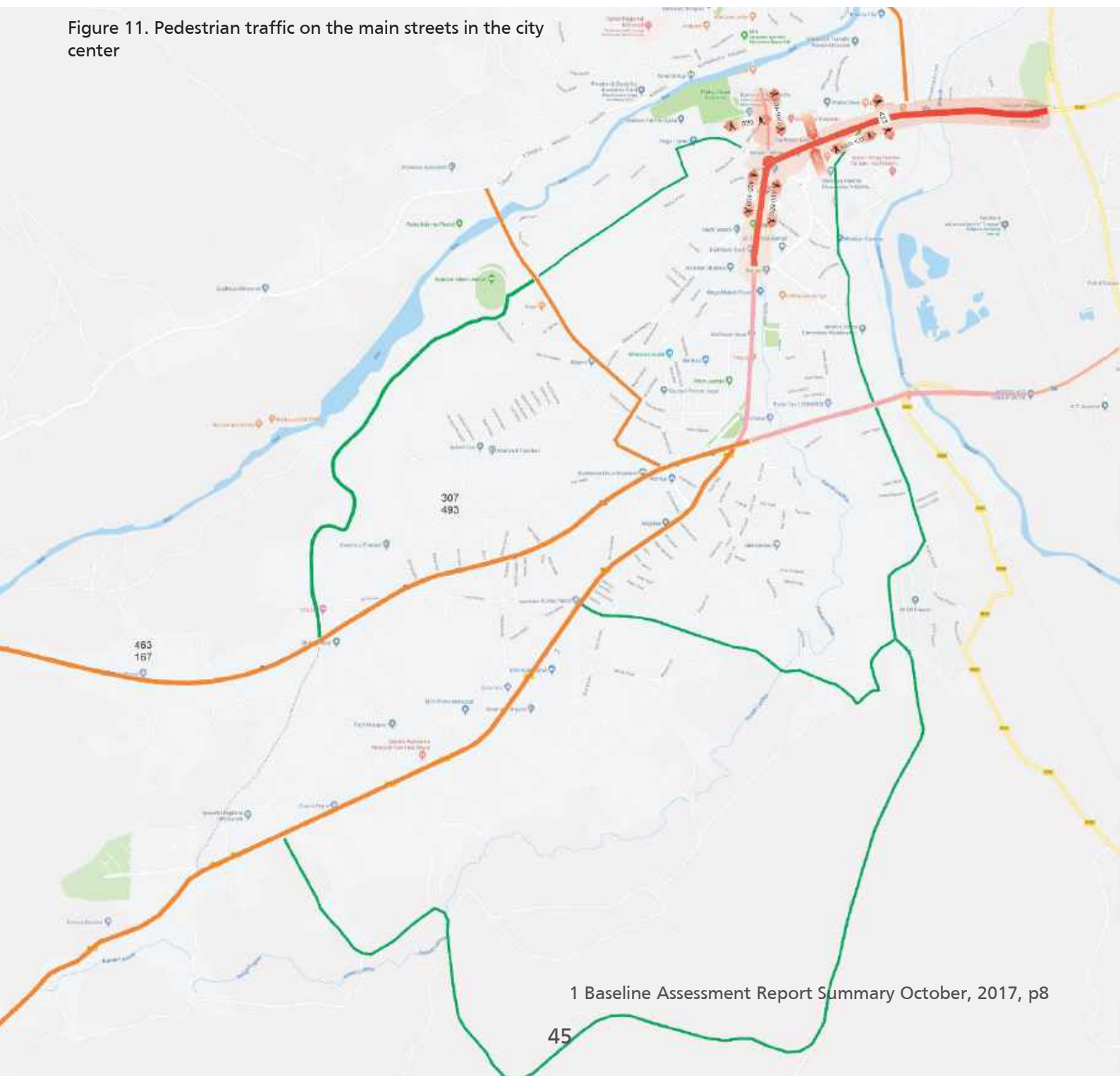


## 2.5 Active Modes

All streets in the city as well as the alleys in the settlement areas are used extensively by pedestrians and by a good percentage of cyclists. Going to school, too, is largely done on foot. The importance of non-motorized transport in Mitrovica South can be assessed considering the large number of students and inhabitants under 20 years. These population groups have a much larger scope for walking and cycling. Pedestrians and cyclists currently make up many traffic participants. Estimates provided by the client range from 60 - 80% of total traffic participants. However, the survey estimates this share around

one third. The inhabitants of Mitrovica South and North, Leposavic and Zubin Potok all pointed to "nonmotorized mobility" as one of the least satisfying municipal services. The issues that the respondents addressed were: the lack of cycling paths and sidewalks; the misuse of sidewalks as parking spaces; the problem of accessibility for people with disabilities; and the limited non-motorized mobility<sup>1</sup>. The conditions in Mitrovica are not favorable: A slow traffic network does not exist. The pedestrian crossings on the main axes are just marked in the downtown area.

Figure 11. Pedestrian traffic on the main streets in the city center



## 2.5.1 Pedestrian traffic

Three major pedestrian zones exist in the city centre of Mitrovica South: i) One walking zone in a park area along the river banks as depicted in the Annex. ii) Another one zone around the main City Square that is continued on the other side of the river in iii) Mitrovica North. An analysis of the pedestrian traffic revealed that the largest volumes of pedestrian traffic is along the roads "Shemsi Ahmeti", "Isa Boletini" and "Mbretëresha Teutë Boulevard".

- Along the "Shemsi Ahmeti" street the number of pedestrians ranges from 1000-1200 peds/ h/ in both directions.
- Along the Isa Boletini road the number of pedestrians ranges from 800-1000 peds/ h/ in both directions.
- Along the "Mbretëresha Teutë" route pedestrians range from 400 to 800 peds/ h/ in both directions.

These are exactly the roads that are claimed to be the most congested by cars. The pedestrian traffic along these roads and at the marked pedestrian crossings is shown below. Asked why they would not walk frequently, 68% of the interviewees in the Mobility Survey for Mitrovica South stated that sidewalks are occupied by parking cars and 58% by shops, 38% claimed that there are not enough sidewalks. The following deficits are claimed in the survey:

- Lack of space for walking
- Parking of vehicles and trucks on sidewalks
- Presence of electricity pillars, bollards, concrete flowerpots, parking chains, and garbage containers in sidewalks
- Presence of ambulatory sales places (i.e. exposition of fruits and vegetables), umbrellas and tables from cafes, and exhibition of stores' articles and advertisements in pedestrian spaces
- Damaged pavement, holes and lack of manholes lids on sidewalks
- Presence of garbage on sidewalks and stones on roads
- Presence of construction materials on sidewalks while constructing roads or buildings
- High risk from cars on the streets
- High risk from bicycles on the sidewalks
- Disrespecting of pedestrians in crossing
- There are no barriers
- Lack of adequate places to stay
- Lack of lighting

However, the potential is very high since 95% enjoy walking and 90% walk regularly for pleasure.



Figure 12. Pedestrian usage in the city centre



Figure 13. Pedestrian usage in the Mitrovica South

## 2.5.2 Bicycle usage

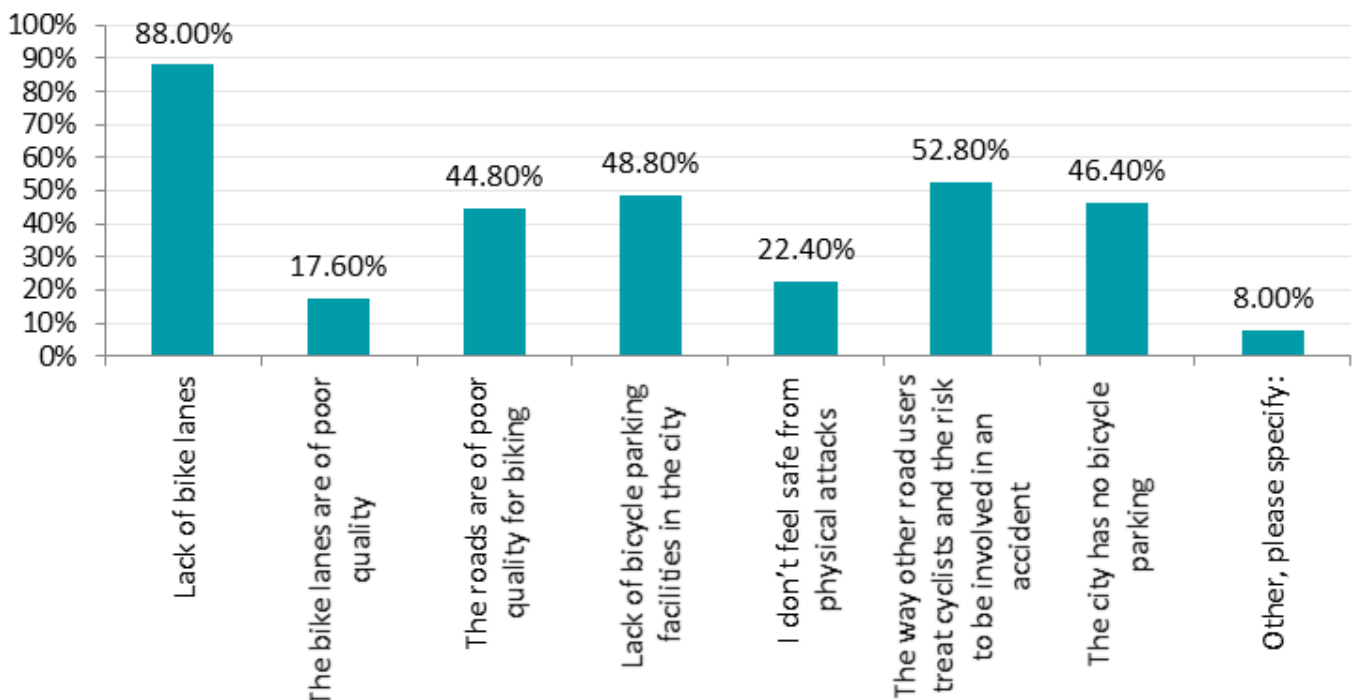
The extension of the city is with roughly 5km x 5 km ideal for the use of bicycles. The longest distance from Mitrovica North Railway Station to the very south west End is only 6.6km long and may be covered in 20-25 Minutes. Large parts of the city are fairly flat with an east-West slope of 500 to 550m and a North-South gradient of 500-600. Even though the geographic conditions are favorable, the usage of bicycles is limited. It has been found that in the town of Mitrovica South, bicycles are used at a very low rate of around 1%. The survey estimated this share at 8%. 16% of the interviewees ride a few times per month, 6% a few times per week and only 2% daily. However 55% of the interviewees own a bicycle, but only about 2.4% of the respondents stated that they use the bike daily as a means of travel. The main reasons why bicycles are not used are missing infrastructures (88%), bad road safety (53%), poor quality roads (45%), and missing bicycle facilities (48%). However, the potential is high: 64% of the interviewees stated that they like bicycling.

As a result, there are two conflicting issues related to non-motorized transport modes. On one hand, there is a high propensity towards walking and cycling which is expressed in the

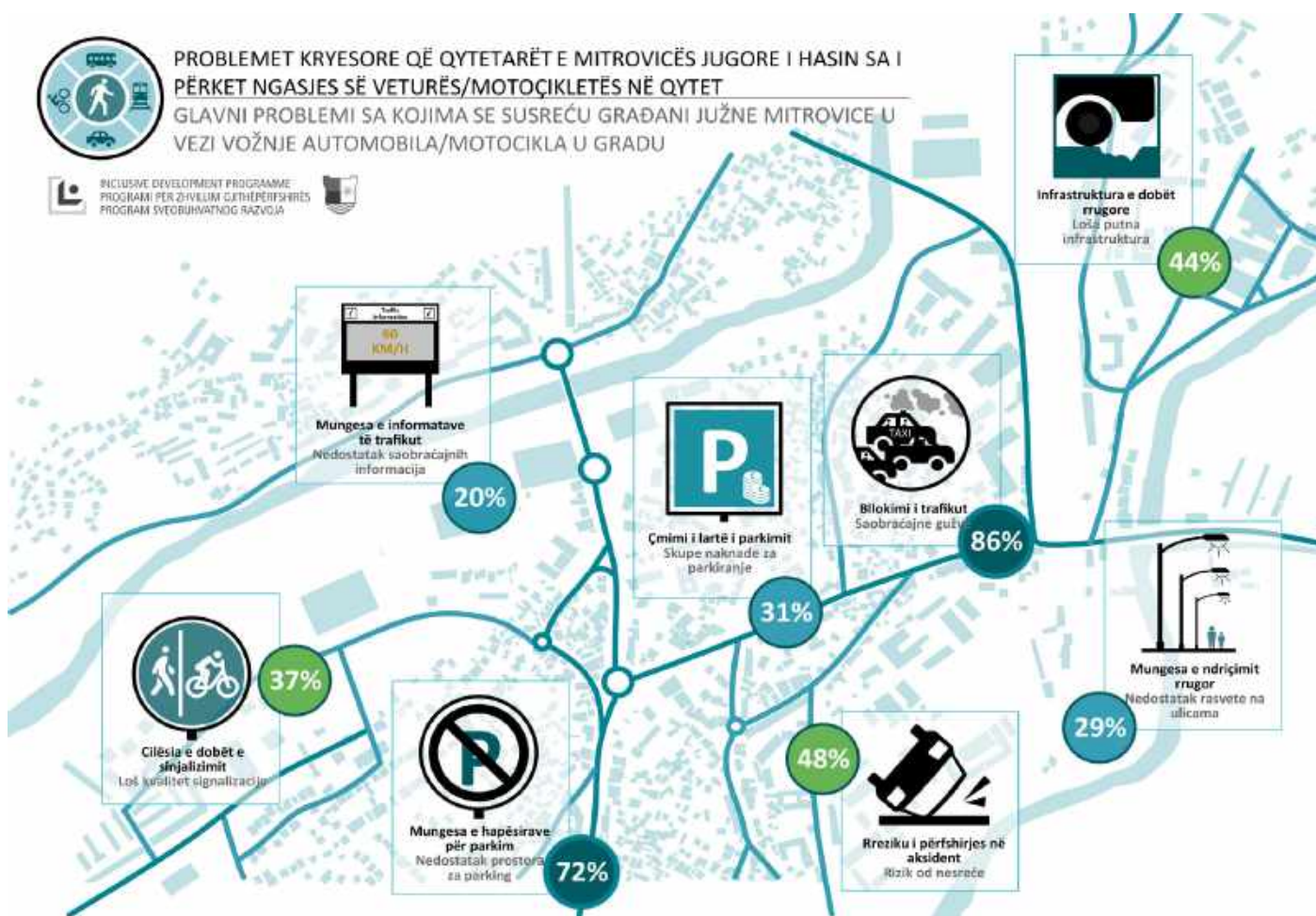
survey statements going along with a favorable geography of the town. However, for a wide range of the population, despite the poor financial situation, owning a vehicle is a very high priority, making it clear that pedestrian and cyclist traffic has a low reputation as a means for the poor. Therefore, the improvement of infrastructures is not sufficient to increase the usage of active modes. It needs as well an image campaign for walking and cycling.

Another means to influence the public opinion for these modes is **the creation of public spaces, alleys and walkways that invite inhabitants and visitors to linger and enjoy the city**. Very attractive walkways are usually around or along water bodies, such as lakes, rivers or the seaside. In Mitrovica this could be a pedestrian and cycling network on both sides of the Ibër that should have a relaxing effect. The area along the banks of the Ibër may be transformed into a meeting point, well connected and accessible, with a city park character and various cultural and recreational offerings. This strategy would go along **creating a livable city that is attractive for investors and young entrepreneurs**. It is an anachronism that Mitrovica has no major car-free pedestrian zones, while thousands of towns in Europe have established and expanded their car-free zones with tremendous positive impacts not only for the visitors, but as well for shop keepers.

Figure 14. What are the main reasons for you not ride a bike in the city more often?



## 2.6 Road traffic



The above-mentioned survey on Mitrovica South's transport challenges revealed the following deficits related to road traffic as depicted below. These questions will be researched in detail further in this chapter.

### 2.6.1 Vehicles

Between 2011 and 2018 the number of vehicles registered in Kosovo increased by 67%. It remains unclear which share of these vehicles drive inside Kosovo or in foreign countries. However, the statistic in Mitrovica South shows stagnation at 11,000 vehicles since 2016. The sudden increase in 2014 may be explained by a new government regulation on vehicle registration. The ratio computes to 150 vehicles per 1,000 inhabitants<sup>2</sup>. This low value reflects the economic situation of Mitrovica South. In Kosovo 82% of the vehicles are passenger cars, 10% heavy goods vehicles above 3.5 tons and 6% Light goods vehicles. Vans, buses and motorcycles each range below 1%. If the share of passenger cars is assumed for Mitrovica, only 12% of the inhabitants own a passenger car. If the analysis is conducted on

Figure 15. Main problems perceived in mobility  
 Source: data from Mitrovica South Survey

households, on average 68% of households have access to a passenger vehicle. However, this value might be lower, since some more wealthy households possess more than one vehicle.

The analysis shows 88% of the inhabitants don't own a vehicle and 32% of households do not have access to a passenger car. This reinforces the need for a good public transport system and the potentials for bicycle usage.

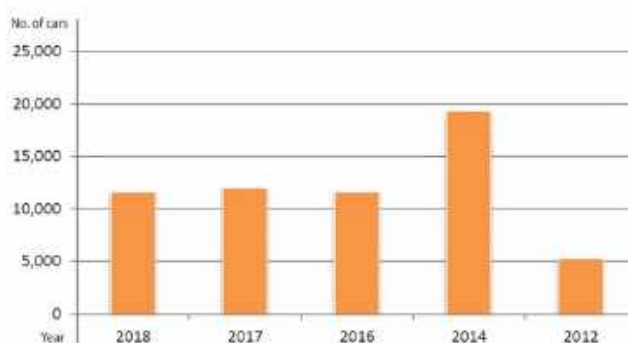


Figure 16. Number of registered vehicles in Mitrovica South, source: DPSI

<sup>2</sup> The ratio for Germany would be more than threefold.



## 2.6.2 Road Network

The entire territory of the Mitrovica South and surroundings has an important position, especially for transit traffic. The municipality is located at the intersection of highways (Adriatic and Ibër) and regional as well as the main railway line, which makes this area important for the northern region of Kosovo and international links through international corridors VIII and X. In Mitrovica South the road network is 430 km long, of which 81% are local roads within the auspices of the Municipality. 54% of the road network is asphalted, another 37% has cobblestone pavements and 9% are unpaved roads. Road infrastructure has only been well

developed in the town of Mitrovica South, while some roads linking rural settlements are under construction, but most villages are only connected with unpaved rural roads. While settlements along national and regional roads are well connected to road infrastructure, there are major accessibility deficits in the villages to the north and east of the municipality, where most of the roads are not paved. Local roads within the urban area make up 16 km. The main streets of the city are asphalted. Many alleys, as well as private access roads, are not paved or in poor condition. Due to this assessment, the road network is regarded as incomplete. The three bridges over the Ibar River represent bottlenecks in the road network, but due to ethnic tensions are currently underutilized. The southernmost bridge connecting Suhadoll with Fidanishte

Table 5. Road classification, length and pavement  
Source: DPSI

Road Type	Road Length (km)	Share	Surface	Road Length (km)	Share
National Roads	31	7%	Asphalt	232	54%
Regional Roads	50	12%	Cobblestone	158	37%
Local Roads	350	81%	Unpaved	40	9%
<b>Total Road Length</b>	<b>430</b>			<b>430</b>	



Figure 17. Pan-European Corridors (VIII, X) Source: Mitrovica Agenda for Local Economic Development, 2004.



Figure 18. National and Regional roads

is a one-story provisional bridge.

Regarding the quality of the road network, contradicting information is provided. The Mobility Survey for Mitrovica South identified poor roads, especially poor rural roads as a main problem in mobility. However, this statement is contradicted in the OSCE Municipal Profiles (2018 p.44) where the „overall status of infrastructure in the municipality is assessed as good. All the main roads connecting villages with the urban center are asphalted”. Due to the missing road inventory, this contradiction cannot be solved, and a number of questions remain open:

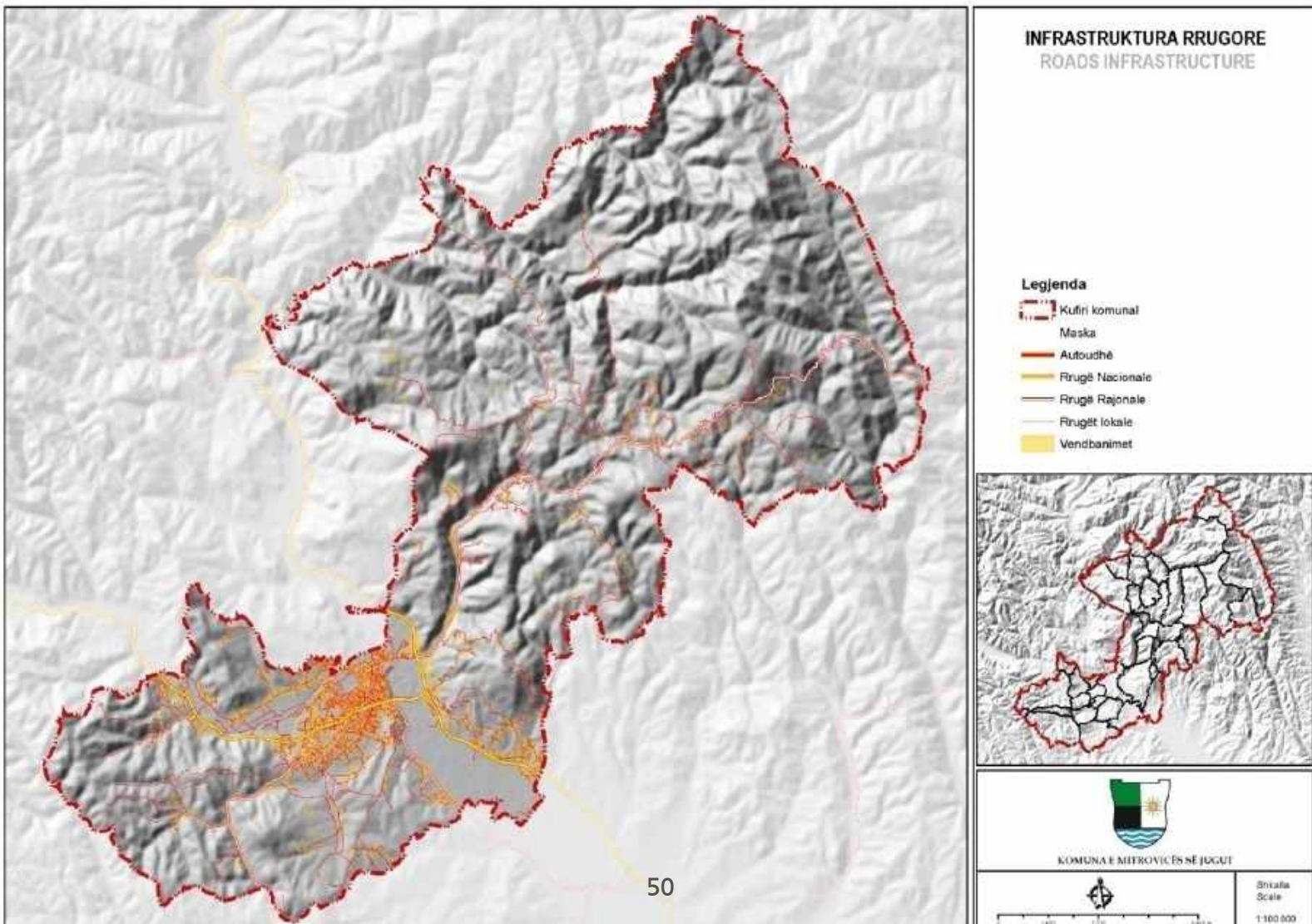
- Does this criticism focus on roads in general or on rural roads in particular?
- Which types of roads are concerned?
- Is it due to lack of maintenance or old infrastructures?
- Who is responsible for maintenance?
- Is accessibility constrained on the unpaved or tiles/cobblestone roads?
- How many days per year is this the case?
- How does this affect transport costs and economic and social activities of the residents?

Through the territory of Mitrovica South passes the Adriatic Highway (N2), connecting Mitrovica with Vushtrri - Prishtina (in the south) and Zubin Potok and further connecting with Novi Pazar (Serbia) and Rozhajë - Berane (Montenegro). The other important road is the national road N 22.3, respectively - Ibër highway which from Mitrovica enables connection to the direction - Zvecan - Leposaviq - Rashkë (northern direction).

Whereas, the network of regional roads in Mitrovica South municipality consists of:

- Mitrovica - Peja Road (R101), which represents the basic connection with the western part of Kosovo;
- Mitrovica - Stan Terg - Bajgora - Kërpimeh Road (R129) connects the northeast part of the municipality with the municipality of Podujeva;
- Road Mitrovica - Frashër - Vushtrri (R220) connects southern settlements with Vushtrri municipality.

Figure 19. Road network map in the Municipality of South Mitrovica, MDP 2020-2028, p. 83



### 2.6.3 Transit traffic

Mitrovica South has an important role for transit traffic. The municipality is located at the intersection of highways (Adriatic and Ibër) and regional connections which makes this area important for the northern region of Kosovo and international links through international corridors VIII and X. Through the territory of Mitrovica passes the Adriatic Highway (N 2), connecting Mitrovica with Vushtrri - Prishtina (in the south) and Zubin Potok and further connecting with Novi Pazar (Serbia) and Rozhajë - Berane (Montenegro). The other important road is the national road N 22.3, respectively - Ibër highway which from Mitrovica enables connection to the direction - Zvečan - Leposaviq - Rashkë (Serbia) (northern direction).

Figure 20 shows the main transit roads in South Mitrovica including a by-pass, which allows transit traffic to circumvent the town on a southern route. The last section of the by-pass (dotted red and black) was not completed yet due to budget constraints.

### 2.6.4 Traffic volumes on the regional and national roads

Traffic counts for transit are provided for two measuring points which are both located outside

the town of Mitrovica South. The locations are encircled in Figure 20.

**a) Measuring point I:** Broboniq (regional road R101). Measuring point I - is part of the regional road R101 through which provides access to the city of Mitrovica stemming from the Municipalities of Peja, Istog and Skenderaj.

**b) Measuring point II:** Kushtova (National road M2). Measuring point II - is part of the national road M2 through which provides access to the city of Mitrovica South stemming from the Municipalities of Zubin Potok and the neighboring state of Serbia. The analysis shows no major traffic peaks, which is unusual. This might mean that commuter traffic is not dominating on this road. Another explanation may be that the survey was conducted on a single day with exceptional traffic volumes.

The annual fluctuation of traffic flows, (see figure 21- 25), shows very divergent results. Measuring Point 1 an extreme annual peak is observed in September, where traffic volumes are more than double compared to the other months and four times as high as in December. Measuring point 2 shows a completely different picture. Here September ranges between the average traffic volumes, while April has double the traffic. An explanation cannot be given, unless there are major deficits in data collection.

Figure 20. Main transit roads in Mitrovica



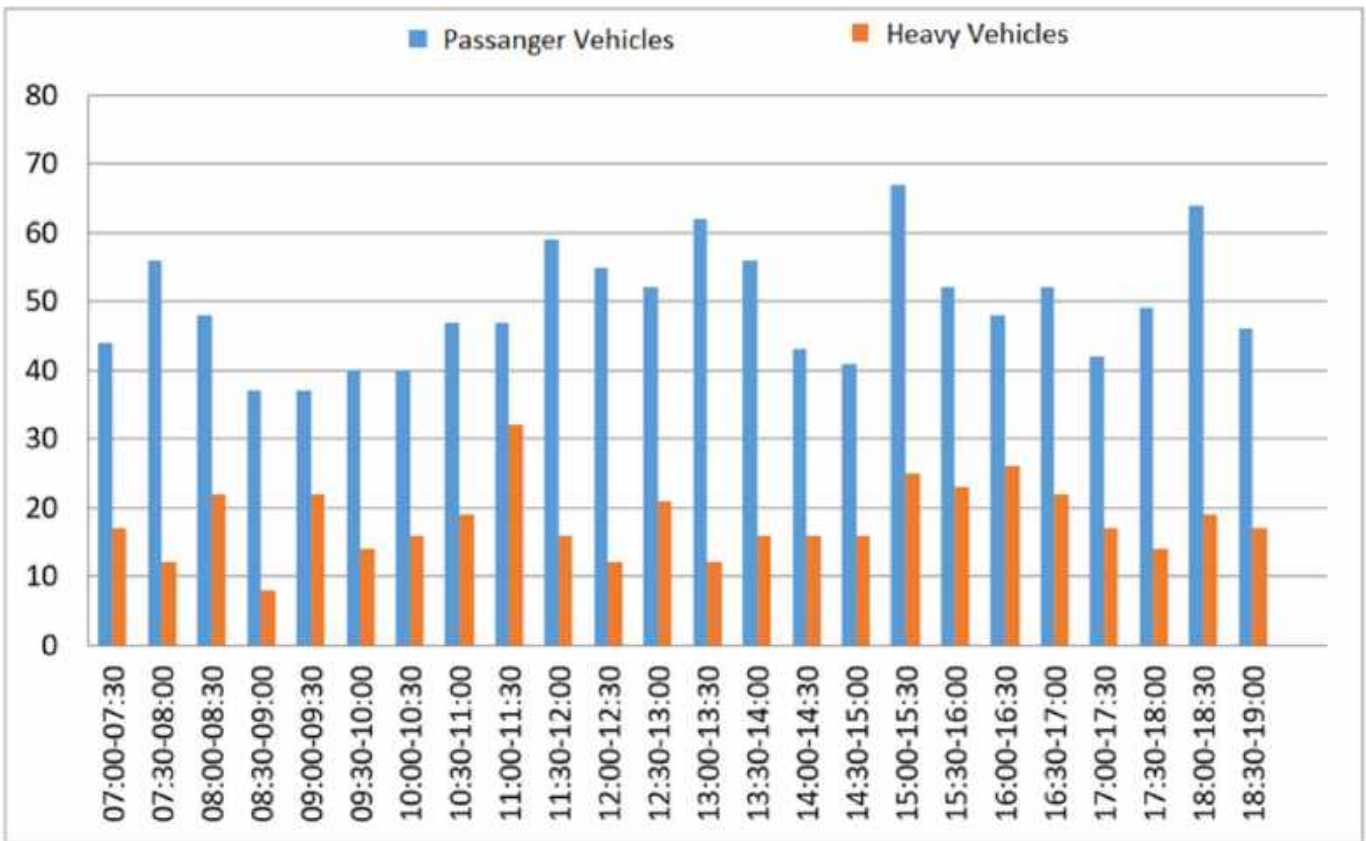


Figure 21. Broboniq: The daily traffic (07:00-19:00)

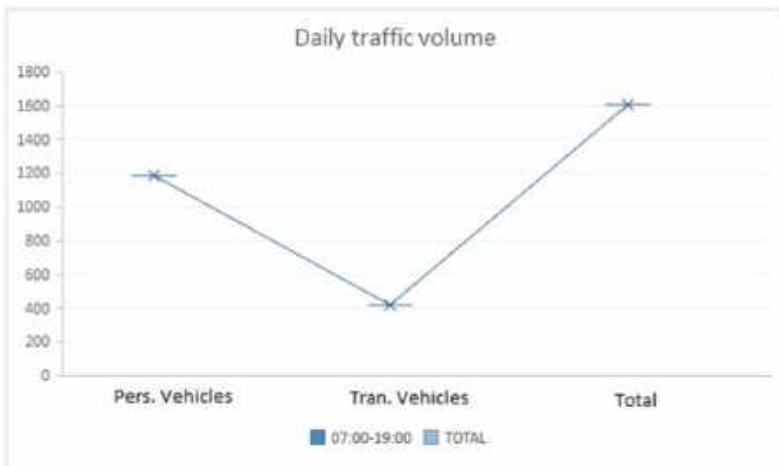


Figure 23. Broboniq: Daily traffic volume

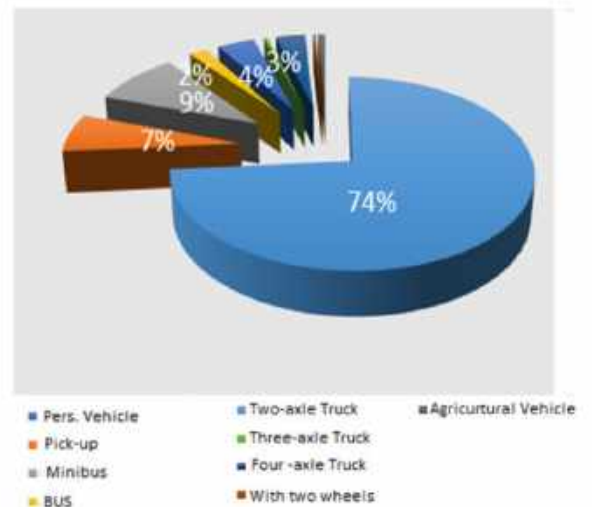


Figure 22. Broboniq: Vehicle structure

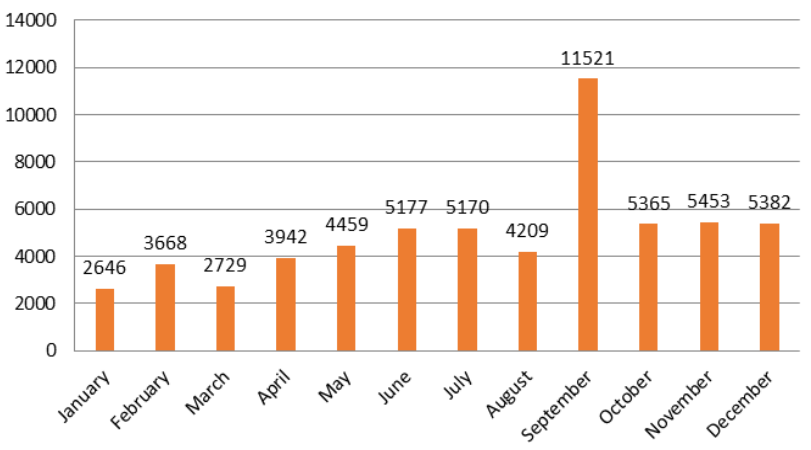


Figure 24. Kushtova: Monthly traffic flow within the year

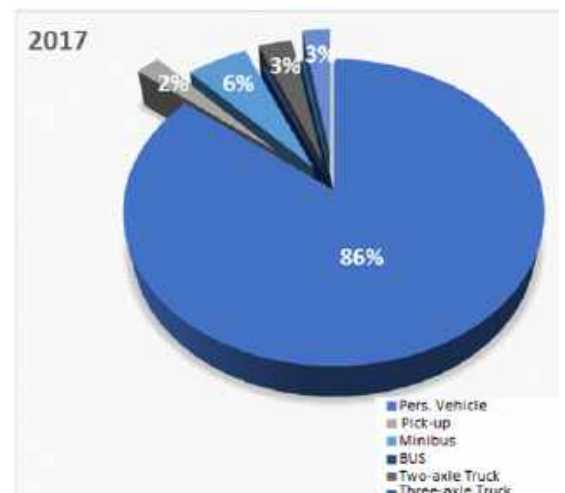


Figure 25. Kushtova: Vehicle structure

More than 4/5 of the vehicles are passenger vehicles, followed by buses with a share of 6-11%. Heavy goods vehicles make up 6-8% of the traffic volume. The percentage of trucks is within a normal range. However, this seems to contradict the numbers given in Figure 20, which show a larger share of heavy goods vehicles. An explanation might be that the survey was conducted on a single day. Since no Origin/ Destination survey has been provided, no statement can be given about the share of transit traffic through the town. According to the documents presented, "roads, in the absence

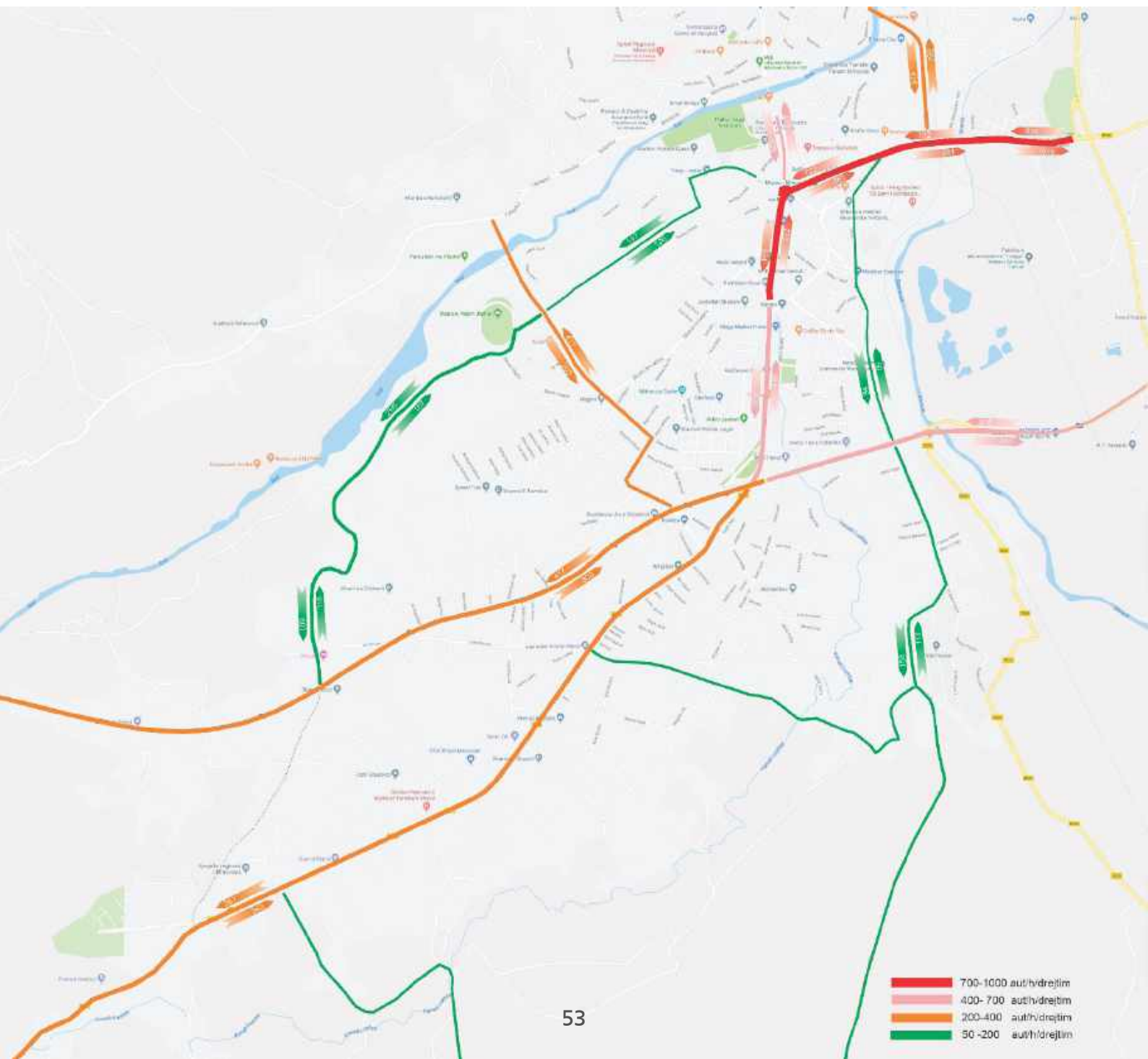
of freight transport by rail, are overloaded with heavy traffic and thus damaged". Since the above data only show a small share of heavy vehicles, this statement needs verification.

Measuring Point	Passenger Vehicles	Buses	Heavy Goods Vehicles
1	81%	11%	8%
2	88%	6%	6%

Table 6. Share of vehicles on regional and national roads

### 2.6.5 Congestion in the city centre of Mitrovica South

Figure 26. Road network load in the city of Mitrovica South



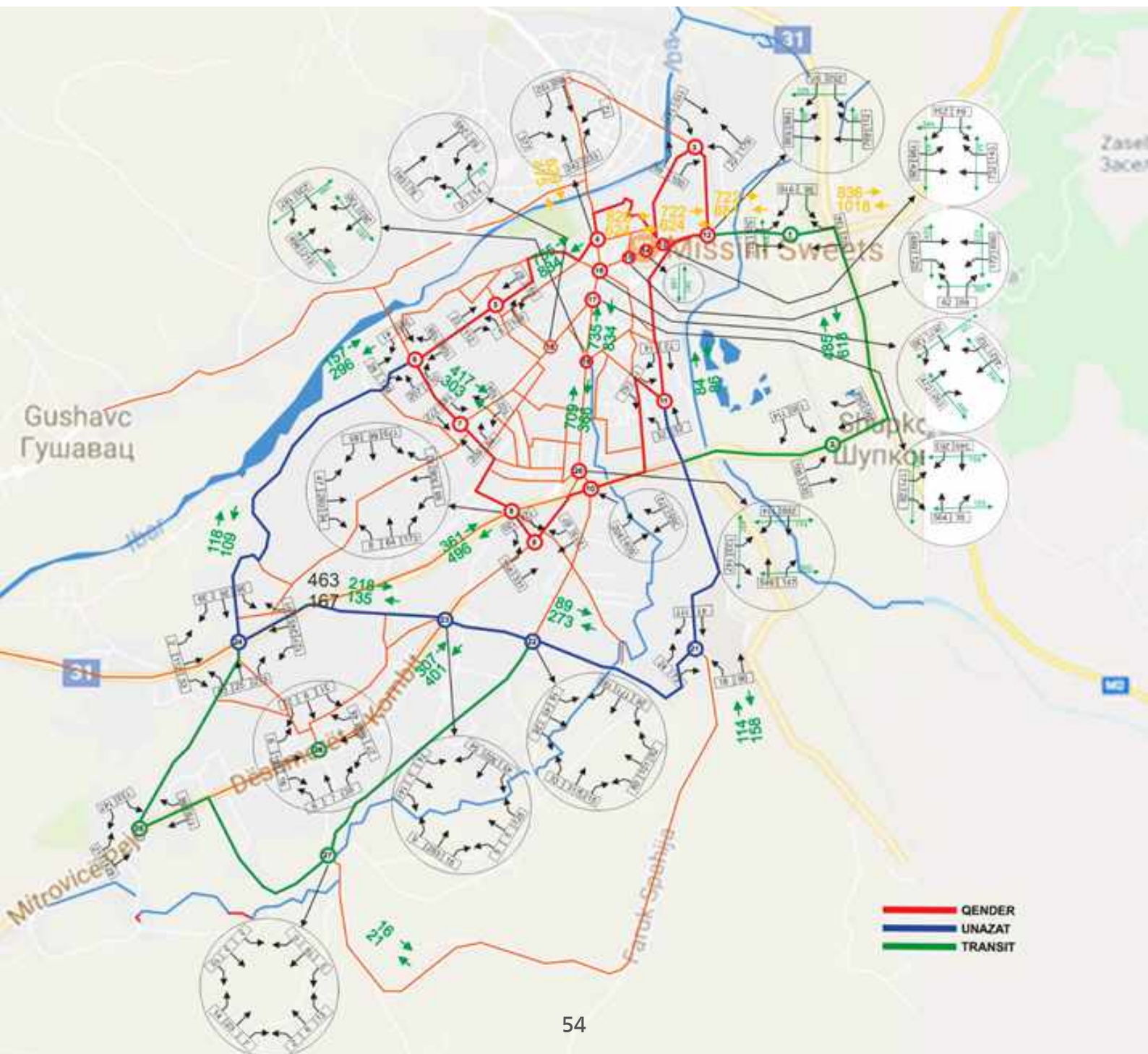
Road Section / Intersection	Min	Max	Capacity of intersections used
Shemsi Ahmeti" and "Mbretëresha Teutë Boulevard"	700	1000	70-80%
Boletini, Trepca Miners and part of Mbretëresha Teutë Boulevard	400	700	50-70%
Faruk Spahia" and "Ibrahim Popoci	50	200	20-50%

Table 7. Number of vehicles per hour and direction in City Centre of Mitrovica South

The Mobility Survey for Mitrovica South named congestion as one of the major impediments in Mitrovica South. Traffic counts that were conducted on six days in April and July 2018, revealed that congestion is mainly observed in the city center of Mitrovica as depicted in Figure 26 and Table 7. This is the downtown area where many shops, museums, bars and banks

are located. Not surprising that these are the same streets that have been identified for high pedestrian volumes. Here a conflicting usage by the different modes is given. An analysis of the intersections revealed that traffic volumes are well below maximum capacities. It may be concluded that "the problem related to t

Figure 27. Vehicle traffic flow at the entrance of the main crossroads on the South Mitrovica road

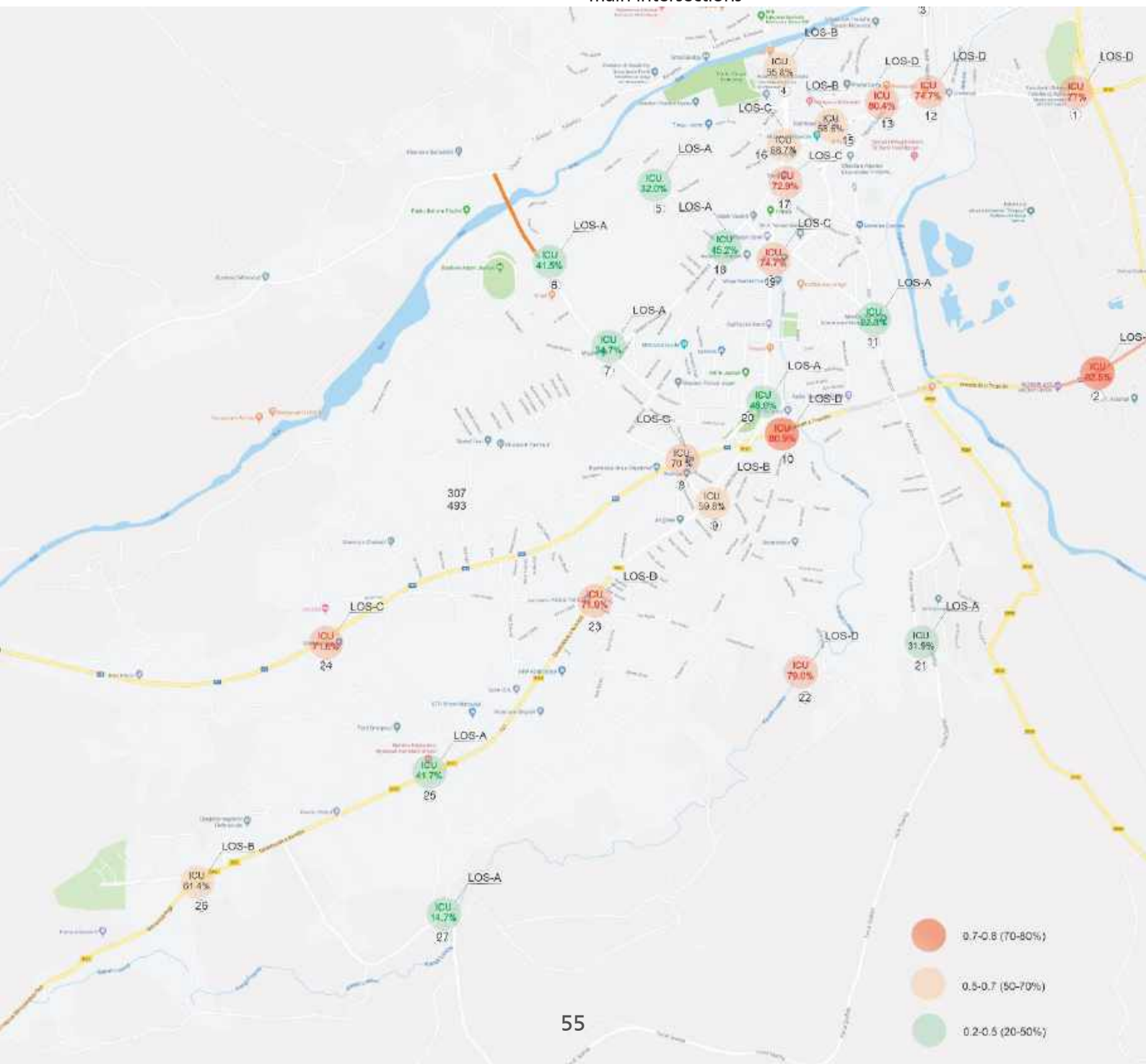


he capacities mainly relates to the traffic sections, respectively the geometrical elements of the intersections, the number of lanes and adjustment of traffic at the crossroad entrance”.

Conclusions - It is not surprising that the central business district of a regional important city attracts larger numbers of visitors. This is as well the case for Mitrovica where traffic volumes reach up to 1000 vehicles per hour and direction. The cause for the congestion is probably not transit traffic, but visitors searching for parking places or obstructing the road through illegal parking or vendors intruding the road space or large numbers of pedestrians crossing the road.

An increase of the road capacities in the city centre is definitely not the right solution since this would entail major negative effects. First of all, the cost of road improvement are considerable and the money might be used better to improve accessibility to the villages not connected to a paved road network. Secondly, international experience shows that increasing capacities on congested roads generates additional (induced) traffic that after a number of years increases the volume to a level that capacities are constrained again. Thirdly, the increased number of vehicles reduces the attractiveness of the city centre.

Figure 28. Intersection Capacity Utilization (ICU) at the main intersections



The solution for these types of problems have been tested in thousands of European towns: traffic calming, shared space, car-free zones or pedestrian areas are sustainable measures for a livable city center, that create attractive public spaces to linger, communicate and shop. This will be to the benefit not only for the visitors, but as well for the entire business community.

There are several additional measures to contribute to sustainability:

- Parking management with a guiding system to reduce traffic in search of a parking place around the center.
- Intelligent traffic management preventing through traffic to cross the city center on the congested roads.
- An improvement of the public transport system which would reduce the number of passengers vehicles with a destination to the city center considerably.
- Location of bus stops close to the city center
- Creation of attractive public spaces by urban planning.

### 2.6.6 Parking

Parking in Mitrovica South exists only in the town center where 846 lots are provided. The criticism on parking is focusing on the two issues:

- i) not enough parking spaces available and
- ii) illegal parking, obstructing road traffic, especially walking and cycling.

The Mobility Survey for Mitrovica South revealed as well that 88% of the interviewees with disabilities regard access to parking spaces as a major problem. Since the parking problems are located mainly in the City Center, a solution has to be developed conjoint with the solutions to solve congestion problems.

- A modern parking management including pricing of public parking spaces is required.
- An effective bus system would reduce the need for parking spaces.

- Increased enforcement by police reduces the problem. Existing parking lots in the city of Mitrovica South are mainly distributed in the vicinity of municipal institutions, educational, healthcare and trade facilities thus enabling citizens to effectively perform their daily services and activities.

Following the analysis of the road network, it has been concluded that irregular parking hampers the traffic and reduce the capacity. Sections in the main roads in which the irregular parking impacts the reduction of capacity are:

- In "Shemsi Ahmeti" road,
- In „Mbretëresha Teutë" road,
- On the street "Isa Boletini"- mainly the section near the Municipal Assembly and near "Bedri Gjinaj" street.

Irregular parking in different parts of the road, especially in sidewalks, interrupts free movement of pedestrians risking their safety. This phenomenon is more evident especially in the city center, in "Shemsi Ahmeti" and "Isa Boletini" streets, considering that in this part of the city, the demand for active movements is high.



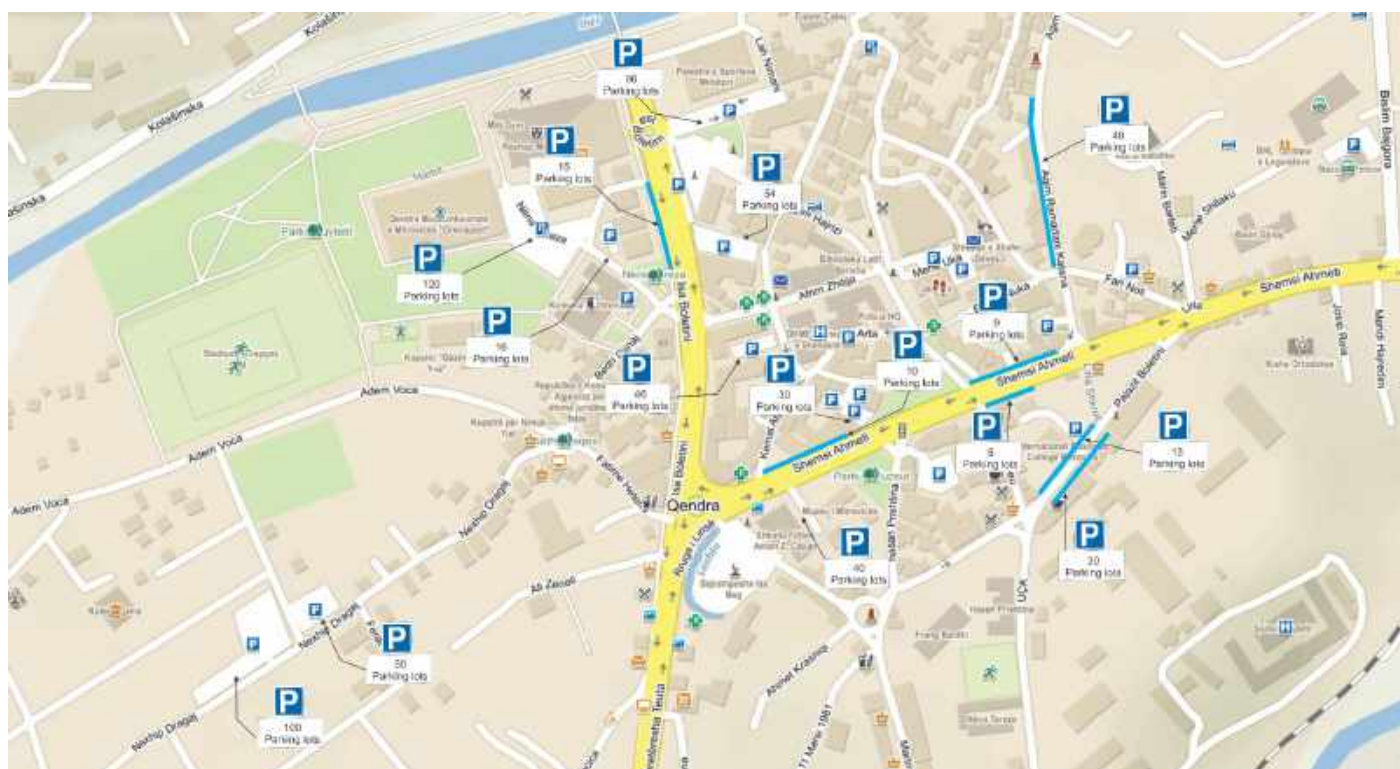
Figure 29. Irregular parking in "Isa Boletini"



Public parking (according to Department of Public Services and Infrastructure)		
Nr.	Location	Nr. of Parking Lots
1	Str."Pajazit Boletin"	90
2	Str ." Pajazit Boletin"	54
3	Str ." Pajazit Boletin"	10
4	Str ."Bedri Gjina" - near the municipal building	16
5	Str ."Bedri Gjina" - behind the municipal building	120
6	Str ."Afrim Zitija" - Main Center of Family Medicine	48
7	Str ."Afrim Zitija" behind Main Center of Family Medicine	10
8	Str ."Nexhip Draga"	150
9	Str ."Shemsi Ahmeti" - the former armory building	30
10	Str ."Shemsi Ahmeti" - near the music school	48
11	Str ."Shemsi Ahmeti" - near hotel Adriatic (Radio Taxi)	5
12	Str ."Shemsi Ahmeti" front of hotel Adriatic (Radio Taxi)	10
13	Str ."Shemsi Ahmeti" - close to the square	15
14	Str ."Shemsi Ahmeti"	87
15	Str .Agim-Ramadani Katana	48
16	Str ."Meh Uka" - to the Xhafer Deva house	24
17	Str .Pajazit Boletini	43
18	Str ."Mbretresha Teutë" to "Teferixhi" ( individual - Taxi)	20
19	Str ."Mbretresha Teutë"- to "Teferixhi" ( Radio - Taxi)	5
<b>Total</b>		<b>833</b>

Table 7 Public parking (according to Department of Public Services and Infrastructure)

Figure 30. Parking lots in Mitrovica South  
Source: DPSI



## 2.6.7 Traffic safety

Road safety seems to be a major concern by the interviewees of the Mobility Survey for Mitrovica South. 91% of the respondents claim that speed limits are not met and the speed around 69% of the schools is not slower. This issue can be tackled by increased police control and enforcement of speed limits. Other problems are the lack of traffic calming and the lack of signaling signs.

Also, based on data from the Mitrovica South Police Station, fatal accidents mainly occurred outside the urban part of Mitrovica South.

Table 8. Non-Injury Material Damage Accidents for 2017-2018 (DRP Mitrovica, 2019)

Non-Injury Material Damage Accidents for 2017-2018 (DRP Mitrovica, 2019)		
Year 2017	Year 2018	+ - %
291	210	-27.84%

Table 9. Most of the accidents in Mitrovica occurred at intersections of the most frequented city streets (DRP Mitrovica, 2019)

Local Roads with the Most Accidents with No Injuries only Material Damages for 2017-2018 (DRP Mitrovica, 2019)				
#	Street Name	Year 2017	Year 2018	+ - %
1.	Mbretëresha Teutë	59	34	-42.37 %
2.	Shemsi Ahmeti	51	35	-31.37 %
3.	Dëshmorët e Kombit	21	13	-38.10 %
4.	Bislim Bajgora	10	6	-40 %
5.	Fadil Deliqi	7	5	-28.57%
6.	Ahmet Selaci	5	8	+60 %
7.	Driton Veliu	5	4	-20 %
Other roads, including village roads		133	105	-21.05%

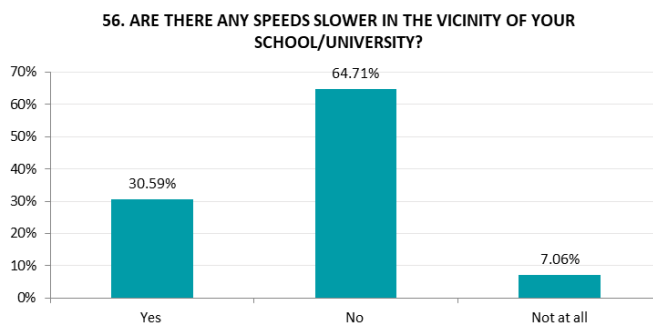
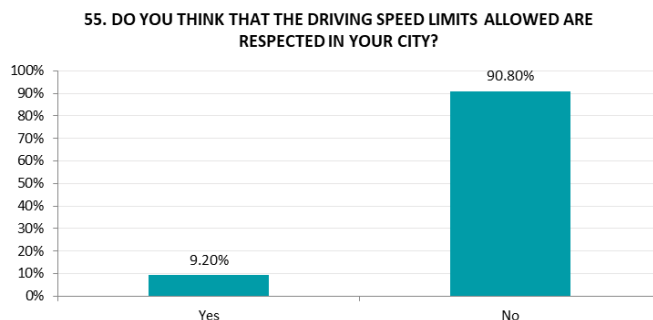


Figure 31. Perception on traffic safety- extracts from Mitrovica South's Survey.

## The number of fatal accidents in the Municipality of Mitrovica South (2014 – 2018)

(DRP Mitrovica, 2019)

Year	Number of fatal accidents
2014	7
2015	14
2016	8
2017	14
2018	9

## 2.7 Environmental Protection

### 2.7.1 Environment and Climate change

Air quality measurements undertaken during the months of January and February for a survey including 12 towns in Kosovo, revealed that Mitrovica South ranks on number 11. It is plausible that open coal or wood fires determine the bad quality of air in the wintertime. The contribution of transport to the air quality cannot be assessed due to the lack of data.

According to the Law No. 03/L-025 on environmental protection, the Government, respectively the Ministry of Economy and Environment, is responsible for improving environmental conditions related to the quality of life and protection of human health.

Municipalities cooperate with the Ministry:

- for protection of environment and sustainable development within their territory according to this law;
- enforce laws and inspect enforcement of the laws related to the protection of environment and sustainable development within their territory;
- prepare and provide information related to the protection of environment and sustainable development for citizens;
- the plan for protection of environment and sustainable development within municipality territory, shall be approved by the respective Municipality Assembly.

Table 10. The number of fatal accidents in the Municipality of Mitrovica South (2014 – 2018) (DRP Mitrovica, 2019)

### Carbon Emissions Per Passenger

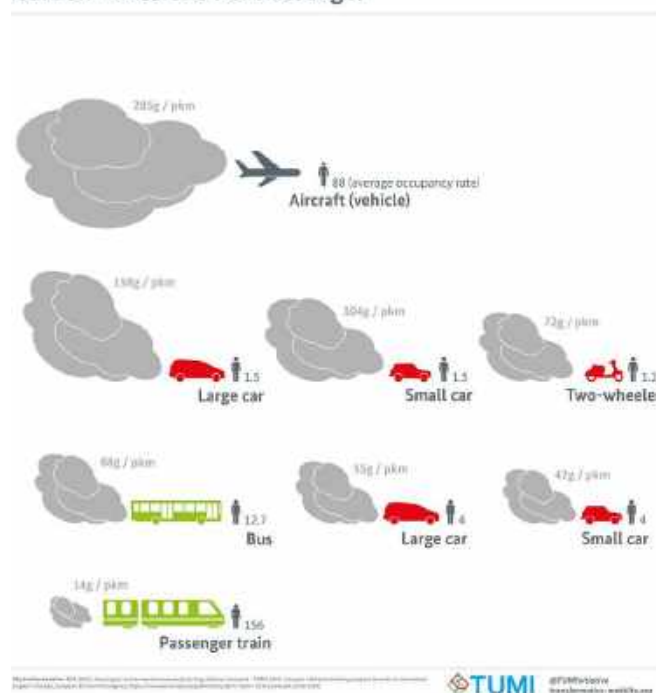
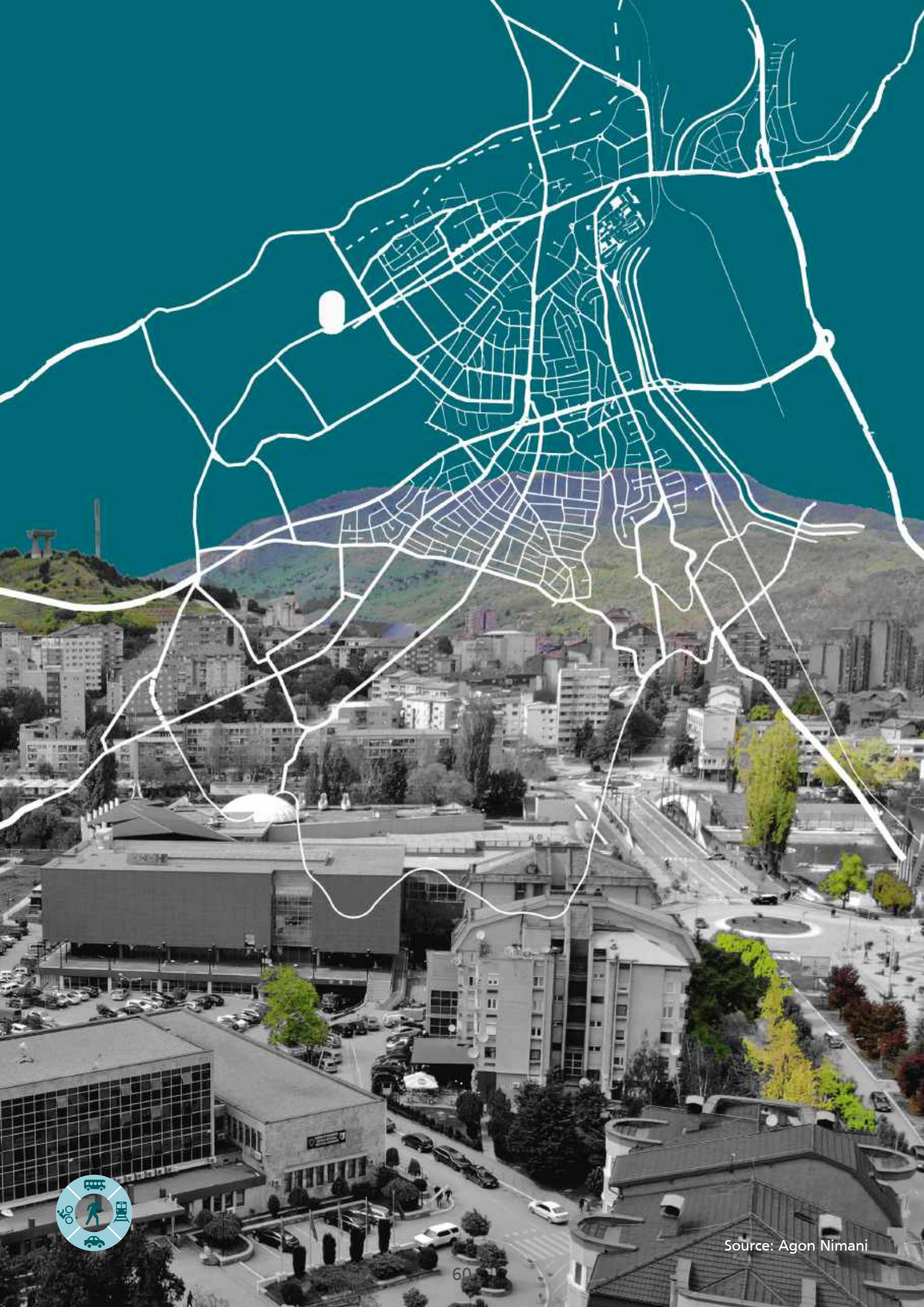


Figure 32. Carbon Emissions per passenger

Source: TUMI

Climate change has not been considered a major issue in Mitrovica South, since other economic, social and political issues have been more important. However, the present discussion on how to reduce greenhouse gas emissions shall not be forgotten, since the EU has the goal to reduce CO<sub>2</sub> emissions from the transport sector by 60% until 2050. A SUMP should take these goals into consideration as well.



Source: Agon Nimani

### 3. CONCEPT PROPOSAL/ DEVELOPMENT OF FRAMEWORK- Short-term and long-term objectives



#### 3.1. Regional Public Transport

Regional public transport in the northern part of Kosovo in terms of regional connectivity is still a work in progress. There are still some obstacles to this process, which have made the regional public transport dysfunctional, such as: internal decision-making barriers (priority and information issues), implementation barriers (sectoral coordinating bodies, capacities and regulatory structures) as well as regional barriers (economic and political disputes) have directly impeded its share in the implementation of public transport at the regional level.

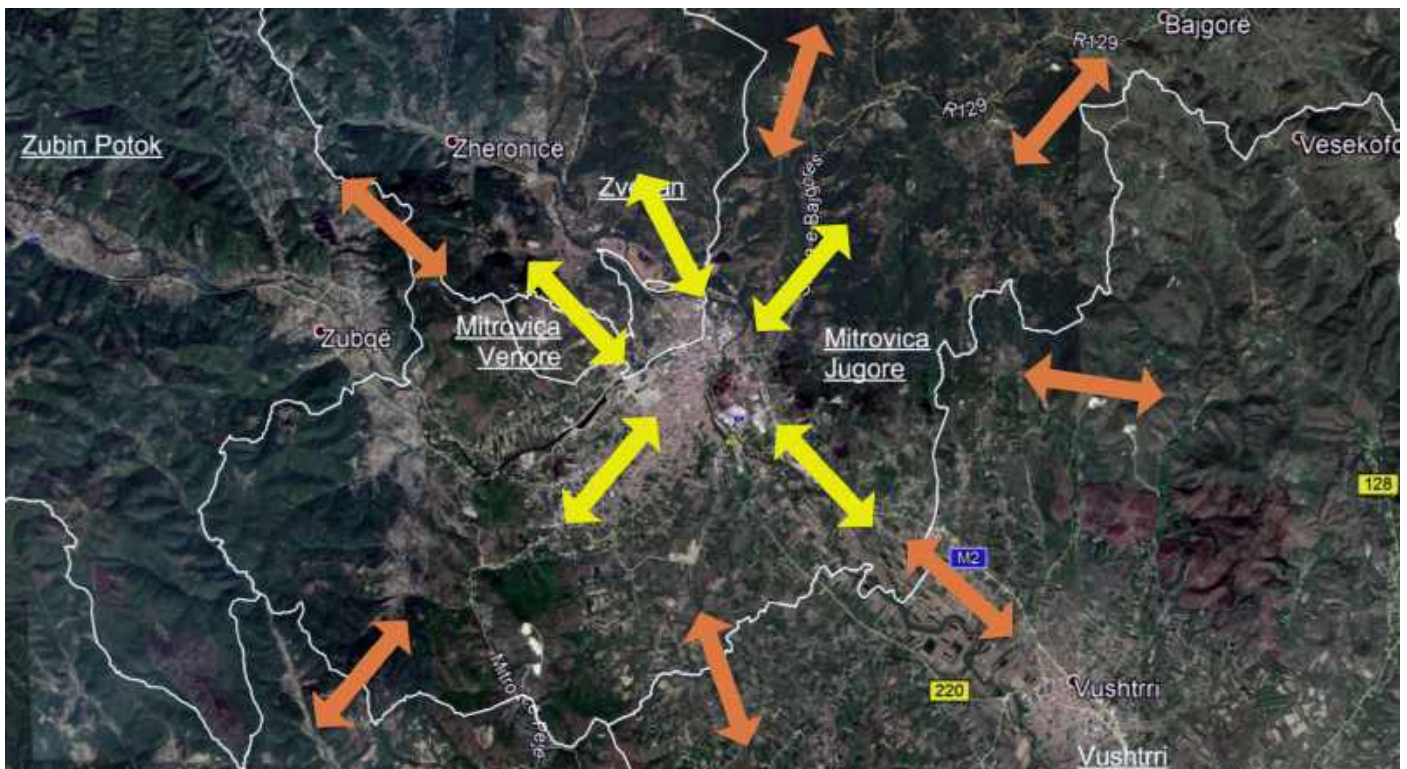


Figure 33. Regional Planning for the northern region of Kosovo

##### 3.1.1. Public transport- priority issues and proposals

Figure 33 shows a hypothetical map with the traffic flows in and out of Mitrovica South. The picture makes clear the Mitrovica South and Mitrovica North constitute one single traffic system. The development of a sustainable transport system requires a large scale of coordination amongst the two municipalities.

##### 3.1.2. Regional public transport system

In order to establish a regular bus service at the regional level, an Inter- Municipal Agreement has been proposed for the creation of a common body for regional transport. These options were initially discussed in the joint workshops of Mitrovica South and Mitrovica North , and remains to be further discussed with the mentioned municipalities of the northern region of Kosovo.

## Public Transport Association Proposal

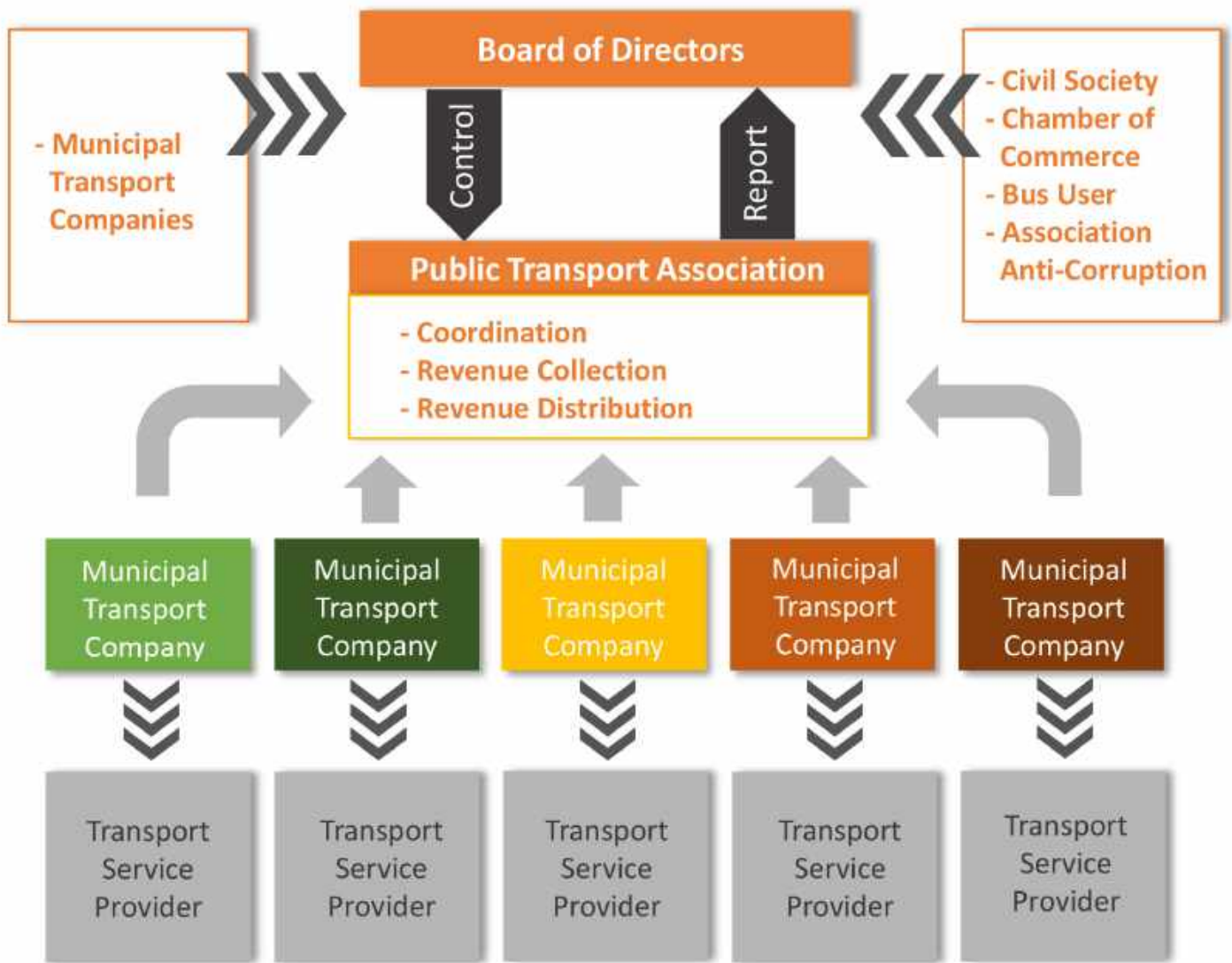


Figure 34. Proposed scheme for the organization of the regional public transport association

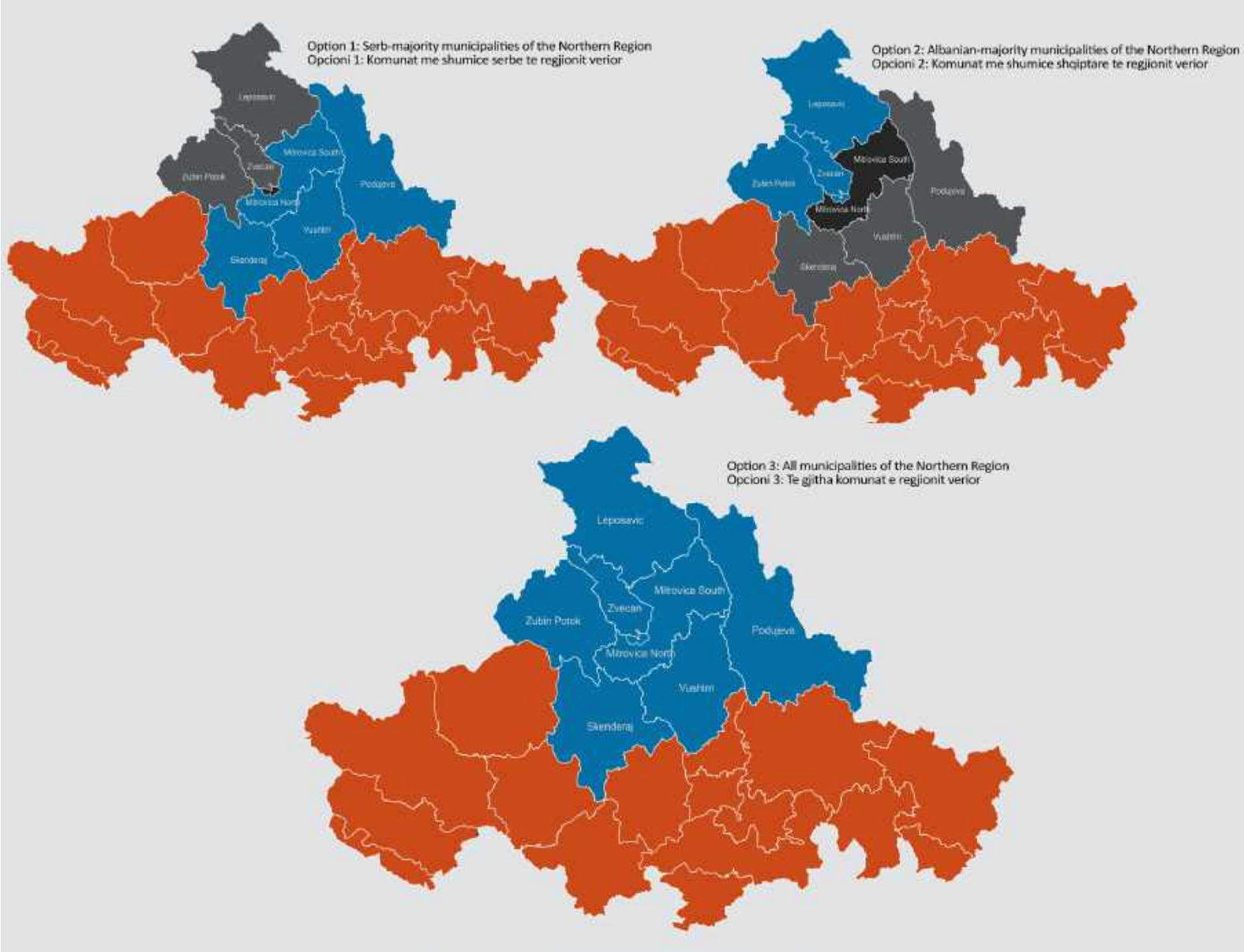
The Joint Regional Transport Body will be established in accordance with the Ministry of Infrastructure and will be represented by all Municipalities of Northern Kosovo Region. The structure of this council shall have the following composition:

- One member from each of the seven Municipalities of the Northern Region (Mitrovica South, Mitrovica North, Leposavic, Zubin Potok, Zvecan, Vushtrri and Skenderaj) appointed as respective municipalities;
- One replacement member from each of the seven municipalities of the region nominated by the respective Mayors for the purpose of efficient functioning of the Regional Transport Body, who will be named as the Deputy Municipal Coordinator for Transport;

- One member from the Traffic Police (Regional office);
- The participation of the private sector and civil society in the work of the council will be foreseen as appropriate depending on the topics under consideration;
- A permanent member for a representative of the bus users.

### 3.1.3. Proposed Strategy - New regional Bus Network, Setting up a regular bus service

There are three options, how a regional bus services may be structured as depicted in Figure 3. Given the fact the both municipalities are part of a single transport system, the option in the right map would be most appropriate.



### 3.1.4. Revitalization of railway transport Prishtina- Mitorovica- Leshak

The route in Kosovo will be rehabilitated in three phases:

- Phase 1: Fushë Kosovë/ Kosovo Polje- border with North Macedonia;
- Phase 2. Fushë Kosovë/ Kosovo Polje- Mitrovicë/ Mitrovica;
- Phase 3: Mitrovicë/Mitrovica – border with Serbia.

In February 2018, Kosovo institutions signed one of the first grant agreements approved under the Connectivity Agenda at the 2015 Vienna Summit<sup>3</sup>, with the aim of improving Kosovo’s only international rail link.

The Kosovo Railway Line 10 is part of the Western Balkans main railway network, an extension of the Trans-European Main Transport Network (TEN-T) Corridors<sup>4</sup>.

Figure 35. Options for regional bus services in the northern region of Kosovo

Railway infrastructure in Mitrovica South is outdated and unable to meet the needs of passengers and freight carriers and as such does not provide adequate links to neighboring countries. For this reason, there is an urgent need for modernization and development in order to meet the needs and provide sustainable transport services.

3 Co-financing of Investment Projects in the Western Balkans in 2015

4 European Commission - "CONNECTIVITY AGENDA", Co-financing of Investment Projects in the Western Balkans in 2016 <https://goo.gl/T8XRgy>.

Project R10, linking Kosovo, Serbia and Northern Macedonia, includes three sections - the railway from Fushe Kosove to the south - towards the border with North Macedonia, Fushe Kosove north to Mitrovica and from Mitrovica to the border with Serbia. Its rehabilitation ensures significant improvement in rail transport between Kosovo and neighboring countries, as well as a wider European network through Pan European Corridor VIII and Corridor X<sup>3</sup>.

In February 2018, Kosovo received grant co-financing of EUR 38.5 million from the EU through the WBIF (Western Balkans Investment Framework) for the first phase of works. The construction works started in July 2019 and are expected to be finalized by mid-2021<sup>5</sup>.

The detailed design and tender dossier for Phase 2 are close to completion and construction could hence start in the third quarter of 2019 and be finalized by the end of 2024. Once complete, the project will ensure secure and efficient rail transport for approximately 50% of the population of Kosovo<sup>6</sup>. Third phase are in preparation of TOR for design. In order to revitalize the rail transport in the relation

Prishtina-Mitrovica-Leshak, it is necessary to:

- Gradually implement the recommendations made on the basis of the Line 10 feasibility study (conducted by the EBRD Consultant) supported to have at least this line in good working order. The southern part of line 10 should be considered as a priority and in the near future the possibility of operationalizing the northern part of line X should be reconsidered. Based on the feasibility study for modernization of line 10<sup>7</sup>.
- Re-functionalize the existing and add new railway stations in: Mitrovica (North/ South), Zvecan, Banjska, Slatina, Leposavic, Leshak, Vushtrri, Prilluzha, Obiliq, Fushë Kosovë.
- Lobbying with central government for the establishment of a light rail system on the existing railway tracks. Trams or light railways may serve a number of stops within the city that are not served by the long distance trains.
- Additionally, the light railways may be used for commuters to Prishtina. Possible stops within Mitrovica are depicted below. For this purpose, options of park&ride facilities are presented as well on the map.



Figure 36. EBRD- Upgrading Kosovo's only international rail link

<sup>5</sup> <https://www.wbif.eu/project/PRJ-KOS-TRA-001>

<sup>6</sup> <https://www.railwaypro.com/wp/a-eu-funding-for-kosovo-rail-route-10/>

<sup>7</sup> Strategy and Multimodal Transport 2015-2025 and the Action Plan for 5 years, 2015.





Figure 37. Possible light rail stops

### Railway infrastructure management

According to Law no. 04 / L-063 on Kosovo Railways (Article 9), the current state-owned infrastructure in Kosovo is managed by the Kosovo Railways Infrastructure Sh.A (INFRAKOS). Whereas, strategic decisions regarding the sustainability of state-owned railway infrastructure in Kosovo, with line closures, modernizations and developments, should be discussed at the government level before any decision is made.

On the other hand, the Ministry of Economy and Environment, together with other competent public authorities, is responsible for the specification and contracts related to railway undertakings that perform railway services in the public interest.

So, all needs and requirements which derive from the local level, must be addressed in advance to INFRAKOS (Kosovo Railway Infrastructure) and the Ministry of Economy and Environment.

### Location of the railway station

The Ministry of Economy and Environment prepares and updates the national transport infrastructure program which should meet the needs of society and the economy, including the location of the railway station in Mitrovica South. Whereas, the current state-owned railway infrastructure in Kosovo is managed by INFRAKOS. So, the competence for determining the location of the railway station is at the level of national programs for the development of railway infrastructure.

Figure 38. S-Bahn Light Trains in Berlin



## 3.2. Urban public transport system

The City of Mitrovica South does not have a functional urban public transport. Public transport services within the urban area are provided by private transport operators through inter-urban lines. The bus station stems from the 1970s and is missing modern facilities, such as information systems and internet timetable. It is located in the "Ilirida" neighborhood along the street "Mbretëresha Teutë" and it has 19 Bus perons. In addition to inter-city buses, citizens depend on individual transport or on the mini-buses and Taxi.

### 3.2.1. Proposed Strategy - New Urban Public Transport Network

The proposed strategy aims on meeting the requirements of daily commuting, reducing the rate of motorization and thus congestion and promoting urban public transport for all traffic participants.

The overall purpose of the urban public transport system for Mitrovica South is to:

- Fulfill the requirements for daily movement of citizens by creating functional inter-connections of the most important urban areas of the city, with particular emphasis on the city center and attractive areas of the city (municipal, educational, health and recreational facilities of the city);
- Reduce the rate of motorization in the city of Mitrovica South by promoting clean and efficient forms of transport such as urban transport and other active movements;
- Increasing the level of safety for all traffic participants and creating conditions for free and unloaded traffic on city streets;
- Creating conditions for the development of the private sector and increasing the number of employees;
- Creating opportunities for efficient project management through public - private partnerships. This can be achieved through tendering of public transport lines to the private sector.

### 3.2.2. Public-private partnership: Tendering and finances

While it is quite common to grant private operators the responsibility for the delivery of services in specific cities, region or at the country level, the investment components of these responsibilities are often subject to specific contractual forms. These specific forms of the contracts supporting the investments are driven by the ability to pull together financing schemes around the specific investment project. Project finance is indeed typically used in those sectors that require large capital expenditures, that have long-lived assets, and that require long periods to amortize investment costs and generate required rates of return for both creditors and equity holders.

Public-private partnerships (PPPs) can be an effective way to build and implement new infrastructure or to renovate, operate, maintain or manage existing transport infrastructure facilities. In both areas PPPs can be a mutually beneficial way to solve critical transportation problems.

## PUBLIC-PRIVATE PARTNERSHIPS



SUSTAINABLE DEVELOPMENT GOALS

### 3.2.3. Coverage of the city's urban area by urban transport

After analyzing the road infrastructure in Mitrovica South, taking into account the city layout, the most important facilities and locations in the city and the distribution of traffic, it is estimated that the coverage of the urban transport network for the city of Mitrovica South would be achieved with three functional lines (see below).

#### a. Bus priority lanes

In general, bus priority lanes exist in urban environments where the goal of improving mobility for bus riders must be balanced against the access and mobility needs of other transportation system users. This "balance" can be achieved in multiple ways, such as allowing other vehicles to access the bus lane under defined conditions, scheduling different uses for the lane during different times of day, and positioning the bus lane in different ways to change the mix of users affected by the bus lane's presence.

Several cities authorize bicycles and taxis to drive in a bus lane as well. Other exemptions are more unusual.

Examples of the types of measures that are appropriate for Mitrovica South include:

- Establishment of bus priority measures where it is possible, mainly on the main routes approaching the city Centre. At traffic junctions signal timings can be adjusted to benefit bus vehicles and allow them more priority over other road users;
- Development of bus stops including improvement of access to stops for bus vehicles, wide pedestrian footways and new facilities such as shelter, seating, lighting and information.
- Improvements of bus service information systems on bus shelters and key destinations (e.g. retail areas/major employment centers). The introduction of real-time passenger information and in-vehicle announcements and displays will

enhance the journey quality for users. Functional inter-connection of attractive areas of the city with suburbs, tracking interval and coverage of urban network according to the criteria of moving along the lines have been taken into consideration when planning the extension of the lines.

When planning bus routes for urban transport in the city of Mitrovica South, the basic parameters for planning urban routes were taken into consideration, such as: coverage, direct travel - direct line extension, functional inter-connection with other lines, speed movement and tracking interval. Direct travel is related to the longitudinal alignment of the lines, in order to avoid unnecessary overlaps and to extend the travel time.

The radial system of urban lines corresponds to the city of Mitrovica South, which in addition to the possibility of direct lines, these lines extend to higher character roads - with adequate geometric elements for urban transport.

No studies have been conducted on the average speed of urban conditions. But if the minimum speed of urban vehicles is estimated to be around 15 km /h, then other parameters such as circuit time and tracking time interval will depend on this speed.

During the coverage analysis (density of lines in the general network), the minimum technical criteria for walking from the line characteristic points (distance between bus stops) were considered.

After analyzing these parameters, it is estimated that, for a functioning urban transport network, for the city of Mitrovica South 3 lines with frequent intervals of operation are foreseen, while a helpline will operate with a shorter interval, respectively in adaptation, even with the public transport requirements for this line.



Figure 39. Bus priority lane (Source: Busspur und Haltestelle in Mannheim)

In order to meet the requirements for urban transport, the following lines are foreseen for the city of Mitrovica South:

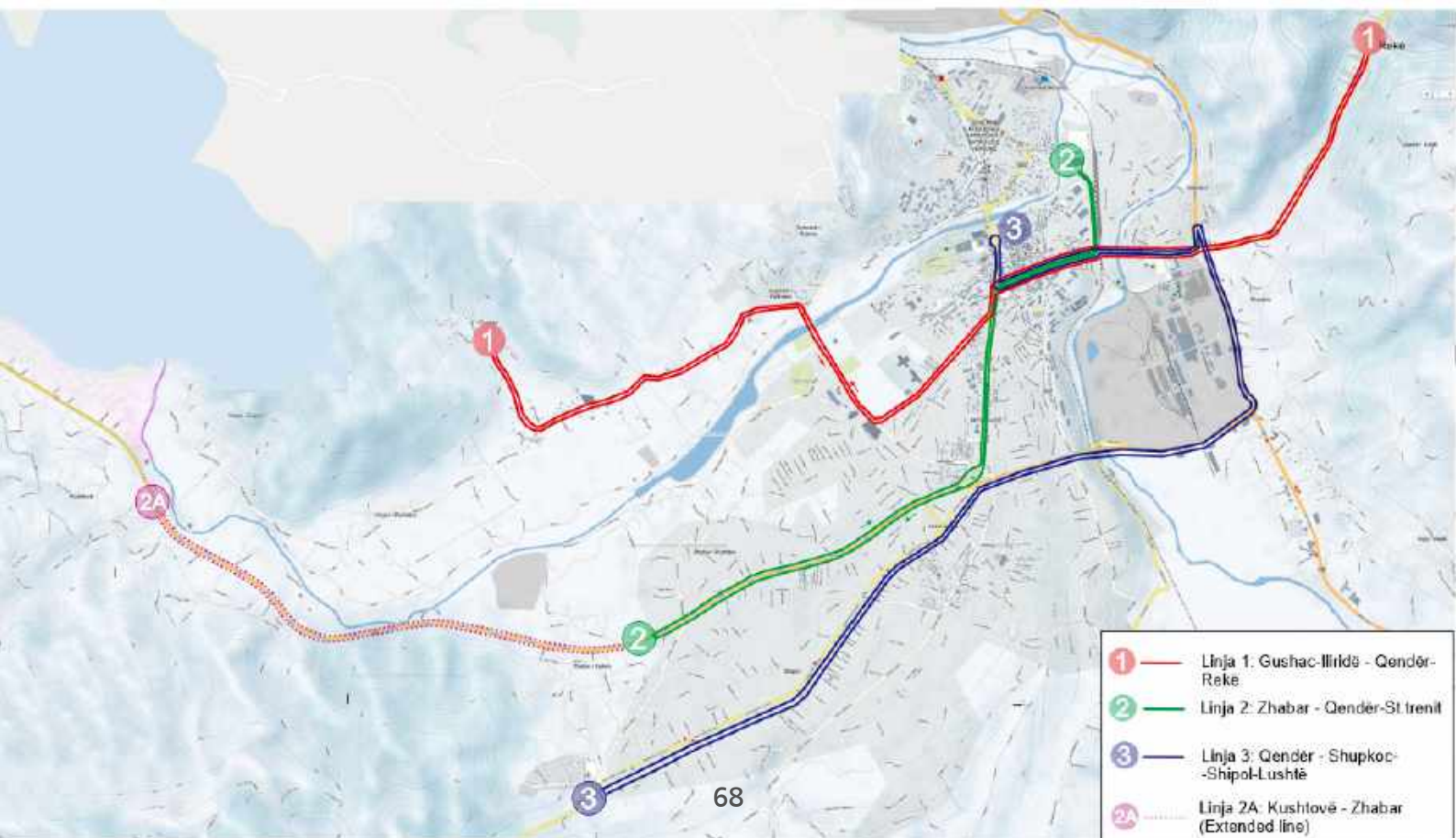
- Line Nr. 1** "Center-Iliridë-Gushac",
- Line Nr. 2** "Zhabac-Center-Train Station"
- Line Nr. 3** "Center- Shupkoc – Shipol - Lushtë"
- Line Nr. 2A** "Kushtovë – Zhabar" (will serve as a Helpline and will operate at a longer interval)

The bus network will be adapted to the decision on the location of the multi-modal hub as described above. The below map covers on the western part of Mitrovica South.

For the low-density settlements that are difficult to serve by public transport. For these type of settlements three options is conceivable:

- Flexible services (dial-a-ride buses, shared taxis, rural UBA)
- Public ride sharing benches for people wishing to travel to town
- More modern, but same principle: Development of a local app for ride sharing.

Figure 40. Urban Public Transport- Proposed Bus Lines for Mitrovica South



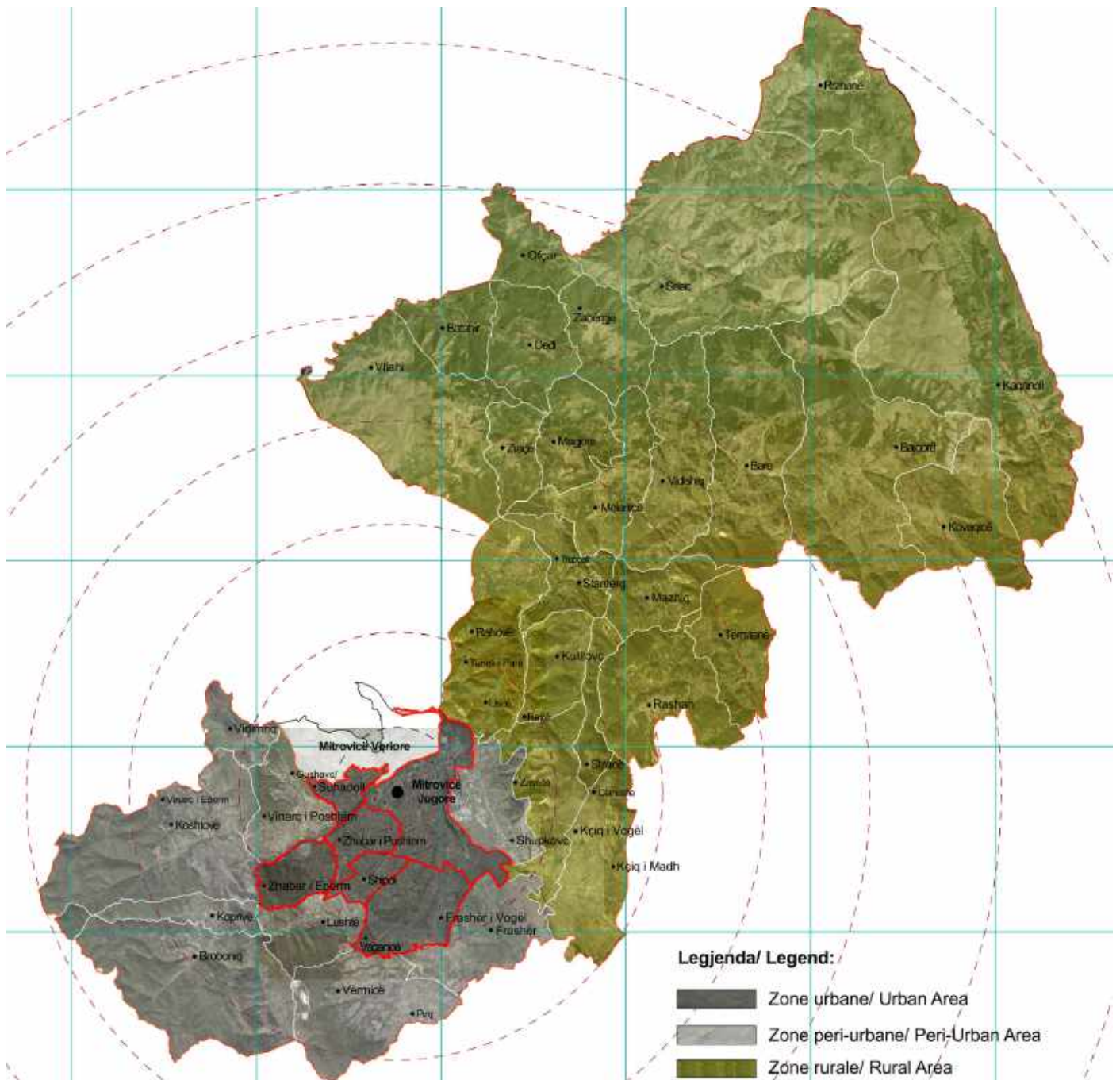


Figure 41. Municipality of Mitrovica South- Rural, peri-urban and urban areas

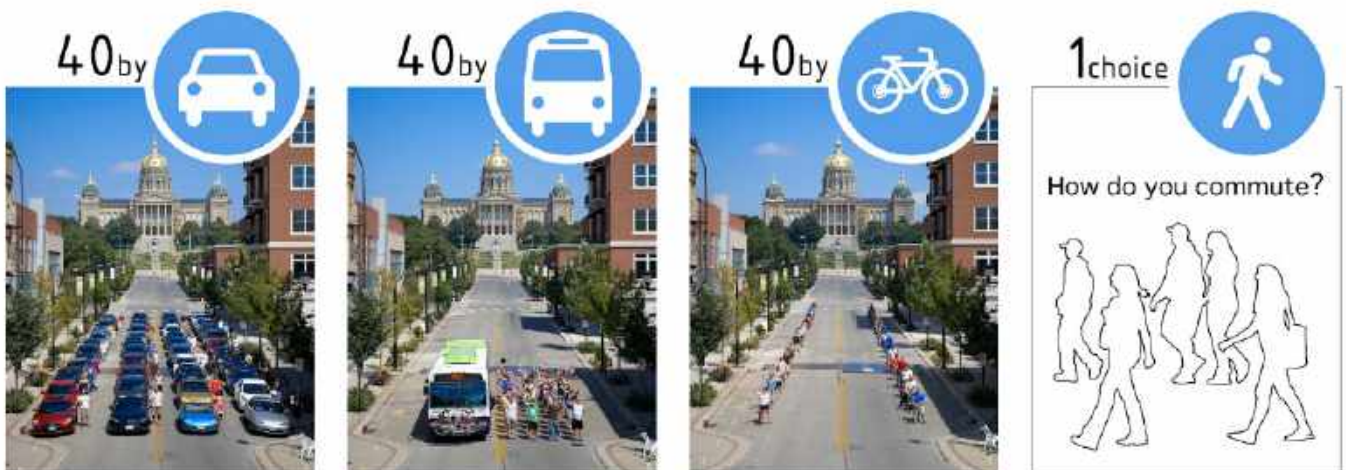


Figure 42. Space required to transport the same number of passengers by car, bus or bicycle- [www.tobinbennett.com](http://www.tobinbennett.com)

### 3.2.4. The ticketing system

The main idea is to provide one single ticket for the entire journey including all means of transport used for the trip. Implementing a modern electronic ticketing system would solve the travel problems posed by the traditional way of ticketing. Therefore, one-way travel should be possible for a fixed time throughout the entire urban transport network. In e-ticketing, category tickets qualifying for free travel and students receiving reduced-price service must be personalized and based on applicable legislation and municipal regulations.

#### a. Conducting a feasibility study

When it comes to public transport/public transport solutions, conducting a financial feasibility study entails constructing the model, including correct assumptions, through which the goal is reached and assigning the financial cost to implementing the project. If the project can generate enough revenues in order for it to be self-sustainable it still has to prove it is able to pass the investment decision criteria such as positive and large Net present value and Internal rate of return. Such projects also have to have assumptions of the level of discount rate which greatly effects the investment decision criteria. Financial scenarios can also be completed to show how the project would do under different constraints. If the level of risk is acceptable for investment, such a project would need to prove financial feasibility throughout the lifetime of the project.

An economic feasibility study would rather study the impact of public transport/public transport solutions to the public sector weighing the benefits it would have over the current situations. Such beneficial impacts are sometimes hard to measure as they have to do with measurements such as time, availability, efficiency, human life, environmental measures. Anything is possible to measure if a number is assigned to it originating from a proper methodology or source. It is also important to mention that even though a project was financially not feasible it could be economically feasible which may sway the

decision to have the project implemented due to the economic benefits it brings to the beneficiaries.

### 3.2.5. Public transport and Taxi services-locations

Taxi services are important transportation services not only for the citizens of Mitrovica South but also for travelers and visitors to the city. These services complement local bus services, offering alternative modes of transport for longer journeys versus private car travel. There are several options to improve taxi operation in the city, including the following:

- Increase the transparency of the taxi business by creating a map of taxi stands for users in Mitrovica South, which will raise standards and service levels for users. It is important to regulate, monitor and control city operating services, ensuring that only licensed vehicles operate and removing illegal taxi operators throughout the city.
- As part of an integrated public transport system, it is important to assess the level and capacity of taxis at key locations, including points where they meet with the other modes of transport, such as bus or pedestrian spaces.



Figure 43. Prague Taxi Stand in Malá Strana (Old Town) Reciprocity Images Editorial/ Alamy Stock Photo

- Allow taxi companies to offer formalized public transport services (collective taxis) to locations not covered by the bus system.
- Develop a ride-sharing app for collective taxis. This app is especially relevant for the areas not covered by regular bus services.
- Formalize taxis presently operating illegally.

In response to the problems faced by taxis in the city, it is proposed to designate taxis in parts of the city in accessible locations where they do not interfere with other road users. It is recommended that municipal authorities determine the locations of stops for taxi services. Location selection and other regulations of taxi services should be done in cooperation with taxi associations, to allow all licensed taxi companies to use the appropriate dedicated spaces. In addition to defining taxi stands, further measures are needed to organize the operation of taxis to reduce the level of illegal activity currently taking place in Mitrovica South. It is important to create equal working conditions

for all companies providing taxi services. As part of this scheme, it is important to include the development of an application for taxi services, as well as better signaling, to clearly emphasize

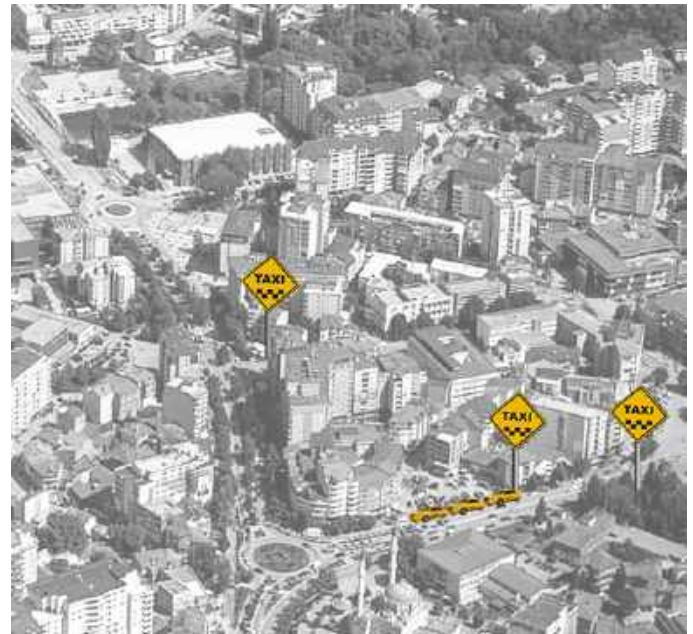
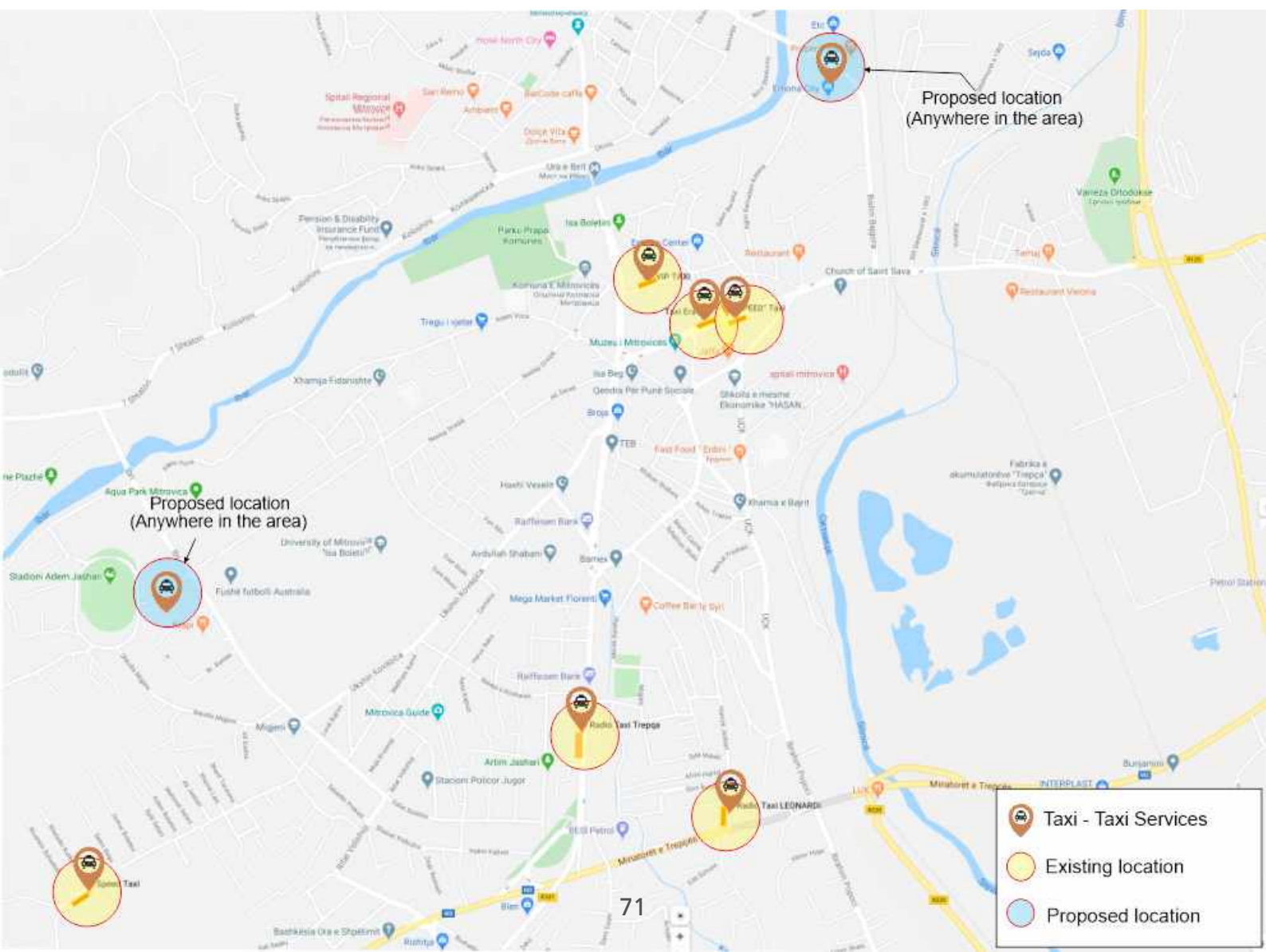


Figure 44. Potential taxi locations in the town of Mitrovica South



### 3.2.6 Intramodality between road and rail transport

The position of the city of Mitrovica South, with good interconnections not only locally but also internationally influenced by the location of the railway, has provided great opportunities for economic development of the municipality of Mitrovica South.

In this regard, the municipality of Mitrovica South should consider establishing a new multi-modal station that will serve as liaison nodes not only for the city of Mitrovica South but also for other regions. A multimodal station is more than necessary for Mitrovica South also for the separation of different transport flows.

An Intermodal Terminal would combine the following modes of transport:

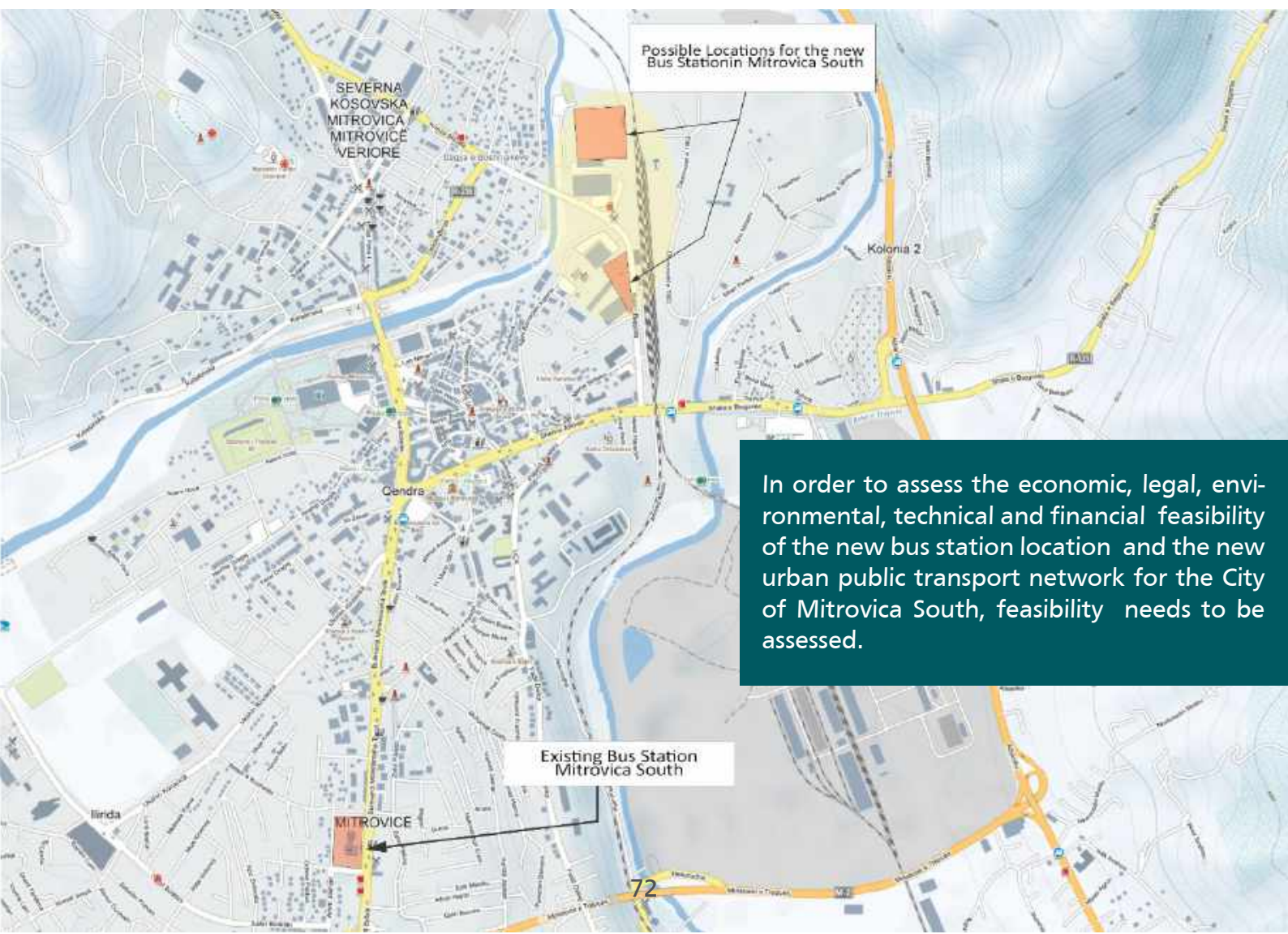
- Long distance buses, regional buses, urban buses;
- Long distance trains, light railways;
- Taxis, shared taxis, dial-a-ride taxis or minibuses;

- Bicycles (safe stands needed), bicycle hiring scheme;
- Car parking for park and ride and kiss and ride;
- Good walking access.

The current bus station in Mitrovica South is close to the city center (in the "Ilirida" neighborhood), but at a distance of about 3.0 km from the train station. In this regard, the Municipality of Mitrovica South should consider building a new bus station which will be near the current train station, creating a multimodal station. This station, which is expected to be the entry point to Mitrovica South, will serve as a bus terminal to enable passengers to subsequently connect to the train station.

Also, in order to establish a functional interconnection between the proposed bus station and the railway station, an urban bus line connecting these two stations to other parts of the city and meeting traffic requirements is envisaged.

Figure 45. New proposed station in Mitrovica South





### 3.3 Concept for Central Business District

The Mitrovica South Survey named congestion as one of the major impediments in Mitrovica South. Traffic counts that were conducted on six days in April and July 2018, revealed that congestion is mainly observed in the city Centre. This is the downtown area where many administrative buildings, schools, shops, museums, bars and banks are located. Not surprising that these are the same streets that have been identified for high pedestrian volumes. Here a conflicting usage by the different modes is given. It is not surprising that the central business district of a regional important city attracts larger numbers of visitors. This is as well the case for Mitrovica South where traffic volumes reach up to 1000 vehicles per hour and direction. The cause for the congestion is probably not transit traffic, but visitors searching for parking places or obstructing the road through illegal parking or vendors intruding the road space or large numbers of pedestrians crossing the road. An increase of the road capacities in the city center is not the right solution since this would entail major negative effects.

#### 3.3.1. General approach

The proposed strategy aims to create a new concept for the city center through a new system of rules. Taking into account the preliminary plans (Urban Regulatory Plan "Qendra" 2010 - 2025+), it is important to ensure that future policies and decisions on surface design minimize the need to travel, encourage walking and cycling, reduce the of motorized individual vehicles and be compliance with broader economic, social and environmental objectives.

There should be a focus on planning and finding the right locations for new developments, the city center and locations where there is good access to the public transport network, ensuring free and safe movement for all participants in traffic.

In order to effectively maintain the city center, it is important to manage the traffic flow keeping in mind:

- Maintain and further develop the multifunctional character of the city center;
- Parking management with a guiding system to reduce traffic in search of a parking place around the centre and reduction of free-of charge parking spaces;
- An improvement of the public transport system which would reduce the number of passengers

vehicles with a destination to the city centre considerably;

- Location of bus stops close to the city centre;
- Development and regulation of the road network, creating new roads and expanding and improving the existing ones. These changes would significantly improve and more clearly separate areas within the city;
- Intelligent traffic management preventing through traffic to cross the city centre on the congested roads;
- Maintenance of existing green and public spaces within the city and creation of other public spaces;
- Extension and strengthening of ecological corridors for pedestrians and cyclists along the rivers "Ibër" and "Sitnicë".



Figure 46. CBD Concept

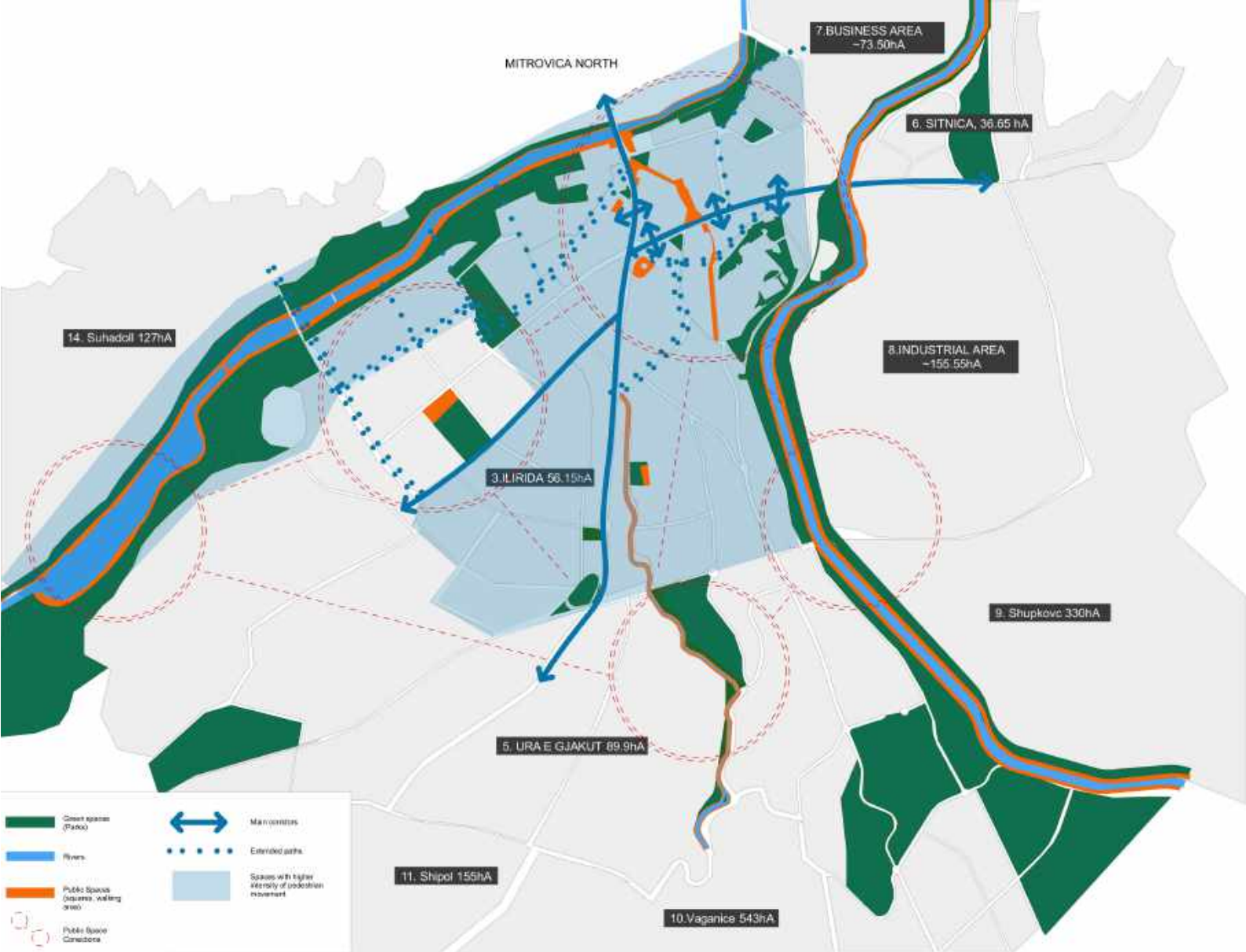


Figure 47. Concept for the city center of Mitrovica South

### 3.3.2. City Access Restrictions

Restricting vehicle access to the city center and urban areas can play a major role in creating more “habitable” areas and reducing the impact of road transport, air quality management, promoting sustainable transport and supporting objectives of urban regeneration policies.

Within the city center is important to manage deliveries within the pedestrianized areas of the city including:

- New controls of the time of operation, vehicle access and vehicle type;
- Enhanced facilities and signing for loading and delivery bays; and
- Stronger enforcement to reduce the level of indiscriminate parking/ loading by commercial vehicles and minimizing conflicts with pedestrians and other street users in the city center. For this purpose, the city council will develop a regulatory framework.

#### Reduce car traffic in the CBD by:

- Only allow residential traffic to enter the CBD (see map below), exceptions for taxis and buses
- Closing Isa Boletinin from the bridge to Shemsi Ahmeti for cars. Alternatively introduce shared space with low speeds (10 km/h) and pedestrians and cars having the same right.
- Allow only for residential parking in the CBD
- Abandon all plans of new road construction in the CBD
- Extend the pedestrian areas in the area with access restrictions: e.g. Agim Hajrizi, Kemal Atatürk, Mehe Uka, Bedri Gjinaj, Nena Terese, etc.
- Deliberate future extensions to the South around the Isa Beg mosque.

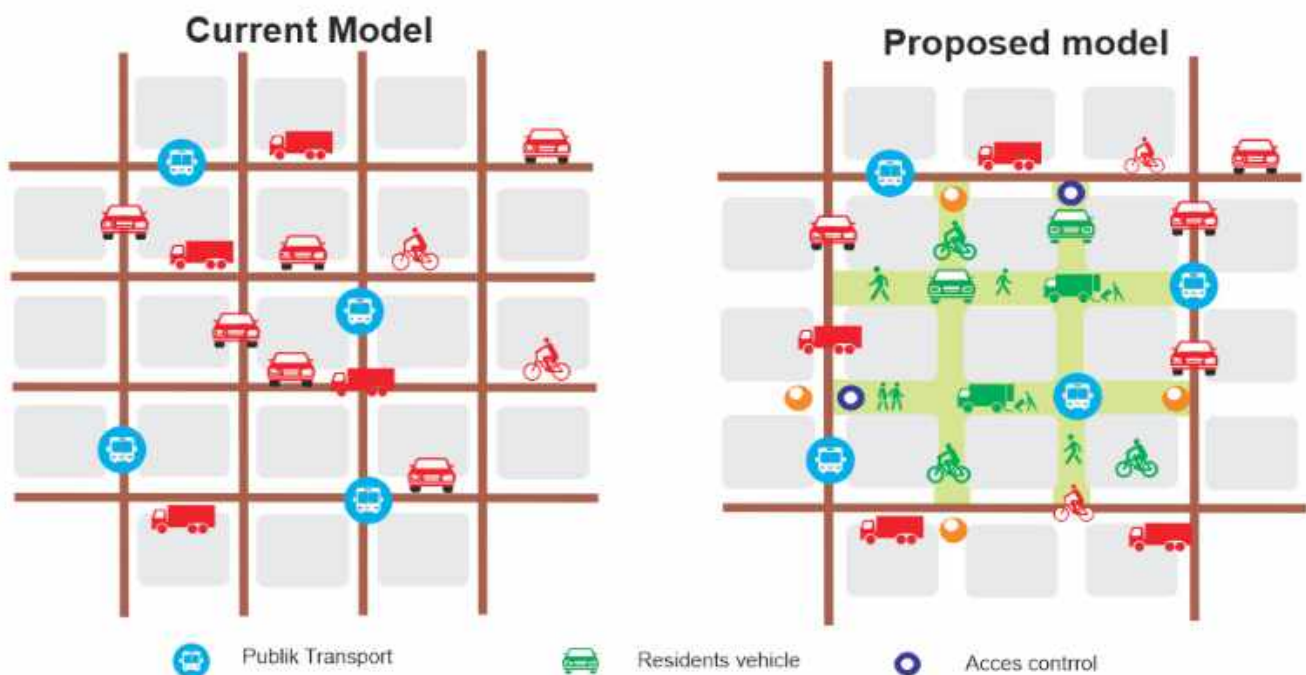


Figure 48. Access restrictions for non-residents in the CBD, Source: Superblocks model of Barcelona

### 3.3.3. Reorganization of the existing road network within the central area (new conception of zoning including parking management)

The city of Mitrovica South has since its beginnings developed according to a concentric model, with traffic concentrated downtown. The main road network in the city is formed along the main roads of national and regional character, divided into radial and circular roads. In order for transport infrastructure and transport to be managed effectively, and to reduce unnecessary delays and congestion, it is necessary:

- More effectively manage parking lots, to reduce

the downtown motorized transport by promoting sustainable travel, including public transport, walking and cycling.

- Scalable transport comfort road network - low comfort in the city center (favoring unmotorized movements) and high in suburban areas-outside the central area, (access restrictions for all cars, except residents in the CBD, residential parking only).

- Traffic reorganization - the introduction of one-way traffic on sections of roads that do not have adequate width and because of the high demand for switchgear and lid return create many points of conflict. Opportunities for intervention are small, so capacity improvements at these intersections should be analyzed with

be analyzed with the possibility of reorganizing traffic (eg one-way access: "Ukshin Kovaqica", "Bedri Gjinaj" and "Kemal Ataturk" - Figure 49).

- Maintain and improve access to key facilities and services for all - including city green spaces and cultural facilities.
- Improving safety at major crossroads with high traffic loads.

- Improving environmental conditions for citizens by reducing the negative impacts of transport on the city environment.
- Promoting healthy lifestyles for citizens, including reducing the negative impact of air pollution and noise.



Figure 49. One-way access: "Ukshin Kovaqica", "Bedri Gjinaj" and "Kemal Ataturk"



Figure 50. One way street example- Urban Street Design Guide National Association of City Transportation Officials

### 3.3.4. City Logistics Improvements

Improving supply/ transport arrangements/ regulations is important in terms of supporting and facilitating the economic aspect of the city.

Measures to improve logistics in the city include:

- Reorganizing the movement of freight transport in Mitrovica South, setting up adequate time spaces for freight access,
- Reduction of vehicle weights and emissions type for freight vehicles on the city road network.
- Increase the usage of goods transport with Pedicels

Such measures will provide better control of heavy transport across the city, unlocking road

capacity for other modes of transport and reducing emissions of polluting gases from vehicles. As part of the overall review and enhancement of the city-center Priority Pedestrian Area, it is important to consider reviewing / updating access agreements for commercial and service vehicles. Within the proposed city-center controlled parking area, additional loading and unloading sites, controlled to reduce the likelihood of misuse and facilitate the circulation of supply vehicles in support of the city's commercial economy. Various specific issues will need to be considered more fully including operating time, vehicle access and vehicle type for such a scheme.



Figure 51. Food transport by bike

## 3.4. Road infrastructure and traffic management

Due to the current manners and modes of travel of the citizens of Mitrovica South, namely because transport by private vehicles is more widespread than other more sustainable modes of transport, the capacity of the city center road network reaches its maximum and consequently traffic congestion occurs.

### 3.4.1. Typology of road management and traffic distribution

To clarify the problems associated with the development of the current road network in Mitrovica South, depending on the traffic structure, it is also foreseen the distribution of movements across different road axes (in terms

of use) in Mitrovica South. Depending on the function assigned to the road and beyond the applicable hierarchy, the distribution of traffic across the streets of Mitrovica South depending on the traffic structure (type and composition of vehicles) is important not only for traffic safety but also for traffic congestion roads that heavy vehicles cause.

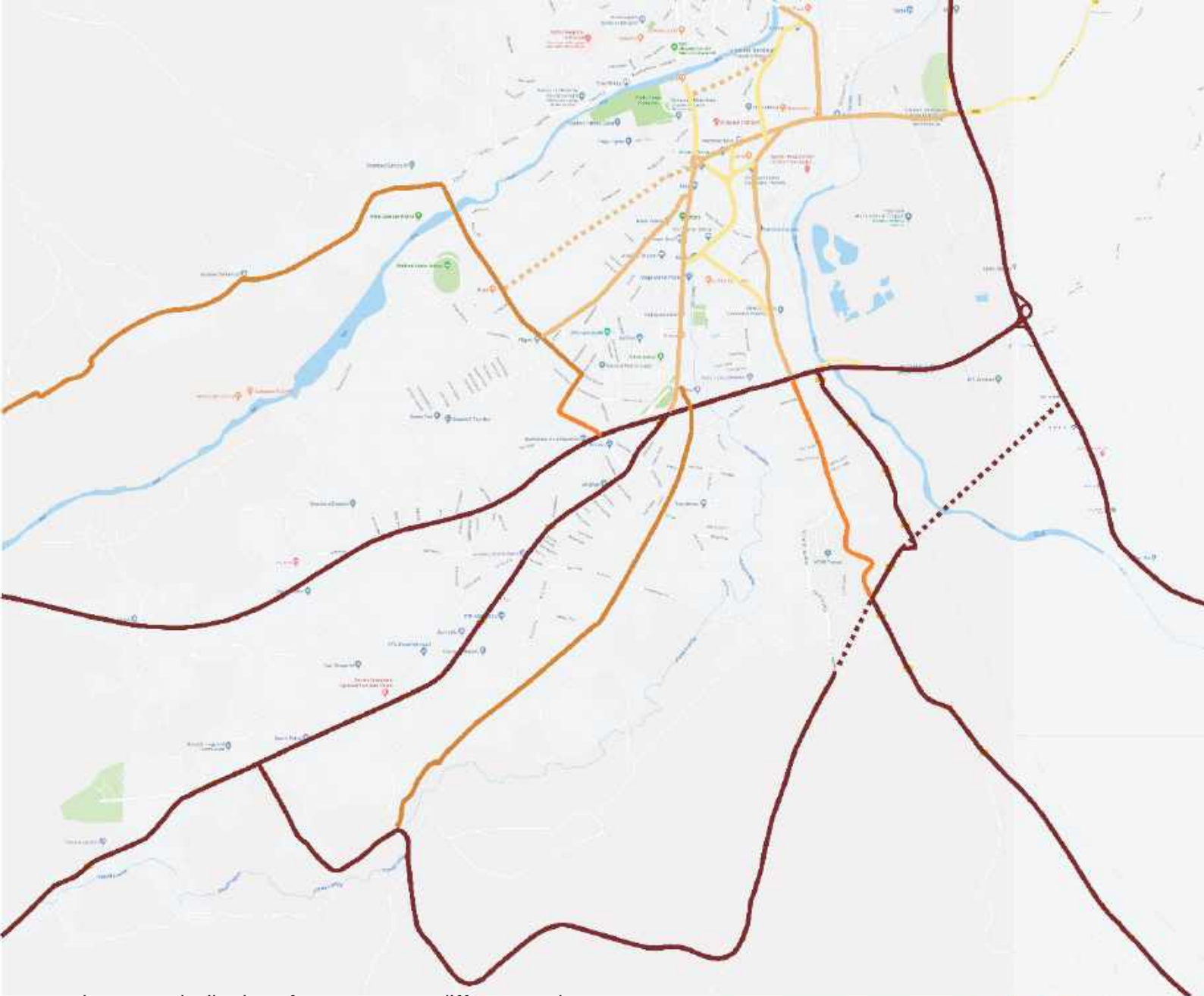
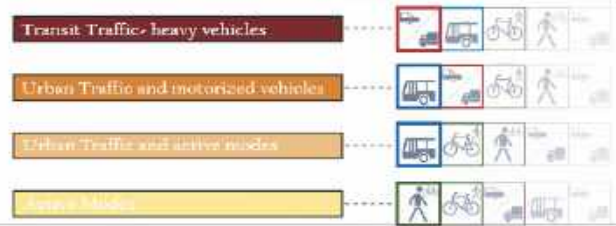


Figure 52. Distribution of movements on different road axes depending on the traffic structure

Depending on the traffic structure, the following is a recommended form of traffic distribution for the different modes of transport:



**a. Transit traffic - heavy vehicles**

The main function of transit traffic axes is to distribute heavy motorized traffic outside of central urban areas. These roads follow a logic of heavy traffic-oriented capacity on higher-character roads. Therefore, these sections of roads are located in sectors where the need for unmotorized movement is limited.



## Urban Traffic and motorized vehicles



### b. Urban traffic and motorized vehicles

The axes of these roads make it possible to distribute trips to the entrance of dense agglomeration areas. The logic of distributing traffic on these roads is driven by public transport, but also by personal vehicles. Regarding heavy transport, arrangements should be in accordance with municipal regulations on heavy transport, subject to timely supply requirements.



## Urban Traffic and Active Modes



### c. Urban traffic and active modes (bicycles and pedestrians)

The axes of these roads make it possible to distribute trips on a medium scale to denser areas. If capacity logic remains multimodal and public transport oriented, road network development should also favor modes of active mobility (bicycles and pedestrians). The traffic function of these road axes should be more restricted, especially for vehicles which tend to use these sections of roads for transit.



## Active Modes



### d. Active modes (pedestrians and cyclists)

The axes of these roads should prioritize active movements, with emphasis on pedestrian movement. The function of motorized traffic on these road axes should be more restricted, and with adequate measures (traffic calming or 'shared space' areas) which favours active movements.



### 3.4.2. Improved Junction Capacity & Safety Measures

The regulation of traffic at the crossroads entrance has a direct impact on traffic safety and is the basis for improving the capacity of crossroads. Improving the capacity and maintenance of traffic signaling at intersections is a prerequisite for reducing road accidents and enhancing traffic safety for all traffic participants. After analyzing the main intersections in

Mitrovica South it has been estimated that some intersections on the main roads have problems with congestion during peak hours and pose a safety hazard to road users. As part of the SUMP strategy, a number of traffic management measures have been proposed to improve the capacity of crossroads while improving the safety of users, especially pedestrians and cyclists. At several major crossroads in the central part of the city, a number of capacity and safety measures have been proposed.

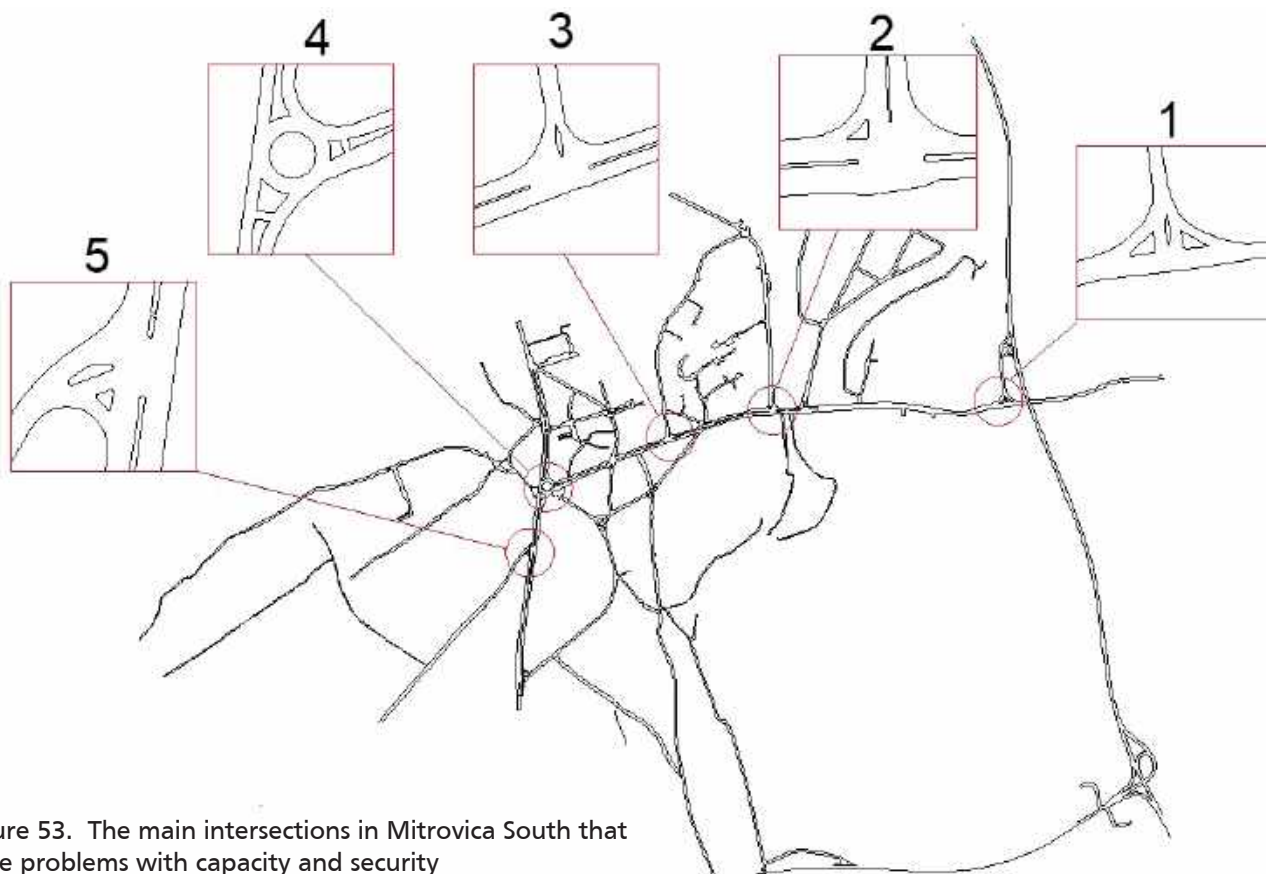


Figure 53. The main intersections in Mitrovica South that have problems with capacity and security

Junction	Recommendations for improving traffic capacity and safety
Traffic intersection No.1	New intersection layout - addition of special lanes for left turn
Traffic intersection No.2	Placement of splitter islands and improving traffic signaling
Traffic intersection No.3	Improving traffic signaling
Roundabout No.4	Improving traffic signaling
Roundabout No.5	Opportunities for intervention are small, therefore improving the capacity at these crossroads should be analyzed with the possibility of the traffic rearrangement (e.g. the possibility of one-way streets) and Improving traffic signaling.

Table 11. Improving traffic capacity and safety



### 3.4.3 Transit traffic, local bypass and road conditions

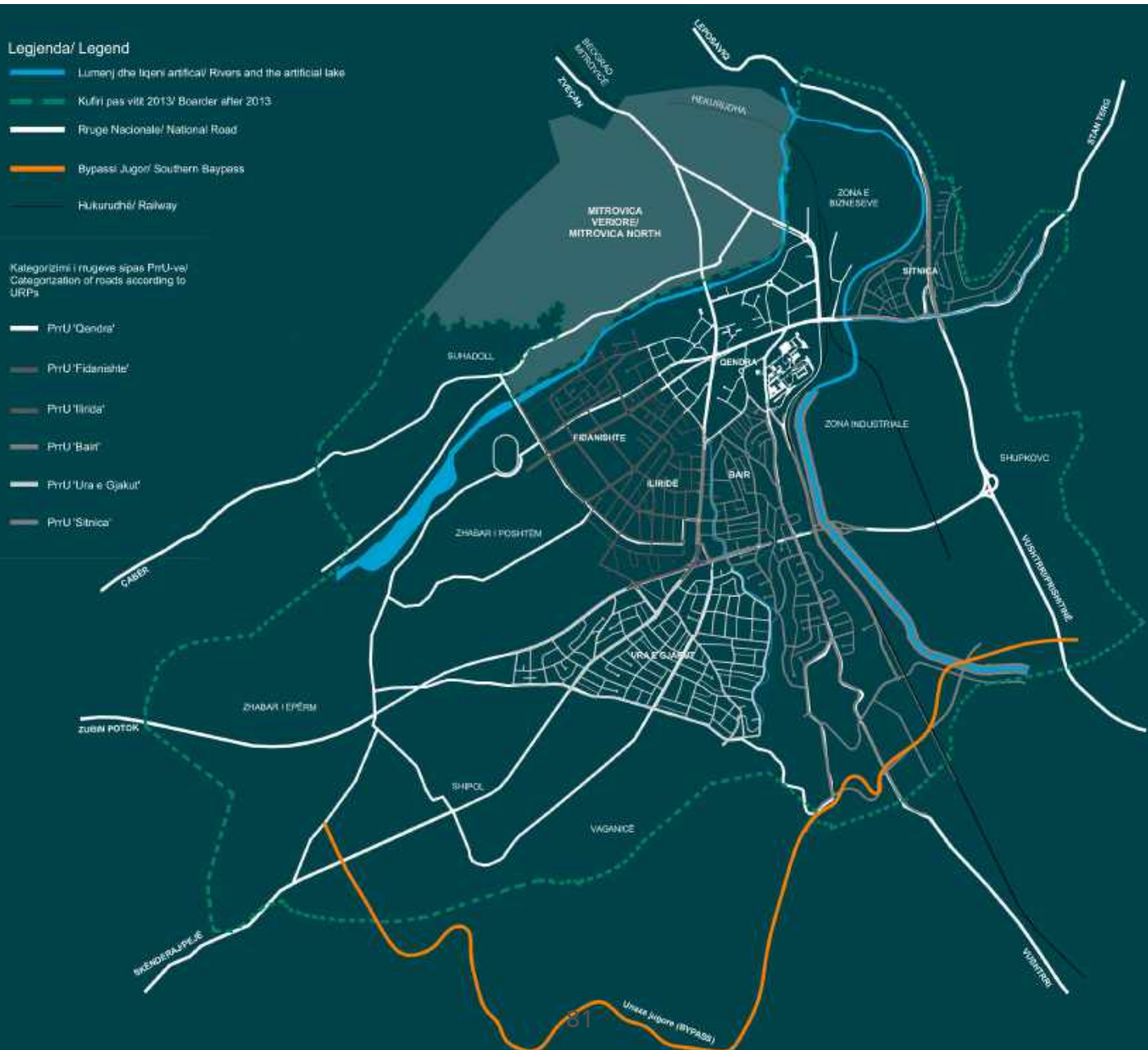
#### a. Transit traffic

In the short term, it is proposed to establish a new transport link by a ring road -By Pass road, extending to the southern part of Mitrovica South and the city center, providing a new transit traffic link between the routes regional road R-101 and the M2 motorway in Shupkoc. This ring road -Bypass was also included in the Municipal Development Plan (MDP) and Urban Development Plan (UDP) of Mitrovica South, and is part of the new MDP priority projects under infrastructure sector, covering the south and south-eastern part of the city. Providing a new high-speed transit link in the southeastern part of the city will provide a new high-capacity transit link and improve traffic congestion in the

downtown area and help solve congestion problems in the city traffic currently occurring in this part of town.



Figure 54. Ring Road- By-Pass south of Bair and connection to Shupkoc



## b. Improvement of road infrastructure for the development of regional transport

One of the main objectives of the regional public transport system is to improve and develop the road infrastructure. Creating a regional transport network for people and goods, in addition to meeting the demand for movement, will also have an impact on economic development by stimulating investment in road infrastructure development at the regional level. The objective of improving road infrastructure for the development of the regional transport could be achieved by carrying out the following activities with the following prioritization:

1. Regular maintenance of roads
2. Rehabilitation of existing roads in the western region;
3. Construction of new roads (only if major bottlenecks or missing links are observed)

### 3.5. Parking management



Figure 55. Improving road infrastructure Mitrovica South Municipality 2020

Inadequate management of parking in Mitrovica South not only causes difficulties in the movement of vehicles, but also significantly affects the movement of pedestrians and cyclists, preventing free movement on the sidewalks, since most of the space dedicated to pedestrians, has been turned into parking lots for cars.

#### 3.5.1. Proposed Strategy for Parking Management

Parking management is important, on dedicated, on-road and off-road parking spaces, in order to reduce traffic conflicts, obstacles and delays by providing an adequate regime to manage supply and parking regulations in the area in an effective way.

According to Push and Pull's framework for parking policy, most cities follow the same pattern when it comes to parking policy (Figure 21). Within this pattern we distinguish three phases each of them consisting of one or more stages. One of the most effective push strategies is the reduction of available public parking spaces in the CBD. For example, Copenhagen reduced its parking spaces by 3% annually.

However, reducing parking places for residents will probably not be accepted. Therefore, a strategy should contain the following items:

1. Identify the need for residential parking
2. Reduce the number of on-street parking lots that are not reserved for residents. This is especially important on roads that are congested during peak travel hours.
3. Classify parking areas according to residential and non-residential parking spaces
4. Issue residential parking licenses. Make residents pay an annual fee for obtaining the parking license. Pay parking controls through the revenues.
5. Charge for the parking on non-residential parking spaces
6. Reduce the number of non-residential parking spaces in the CBD annually.

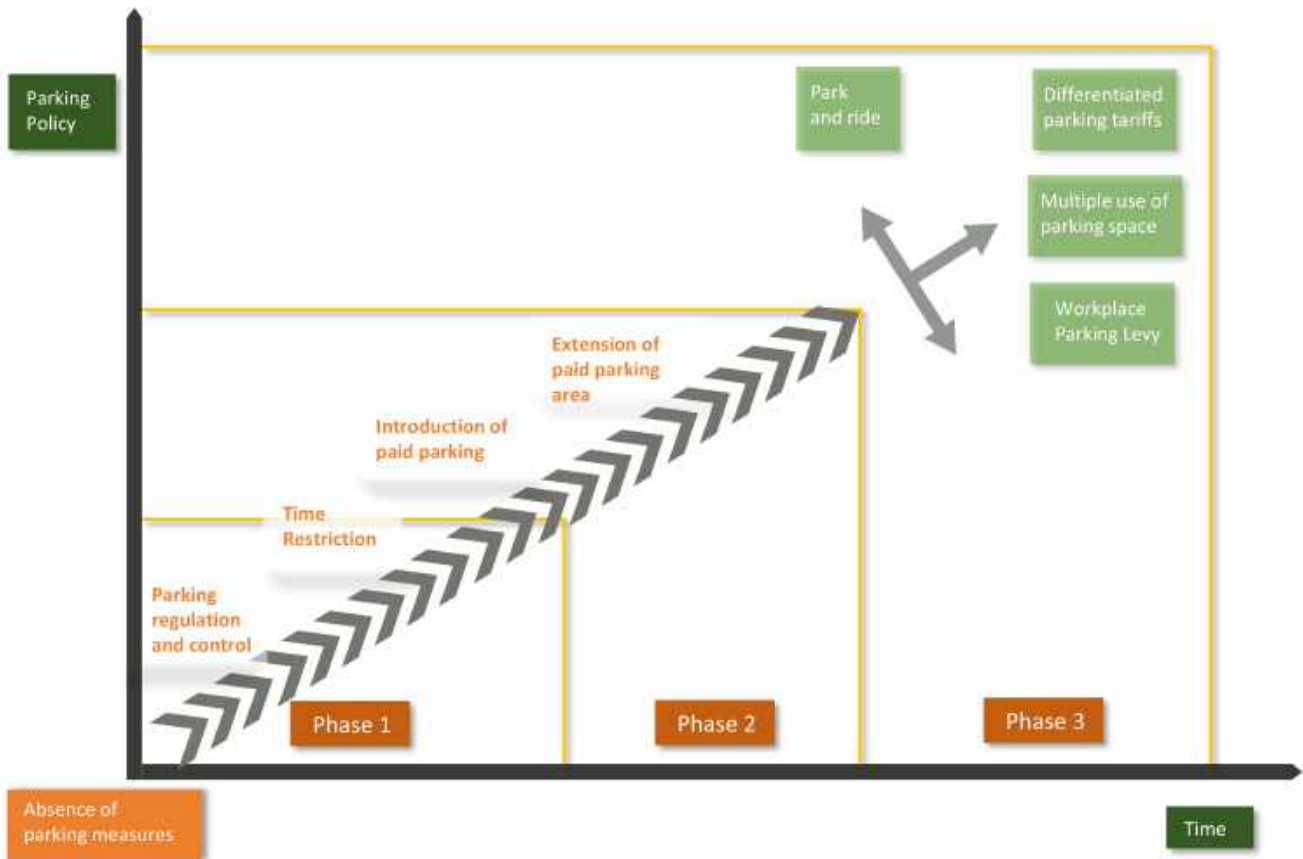


Figure 56. The staged development of urban parking policy (Source: Push&Pull Training Material "Setting the framework for parking policy" by Prof. G.Mingardo)

Parking regulation is often a municipal activity in most European countries including Kosovo. Usually, each city is responsible to develop and design the parking policy objectives and choose the policy instruments to execute them. Generally central governments offer guidance, often on parking requirements (technical norms of Ministry of Economy and Environment), but rarely engage with decision making. This is mainly due to the awareness that parking is a local matter and that local authorities are responsible on addressing the issue on a local level.

Based on Push and Pull's framework for parking policy there are four main objectives<sup>8</sup>:

1. To contribute to a better accessibility and mobility of the urban area;
2. To contribute to a better quality of life in the city (mainly a better air quality and quality of the living environment);
3. To support the local economy;
4. To raise municipal revenue.

Several parking control options are available in Mitrovica South to manage the demand for parking in the city more effectively. This includes:

- Paid parking system, dividing the city into two zones, so that the city center (in the first zone) has the highest prices and limited time periods, in the second zone the cheapest prices and no time constraints, while outside these areas free parking and no time limits;
- Restriction/ regulation of private parking spaces (legislatively or if not possible then with traffic measures for road infrastructure);
- Regulation of "Residential Areas for Collective Buildings" in Residential Areas - to protect local residents and communities from other people's parking activity (suburbs/ visitors).

<sup>8</sup> Based on Push and Pull, Executive summary – Setting the framework for parking policy –Dec. 2016, p.2

### 3.5.2. Developing a Parking Policy for Mitrovica South

In line with the overall objectives of the Sustainable Urban Mobility Plan (SUMP) for Mitrovica South, parking monitoring and management can also have a positive impact on the development of sustainable urban mobility. If sufficient parking is provided in the appropriate places and the division of the city into parking areas, unnecessary driving will be eliminated, as the need to seek a place for free parking. This reduces fuel consumption and pollutant emissions.

The increasing demand for parking, often greater than the capacity of the central part of the town of Mitrovica South, requires measures to meet different needs and demand for parking taking into account different types of users (city residents, residents of the suburbs / visitors). The municipality of Mitrovica South needs to develop a new Regulation as part of

a project focusing on “managing and controlling parking demand for the city of Mitrovica South”. This regulation should have as a basic criterion the creation and development of a payment and parking control system, using measures that do not require a high degree of investment, in particular, the implementation of a computerized payment and parking control system.

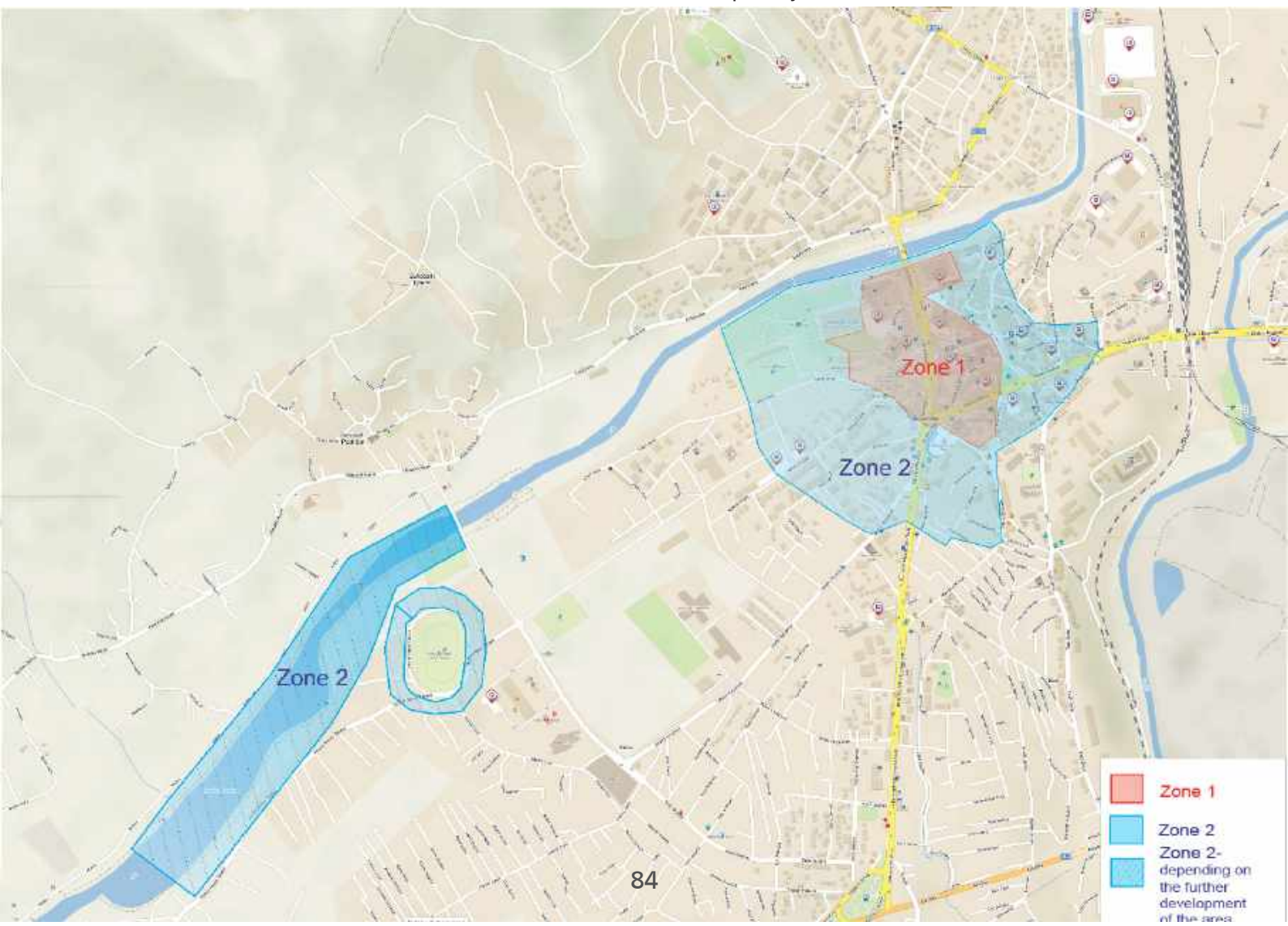
#### - Parking Zone 1

The central part of the city is classified as the most expensive area with the shortest allowed parking duration.

#### - Parking Zone 2

The peripheral part of the city allows parking for longer periods of time with lower prices. This zone will include parking provided around the city stadium and around the lake. The inclusion of the planned parking lots in Zone 2 will be re-evaluated and will depend on the developments and attractiveness of these areas.

Figure 57. Division of the city into zones, depending on the priority and attractiveness of the zones



### - Parking Zone 3

Lies outside the definitions in Zones 1 and 2, and this zone is intended for free and unconditional parking of vehicles.

In Figure 57 the conceptual/ strategic principles for dividing the city into zones are given, depending on the priority and attractiveness of the zones. **Whereas, accurate identification of the areas described above should be developed in subsequent studies on this issue.**

#### 3.5.3. "Area for residents of collective buildings" in residential areas

In collective housing in the city of Mitrovica South there are public parking lots used by residents of collective housing. After authorizing the introduction of toll-free parking areas in separate areas of the city, further stages of toll-free parking should be introduced for collective housing parking lots. Apart from the management and maintenance of these spaces, the introduction of measures for the paid use- of these parking lots is also aimed at protecting

these spaces from increased parking activity by non-residents. The area for occupants of collective buildings should be regulated by a special regulation in an agreement between the Municipality and residents, marked with the relevant signaling indicating that it is designated for occupants of collective buildings. Only residents with valid parking permits and subscribers can park in these spaces.

#### a. Arrangement of parking areas for new buildings

The parking lot is space designed, marked and technically equipped to accommodate and leave a vehicle. As part of the objectives for parking management in Mitrovica South, it is foreseen to arrange parking areas for new buildings. Adjustment of parking areas for new buildings should be carried out in accordance with technical spatial planning norms setting standards regarding the number of parking lots, depending on the content.

Figure 58. Longfellow Street Residential Shared Street, Santa Monica, CA



### 3.5.4 Benefits of parking policy measures

Several key benefits will be realized by the introduction of parking policy measures that include:

- Revenue Generation: It is expected that parking policy measures for the City of Mitrovica South will generate revenue that will support financing of improvements to downtown parking spaces, other transportation improvements for all modes of transport including pedestrian traffic and cyclists;
- Mobility Management Support: It will form an important component of efforts to encourage more efficient modes of transport that will help reduce problems such as congestion, pollution emissions, energy consumption, and improvement of road safety for all road users;
- Better conditions for urban mobility: It will help create more attractive and efficient urban environments by reducing overall paved areas, allowing for more flexible construction design and increased accessibility for walking and improving parking spaces.

#### a. Operation and enforcement of parking rules

It is important to establish an organization that aims to develop and modernize city parking payments and that manages parking control as well. Such parking operator may be owned by the municipality or operated through a private concessionaire.

Implementing parking controls and regulations is a key element of the parking strategy. It is proposed that the current implementation approach be revised and modified to strengthen the resources dedicated to implementing the proposed parking and traffic management measures as part of the Plan. The success of controlling and managing parking activity throughout the city, especially in the city center, will depend greatly on the existence of a successful implementing body. The benefits of introducing a new parking organization in Mitrovica South responsible for operational parking management and control should include the following activities:

- Ensuring that parking policies are effectively implemented and enforced, with associated benefits to improve traffic and public transport, road safety, use of parking spaces and environmental benefits;
- Integration of all enforcement and parking policies provides opportunities for better monitoring and enforcement, enabling policies more responsive to public needs; and
- There are long-term system update options to accommodate more automated systems, including space allocation and payment mechanisms.

Improvement of law enforcement. Since the police is presently overburdened with the task of controlling illegal parking, the following measures may be taken:

- Establish a parking police in Mitrovica. Lobby with Central Government to allow for the legal exemptions as it was already done in Prishtina.
- Raise the penalties to a level that the officers of parking police entirely financed through the revenues generated.

### 3.5.5. Parking Management and Law Enforcement

Implementing a parking management concept aims to increase the efficiency of dedicated parking space, namely to provide Mitrovica South's citizens with parking opportunities and facilities through efficient management of public parking areas.

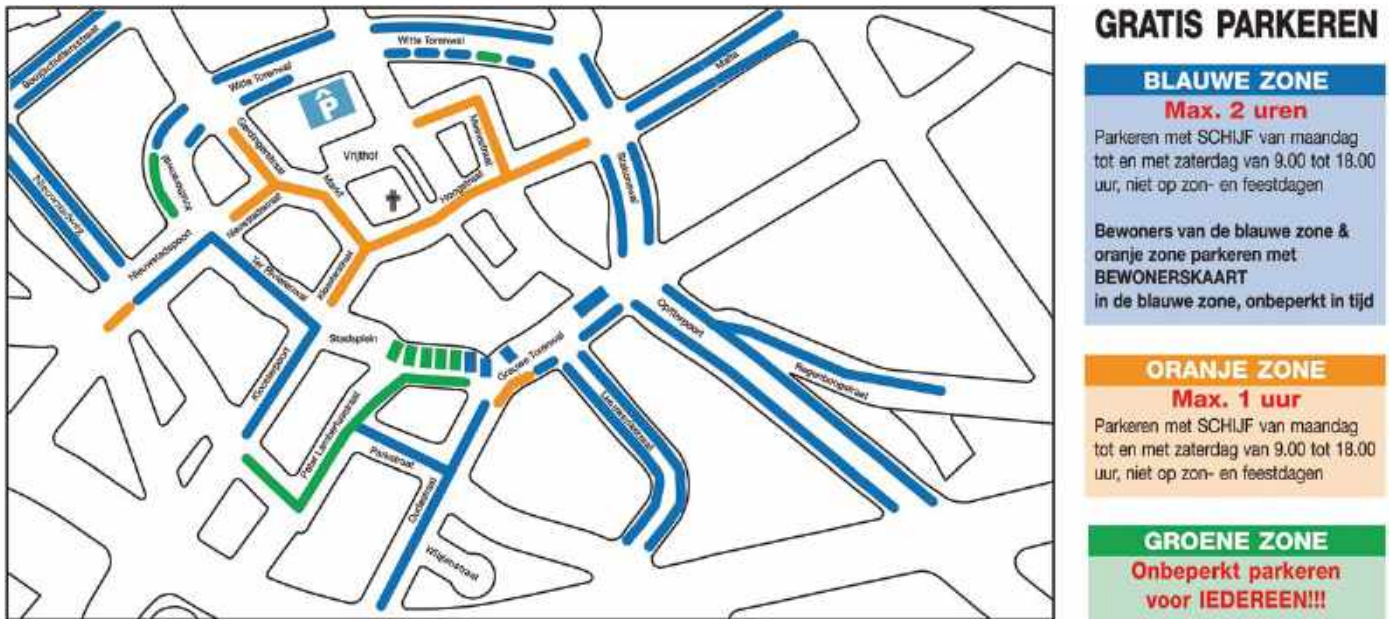
Effective parking demand management plays a key role in this approach, carefully managing the increase in traffic flows, by encouraging people to use other alternatives and thereby supporting more sustainable travel options; while providing access for some residents and local businesses. **Implementing a parking management concept can be realized by considering options:**

- Drafting a new Regulation to manage and control on-street and off-street parking demand,
- Drafting a special regulation (in agreement between the Municipality and the residents)

- for parking in residential areas and collective housing;
- Dividing the city into zones, depending on the attractiveness and importance of the zones, creating new conditions and regulations for vehicle parking for the respective zones;
- Establishment of a new residential parking scheme to control parking activity in residential and community areas;
- Request new builds for the number of parking spaces or garages based on Spatial Planning Technical Norms<sup>9</sup>;

- Introduce new parking rules where necessary and implement these rules effectively. It is essential to conduct parking controls on a routine basis to ensure that there are no abuses or illegal parking activities; and
- Use of planning policies to control the number/type of public parking throughout the city.

Figure 59. Example of time restriction in Bree (Belgium): blue areas max. 2 hours parking, orange areas max. 1-hour parking and green areas is unlimited parking



### 3.6. Improvements for Active Modes

The inhabitants of Mitrovica South, Mitrovica North, Leposavic and Zubin Potok all pointed to “nonmotorized mobility” as one of the least satisfying municipal services. The issues that the respondents addressed were the lack of cycling paths and sidewalks; the misuse of sidewalks as parking spaces; the problem of accessibility for people with disabilities; and the limited non-motorized mobility. The conditions in Mitrovica are not favorable: A slow traffic network does not exist. The pedestrian crossings on the main axes are just marked in the downtown area.

Walking and cycling are recognized and promoted as sustainable modes of transport, with positive effects on the health, environment and overall quality of city life, helping to reduce noise and the demand for polluting modes, including air pollution and acoustic pollution, implementing policies addressed to reuse urban spaces and create a more human-friendly urban environment. However, in order for walking and cycling to be accepted by citizens and supported

by Municipal authorities and other local institutions, the infrastructure must provide a safe and effective environment for pedestrians and cyclists. In order to favor pedestrian and bicycle use of the road, as well as to promote a new culture of unmotorized traffic, conditions for free and safe movement must first be established.

<sup>9</sup> Ministry of Environment and Spatial Planning, Administrative Instructions/ MMPH-08/2017-UA

### 3.6.1. Proposed Strategy- Walking & Cycling network and facilities

Improve existing infrastructure and develop additional and functional infrastructure for pedestrians and cyclists to improve access to main areas, such as: schools, institutions, facilities of particular importance, public transport sites, high employment density areas, and green and recreational spaces. The goal is to raise the walking and cycling modes on these areas and to raise awareness of the paths and areas dedicated to walking and cycling throughout the city.

### 3.6.2. Development of pedestrian and cyclist network- strategic concept

In order to increase the attractiveness of walking and cycling among users it is important to improve the overall quality of all trails and those to key destinations, identifying key destinations such as city center, employment areas, key transport junctions, and neighborhood centers/suburbs. More specifically, when considering the quality of pedestrian and cycling environments, it is important that the trails be:



### 3.6.3. Pedestrian network development - strategic concept

In order to favor the use of roads by pedestrians and bicycles, as well as to promote a new culture of unmotorized traffic, conditions for free and safe movement must first be established. The main purpose of the development of pedestrian infrastructure is to improve the quality of

movement and remove barriers from the sidewalks, as well as unimpeded access to public and public administration buildings, health and social services, schools, shops, cultural facilities and other buildings.

There are several proposals for improving pedestrian conditions in Mitrovica South, including:

#### **Connected:**

In terms of the paths being well connected, integrated, ideally without 'gaps' in the network;

#### **Comfortable:**

The paths are easy to use, with sufficient space and capacity; addressing the negative impacts of traffic pollution and noise;

#### **Convenient:**

Pedestrian paths providing links to destinations where people want to travel, following appropriate 'desired lines';

#### **Friendly:**

Pedestrian paths should help foster social interaction as much as possible; and

#### **Visible:**

Pedestrian paths should be safe to use and also easy to use with low mobility



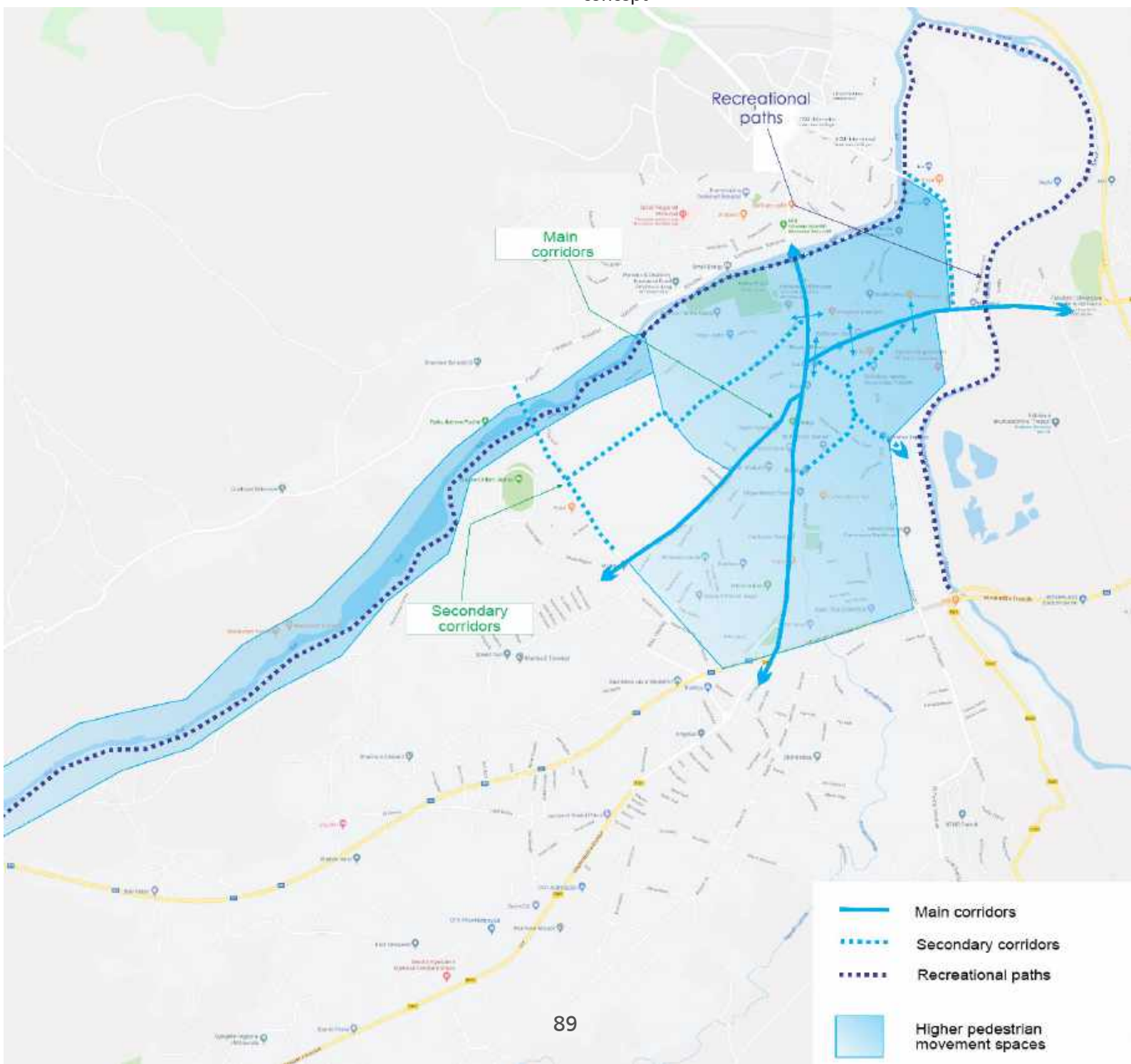
Figure 60- 61. Examples of bike paths  
Source : altaplanning.com



- Development of strategic concepts of pedestrian road network - with adequate design standards and associated spaces for different types of pedestrian roads throughout the city.
- Extended downtown pedestrian and cyclist scheme, expanding the area to include adjacent roads and providing a wider pedestrian area. This will include trips to the city center, to areas close to schools, and to more suburban locations like the lake or other recreational areas of the city.
- Measures to assist persons with impaired mobility
- Introduce other measures to assist blind/visually impaired persons (eg use of special areas-detectable near pedestrian crossings);

- Use of adequate traffic alert for unmotivated traffic;
  - Good connection of pedestrians/ cyclists to public transport, car parking, taxis and bicycle parking;
  - Improving conditions in the city for pedestrians. Where appropriate, this includes redesigning roads, boulevards, squares to provide better connectivity and accessibility for users;
  - All barriers to pedestrian movement throughout the city should be removed and expansions of existing pedestrian areas considered;
- The development of the pedestrian network - the strategic concept is given in Figure 62.

Figure 62. Pedestrian network development- strategic concept



### Spaces with higher pedestrian movement intensity:

High quality areas in the city center, with a large number of users and serve to meet the demands of moving to major employment centers, shopping malls and public transport centers.

### The main corridors:

Pedestrian paths with a large number of users and serving primary employment, schools, shopping malls and public transport centers.

### Secondary corridors:

Secondary use trails in local areas leading to primary trails, neighborhood centers etc.

### Pedestrian Recreational paths:

Paths which are mainly used for recreational movement along the banks of the rivers Iber, Sitnica and Artificial lake.

### 3.6.4 Cyclist network development - strategic concept

Existing cyclists' lanes and paths in Mitrovica South need to be adapted in order to meet their goal of sustainable mobility while being safe for users as the way they are built reduces the safety of cyclists and pedestrians. These trails are part of the streets "Isa Boletini", "Mbreteresha Teuta" and "Agim Hajrizi", while, the paths for cyclists are along the lake.

However, the existing trails /lanes do not meet the standards and safety requirements for cyclists. In addition to separating the lane from the sidewalk for pedestrian movement, there is also lack of adequate signage for marking the paths/ lanes for cyclists.

Mitrovica South has a suitable configuration for cycling development. But despite this terribly suitable terrain for cycling development, such a form of movement has not been sufficiently promoted.

The proposed cycling scheme includes the neighborhoods of "Center", "Ilirida", "Bair", "Lower Zabar" extending along the main road to Shupkovac and "Kolonija 2". Whereas, a new recreational cycling path is foreseen by the lake and as a continuation of the existing trails towards the Ibër and the railway.

The proposed cycling scheme will be more fully evaluated through further feasibility work prior to any implementation work.



Figure 63. Mitrovica South (Isa Boletini Street) inadequate cycling path

Figure 64. Example of good practice (Source: Ken Lambert/ The Seattle Times)

### a. Criteria for planning bicycle infrastructure

Based on Spatial Planning Technical Norms, definition, classification and dimensions of bicycle lanes and bicycle paths, are given below. Bicycle lanes are part of the street/ road, designated for bicycles, marked with appropriate traffic signs.

**Bicycle lanes** are planned on the roads in which the maximum speed limit doesn't exceed 50 km/h.

**Bicycle paths** are circulation spaces designated for bicycle traffic, conducted of the transverse profile of the street/ road marked with appropriate traffic signs. The paths, for bicycles and pedestrians, can be adjoined.

- Safety is enhanced by separate lanes if car speeds are above 30km/h.
- In the second phase plan cycling lanes to the south as well
- Guidelines for cycling network development may be retrieved here: <https://www.sutp.org/principles/encouraging-walking-and-cycling>.

### b. Classification of bicycle lanes and paths

**Bicycle lanes and ways are divided into:**

1. Bicycle lanes and paths inside the settlement;
2. Bicycle paths outside the settlement.

### c. Bicycle lanes and paths inside the settlement

The optimal/ minimal width and height of the bicycle lane/path inside the settlement is:

1. One-way bicycle lane/ way, on both sides of the street/ road:
  - Width: 2.00 (1.50) m;
  - Height: 2.50 m.
2. Two-way bicycle lanes/ paths, on one side of the street/ road:
  - Width: 2.50 (2.00) m;
  - Height: 2.50 m.

### d. Bicycle paths outside the settlement

Bicycle paths outside the settlement are planned as separate, with a green strip of adequate width and without safety protection barriers, from the transverse profile of the street/ road. Exceptionally, due to lack of space for planning a green strip, the bicycle path must be secured with a safety protective steel barrier.

The optimal/ minimal width and height of the bicycle lane/path outside the settlement is:

1. One-way bicycle path, on both sides of the street/ road:
  - Width: 1.60 (1.00) m;
  - Height: 2.50 m.

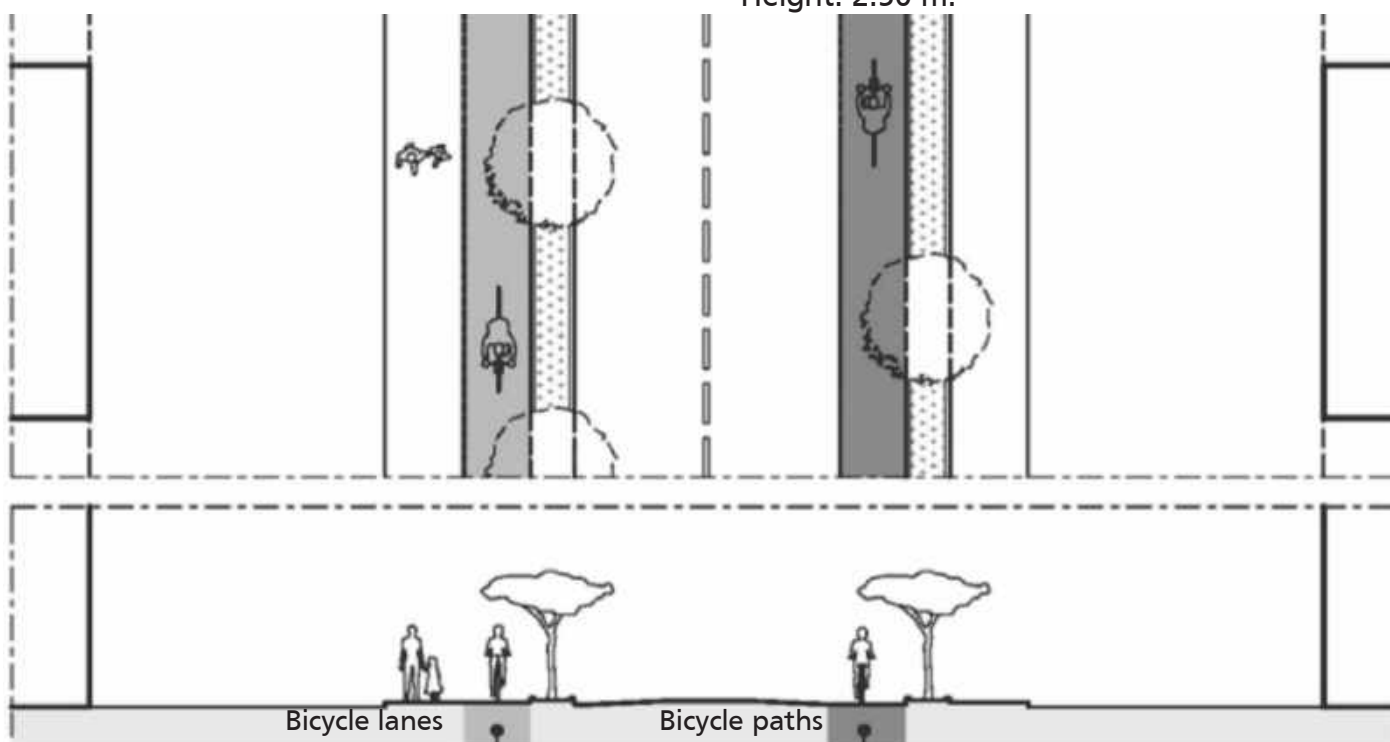


Figure 65. Bicycle lanes and paths profiles

When planning or upgrading bicycle infrastructure in urban conditions, technical and safety criteria for bicycle infrastructure shall be considered.

Table 12. Criteria for the use of shared infrastructure by cyclists and pedestrians

Pedestrian/h	Pedestrian and cyclist lane planning
< 100	pedestrian sidewalk and cycling path are common areas
100-160	Visual separation only (with signaling)
160 - 200	Visual and inter-level divisions
>200	The same (common) surface cannot be used- a physical separation between the bicycle lane and the pedestrian lane should be made

Table 13. Width of surfaces for bicycle movement

Surface type for bicycles	Width (m)	
	Optimal	Minimum
Bicycle lane	1,50	1,00
One-way bike path	2,00	1,50
Two-way bike path	2,50	2,00
Bicycle Path	3,50	2,50

Table 14. Number of parking spaces for bicycles

Number of bicycle parking spaces depending on content	
Content / Type of building, description of the content of the building	Minimum number of bicycle parking spaces (PSPB)
Commercial and municipal content	5 PSPB / 100 m <sup>2</sup> of gross surface area per visitor
Business and public contents	1 PSPB / 100 m <sup>2</sup> of gross surface area built for employees
Educational contents	1 PSPB / 5 students per visitor + 1 / 10 employees
Cultural content - theaters and museums	10 PSPB / 100 seats, per visitor
Health-hospital contents	10 VPB/ 100 beds, per visitor
Sports and recreational content	10 PSPB / 100 seats, per visitor

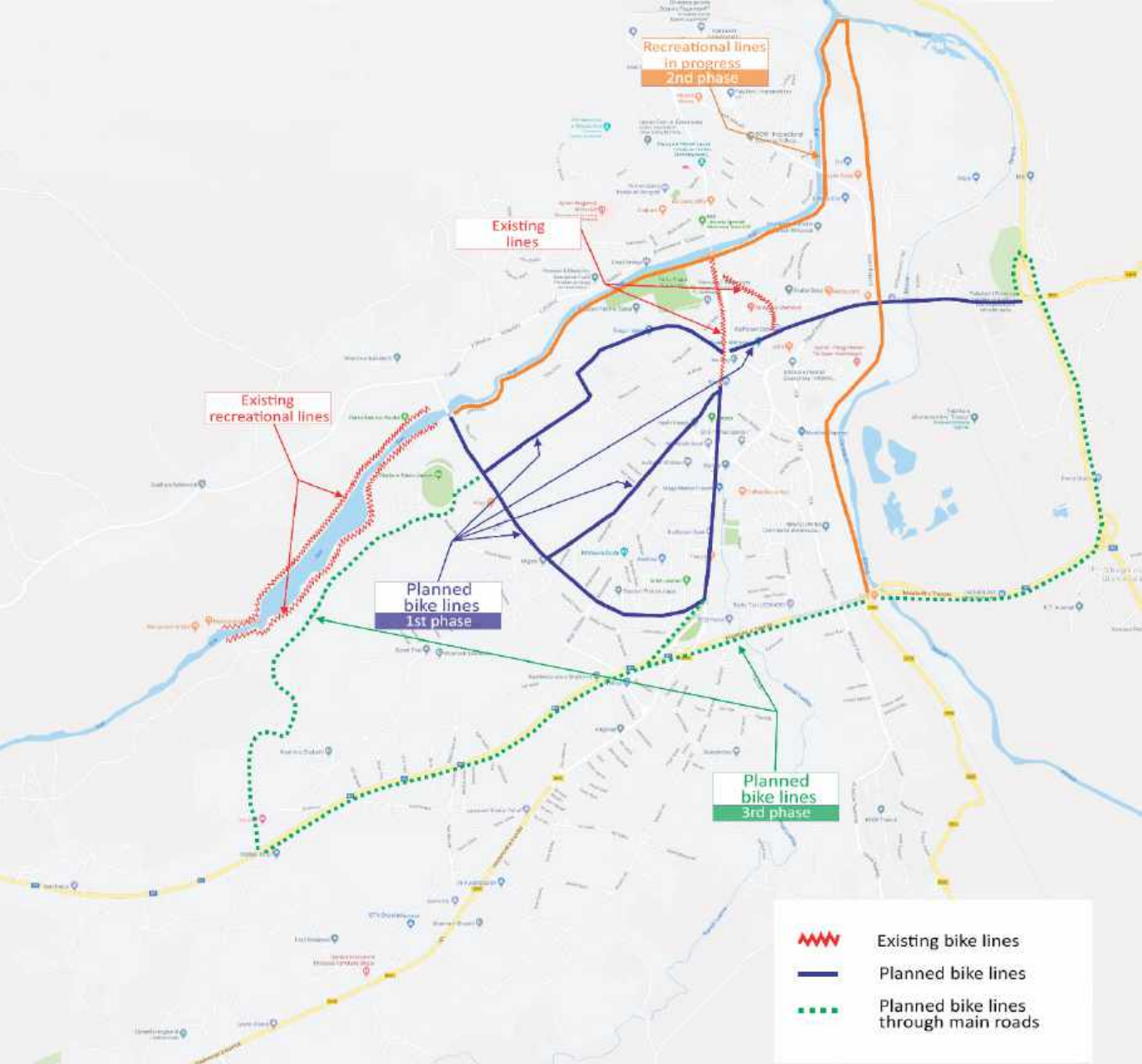


Figure 66. Proposed cycling scheme in Mitrovica South

### 3.6.5. Bicycle parking spaces

It is recommended that priority areas for bicycle parking spaces be concentrated near public buildings in the city center, where there is likely to be greater demand. In parallel, there has to be interaction with larger employers across the city to provide bike spaces for employees and consumers.

Bicycle parking spaces must consist of: 1.20 m<sup>2</sup> parking space / bicycle and access parking space, width: 1.50 / 1.80 m.

- Where bicycle parking facilities are available, respect for technical norms and standards for bicycle parking (Table 14):

There are many different types of bicycle parking design, ranging from standard bicycle parking lots that are often used in commercial areas where there is high demand for more convenient, covered and secured bicycle parking, as shown in the figure 67.



Figure 67. Bicycle parking (Source: Presto- Bicycle parking and storage solution)

### 3.6.6. Development of a “bike-share” scheme for bicycle rental

The bike-share system enables users to rent bicycles from designated centers, which plays the role of a low-cost bicycle distribution station. Rented bicycles have many different stations. It can be left to another station in the same city, which it learns through the platform.

The principle of the scheme is relatively straightforward - anyone can take a bike to one place and return it to another, making journeys from one point to another through bike riding. For Mitrovica South, it is proposed to develop a new bicycle rental scheme throughout the city, including:

- Development of a bike-share scheme across the city, offering low prices to users receiving

bicycles for use in surrounding areas/ suburbs.

- Providing facilities for people to access bicycles and safe spaces offered throughout the city;
- Possible electric bicycle delivery system;
- Bicycles and bicycle parking spaces, which are easily accessible, of good quality and regularly maintained, and which can be used as required by the user.

Best practices of the Bike-share system are recommended<sup>10</sup>:

- Minimum System Coverage Area: 10 km<sup>2</sup>
- Station Density: 10–16 stations per km<sup>2</sup>
- Bikes/Resident: 10–30 bikes for every 1,000 residents (within coverage area)
- Docks per Bike Ratio: 2–2.5 docking spaces for every bike.

<sup>10</sup> CIVITAS webpage on bike sharing: <https://civitas.eu/car-independent/bike-sharing>



Figure 68. "Bike-share" System in Tirana



Figure 69. Bike-Share" system in Helsinki

In most cases, financial backing is needed as most of the schemes are not financially self-supporting. Most bike-sharing schemes need to be backed by a large transport operator or by public resources, either through direct funding or indirectly through Public-Private Partnerships (PPPs). Most of the services are provided by PPP but there are other operators such as non-profit organisations, public transport (train companies) and local governments. Many of the membership-based systems are operated through public-private partnerships. Funding mechanisms include fees paid by users, municipal budgets and public-private partnerships.

Different contract opportunities between a municipality and an operator exist (Figure 19). PPPs can be designed in different ways, for example regarding who makes the investment, and who collects the revenues/stands the risk. The division of tasks between municipality and operator is the central decision in view of the call for tender and the operator contract. Contract models are diverse and consequently unique for each city or region.

	Infrastructure	Operation
Option A1	Contractor	
Option A1	Contractor A	Contractor B
Option B	Contractor	Municipality
Option C	Municipality	Contractor

Table 15. Division of Tasks<sup>11</sup>

### 3.6.7. Promoting the Health Benefits of Walking & Cycling

Promoting the health benefits of walking and cycling is an important message to encourage not only greater use of these modes of transport across Mitrovica South, but also to encourage a "healthier lifestyle".

Numerous studies have shown that regular walking and regular cycling can play a major role in the health benefits for people, helping to prevent overweight and heart disease, especially for those who have very little physical activity. If more bicycle, walking and riding activities are carried out, then this also contributes to reducing traffic congestion, reducing air pollution and noise pollution. It is important to promote the benefits of walking and cycling related to health, social inclusion and the environment, in partnership with other agencies across the city and country.

There are a number of key actions related to marketing and promotion, including:

- Promote the health benefits of walking and cycling;
- Promote healthier lifestyles by implementing safety initiatives to encourage activities - such as sustainable school travel plans.
- Develop promotional campaigns and materials to encourage the active use of walking and cycling as healthier modes of transport.

<sup>11</sup> Optimizing Bike Sharing in European Cities, OBIS, June 2011

- Provide good alerts for pedestrians and cyclists to enable users to determine the location of key walking and cycling destinations, including travelling distance and providing accompanying spaces (eg bicycle parking).



Figure 70- 71. Dublin City (Promoting Walking & Cycling) (Zero Emissions - Let's Bike Boston)

### 3.7. Traffic safety

Road safety seems to be a major concern by the interviewees of the Mitrovica South Survey. 91% of the respondents claim that speed limits are not met and the speed around 69% of the schools is not slower. According to data from the Mitrovica South Police Station, the number of material damage and no injuries on Mitrovica South's local roads has decreased by 27.84% from 2017 to 2018. Most of the accidents in Mitrovica occurred at intersections of the most frequented city streets (DRP Mitrovica, 2019). Also, based on data from the Police Station, fatal accidents mainly occurred outside the urban part of Mitrovica South.

#### 3.7.1. Proposed strategy for traffic safety

Creating a safe environment for living and working in Mitrovica South remains one of the priority issues for the municipality,

with a focus on speed management to reduce accidents and injury rates on the city's road network.



The main objective of all modes /forms of movement is to create a safe environment in which all traffic participants are able to drive, ride /bike and travel without fear of being involved in a road accident or in any way be at risk of participating in traffic. Citizens are more likely to choose to walk/ ride a bike if they feel that areas /trails are safe and not dangerous, while poorly maintained spaces often impede potential pedestrians and cyclists. There are a number of key actions that will improve the safety of all traffic participants, including:

- Reducing traffic accidents- analyzing accident data to ensure a safe and un-hindered environment for users and continuing to reduce the number of pedestrian victims, especially children;
- Increase the number of students on foot and by bike by promoting the development of sustainable school trip plans;
- Improve road design for pedestrians and cyclists by reducing the need for protective fences to improve road crossings, and develop traffic calming and safety measures within local areas to reduce vehicle speeds.
- Lobby with central government for a register of traffic violations including a point system with penalties for multiple violations.

### 3.7.2. Development of Speed Management Plan - Components of the Plan in Line with the EU

Objectives include all appropriate measures to improve traffic safety, in accordance with the EU Road Safety Directive - ISO standard 39001: 2012, road safety management systems and other internationally recognized standards and practices.

There are clear benefits to limiting vehicle speeds, including:

- Creating a safe environment for all road users, especially the most endangered road users - cyclists, pedestrians and people with disabilities;
- Reduce the likelihood of accidents involving machinery/ equipment during temporary road works, and
- Minimizing the effects of secession and anti-social effects in sensitive areas - such as schools, residential neighborhoods and public spaces.
- Traffic speed management is important to improve traffic safety on the city's road network, including:
  - Implement traffic calming measures (<https://www.ite.org/technical-resources/>)
  - Traffic calming - creating 20-30 km /h speed zones around schools and other educational institutions to improve safety and encourage more children to consider walking or cycling for their school trip; and
  - Improved horizontal and vertical traffic signaling.

Roads in the town of Mitrovica South vary in character, dimensions and traffic load. Therefore, it is recommended that speed management be made depending on the dimensions of the roads, the importance of the areas crossing the roads and the traffic structure.

In Figure 72 are given the recommendations of speed management depending on the dimensions of the roads, the importance of the areas crossing the roads and the traffic structure.

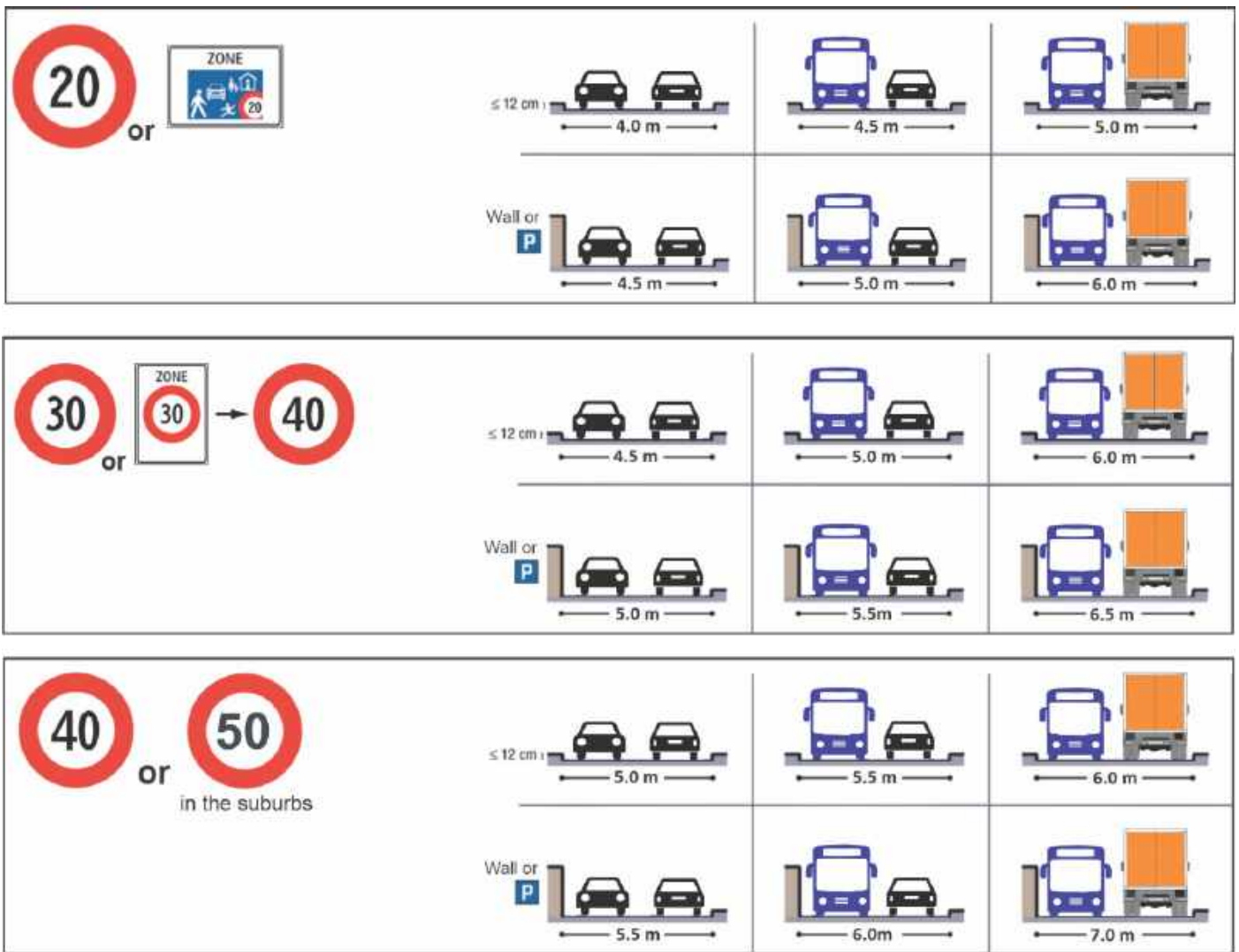


Figure 72. Speed management depending on road dimensions, importance of zones and traffic structure



Figure 73. Road Safety related SDGs and targets

Figure 74. Safe System Approach

Source: Save Lives- A road safety technical package

**Box 1.1**

**Road safety-related SDGs and targets**



**SDG Goal 3: Ensure healthy lives and promote well-being for all at all ages**

Target 3.6: By 2020, halve the number of global deaths and injuries from road traffic accidents



**SDG Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable**

Target 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

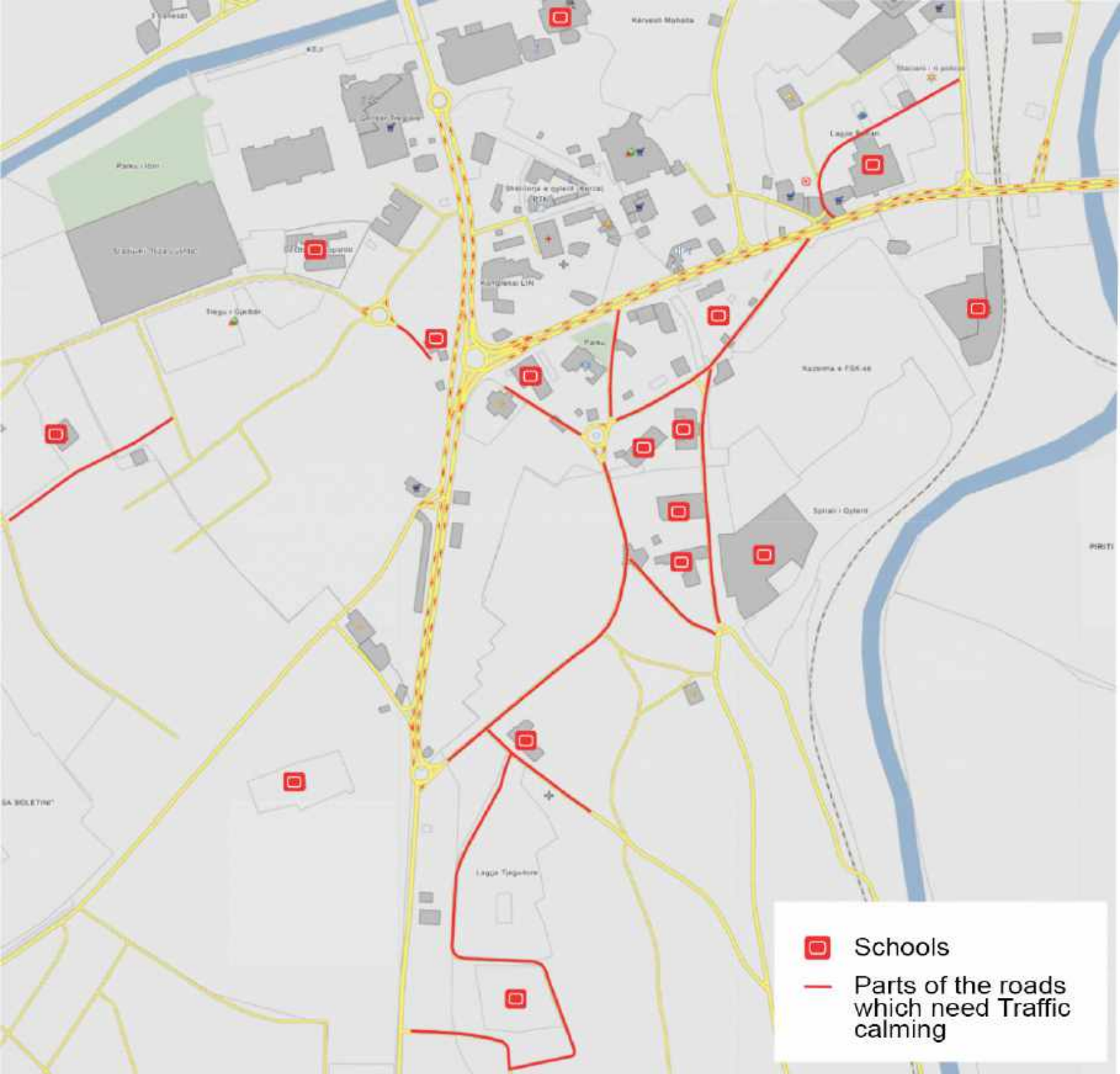


Figure 75. Traffic congestion on some parts of roads near schools in Mitrovica South

### 3.7.3. Traffic calming

Traffic Calming - Creating Speed Zones of 20–30 km/h in Mitrovica South is needed around schools in local neighborhoods, in order to improve safety for students and residents, creating conditions and further encouraging walking activities and cycling. In figure 75. are presented the schools as well as the city streets, which must be subject to this treatment.

### 3.7.4. Raising public awareness on traffic safety

The analysis of the accident situation in the Municipality of Mitrovica South, with a high number of accidents, indicates that there is a need to raise public awareness on this problem. There is a need to change the misbehavior of drivers and improve the education of all traffic participants. Particular attention should be given to new asset managers as well as school children. For this reason, it is necessary to:

- Establish a good cooperation between the municipal administration (Department of Public Services, Department of Education) and various institutions (such as the Ministry of Infrastructure and Kosovo Police) to organize continuing education for students and other traffic participants with the aim of guaranteeing specialized campaigns in schools to increase the level of traffic safety
- Monitor the drivers of vehicles by the Kosovo Police and, in case of violations of traffic rules,

strengthen the implementation of the Law.

- Public Awareness Campaigns. In order to reinforce the effect, campaigns must coordinate actions of all institutions.
- Periodic road safety campaigns should be conducted at periodic intervals in order to raise public awareness (for the whole of society) about road accident problems.
- Professional training for traffic safety staff.
- Install automatic speed controls and increase controls with mobile radar stations.

### 3.8. Environmental Protection

Air quality measurements undertaken in early 2020 revealed that Mitrovica ranks on number 11 out of 12 in the survey in Kosovo. Since unfortunately no other data were provided, no further analysis could be undertaken for the municipality. It is plausible that open coal or wood fires determine the bad air quality in wintertime. The contribution of transport to the air quality cannot be assessed. Climate change is not a major issue in Mitrovica, since other economic, social and political issues are more important. However, the present discussion on how to reduce green-house gas emissions shall not be forgotten, since the EU has the goal to reduce CO2 emissions from transport 60% until 2050.

#### 3.8.1. Monitoring of environmental conditions

Air pollution is a critical environmental problem in the urban areas, though less so for the country. Ambient air quality is particularly bad in Prishtina, the Obiliq area, the Drenas area, and Mitrovica South<sup>12</sup>. Mitrovica South is located near the industrial complex "Trepça". Even though the mining-metallurgical industry is closed in Mitrovica South, lead (as the highest pollutant element) and other metals continue to be present, thus, causing the main environmental pollution problems, with serious implications on the health of the population.

Main sources of contamination are particulate matters (PM or dust), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides NO and NO<sub>2</sub> (NO<sub>x</sub>), ozone (O<sub>3</sub>), lead (Pb), carbon dioxide (CO<sub>2</sub>), and dioxin. Kosovo's Ministry of Economy and Environment has been measuring air quality in eight locations throughout the country—including the urban centers of Prishtina, Mitrovica, Peja, Gjilan, and Prizren for years.

Currently, 12 air quality monitoring stations exist in Kosovo, one of which is located in the Municipality of Mitrovica South.



Figure 76. Air quality monitoring station in Mitrovica South (Real – time Air Quality Index)

<sup>12</sup> Local Environmental Action Plan 2012/2017

Modern air quality monitoring systems largely rely on automatic analyzers which provide continuous real-time information of pollutant concentrations in ambient air. These equipment's are used to monitor the most important pollutants in the air: Sulphur dioxide, nitrogen dioxide and nitrogen monoxide, carbon monoxide, ozone, and particulate matter.

#### a. Determining the locations of air quality monitoring stations

Institutions responsible for determining locations of air quality monitoring stations should consider a number of criteria at the time they localise stations.

Aspects that need to be considered when determining locations of these stations include:

- generating data for zones with high concentrations of air pollutants (where the population is exposed to these pollutants);
- not be positioned in such a way that the level of pollution is affected only by a particular source of pollution, but by an integrated contribution of all possible sources of pollution (with exception of single source of pollution that is typical for a given area);
- protection of vegetation and of natural ecosystems.

Despite approving laws on air protection and having a similar legislative framework, Kosovo is thus still far from EU standards. The state of the air in the region is proven to be very harmful both to the population and the environment. In order to see improvement regarding this issue, Kosovo can undertake some applicable solutions. Here is a list of concrete recommendations in order to improve air quality policies and gradually align with EU standards:

- Set up air measurement stations along major transport axis, and fully functionalize the air quality monitoring network by servicing all stations;
- Inform the public at least once a month through electronic and written media concerning the air quality in each municipality and generally for all

Kosovo;

- The data that will be obtained by EU Air Quality standards<sup>13</sup> :
- Establish a centralized collection and processing system of data generated from the monitoring stations, as well as a system that is able to automatically generate summary reports for each of the monitoring stations;
- Intensify co-operation with the central level in terms of their monitoring, reporting and informing about the situation of the air quality, which is generated from the centralized air quality monitoring network.
- Monitor continuously, in particular the overrun of the limit values of the parameters that pollute air (especially PM10 and PM2.5), and to take adequate and immediate measures to improve the situation;
- Lobby for the establishment of a central-government vehicle inspection and enforcement.

#### 3.8.2. Improved Sustainable Urban Mobility Planning

Given Mitrovica South's development plans, it is important to ensure that future policies and land-use decisions minimize the need to travel, encouraging non-use of vehicles and that these policies are in line with broader objectives. economic, social and environmental. There should be a focus on planning and finding the right locations for new developments, in particular downtowns and locations where there is good access to the public transport network, making sure that the major travel attractors are located there.

Therefore, in order to improve sustainable urban planning, it is necessary:

- **Better integration of land use & transport planning:** Effective land use planning is important to the delivery of long-term sustainable transport solutions. It is essential that new development makes proper provision for sustainable transport, including walking as well as good access by public transport.

<sup>13</sup>(<https://ec.europa.eu/environment/air/quality/standards.htm>)

Future development in Prishtina should be sustainable in terms of sustainable transport modes and access.

- Most importantly, it is imperative to stop urban sprawl as it can be observed in the whole area. Low density settlements are difficult to be served by public transport and consequently the inhabitants are forced to use private cars. Thus, new developments should increase densities of existing settlements. Given the large scale out-migration in the past decades, no new development should be planned.

- **Promoting sustainable travel as part of transport design:** It is important to ensure that new solutions to promote sustainable transport modes are up-to-date and reflect best practice and design. The establishment of new design guidelines to help guide and inform the development and implementation of local measures is useful to help standardize schemes and ensure they take account of international best practice that can be successfully applied whilst reflect local context.

- **Supporting infrastructure measures with 'softer solutions' such as training & education:** The implementation of engineering solutions to encourage greater use of sustainable travel modes should be supported by marketing, training and education initiatives to encourage people to change their travel behavior. The development of school and business travel plans will help tackle car trips for journeys to school and work, whilst cycle and road safety training will increase confidence for road users, when cycling or walking.

The environmental protection strategy affects not only the overall socio-economic development of the country, but also the well-being of all its citizens. Although significant progress has been made in recent years in terms of capacity building and harmonization of legislation with EU standards, implementation of the legislation is still difficult and remains at an unsatisfactory level, hence the interaction with central institutions, in order to comply with environmental regulations is necessary.

For the city of Mitrovica South, the problem is that the city itself is located near the Trepca industrial complex. However, air pollution is also caused by congestion within the city, the use of low quality fuels and the use of older vehicles..

Therefore, it is important to interact with central government and other responsible bodies in order to carry out the following activities:

- Completion and advancement of the legal regulation on air quality monitoring in line with EU directives;

- Activation of the air quality monitor system;

- Establishment of air quality information system;

- Reduction of emissions of harmful substances into the air and

- Raising awareness and knowledge of the air quality of entrepreneurs and citizens.

### 3.8.3. Raising environmental awareness and promoting sustainable transport

To fully promote the concept of sustainable travel, and raise awareness of environmental protection, it is recommended to create a comprehensive campaign to support and promote active modes of transport and public transport throughout the city, targeting residents, businesses and tourists.

To raise awareness and knowledge about protecting the environment, and to help future generations fight these phenomena, the burden must be borne by parents, educational and health institutions, but also part of the burden must be borne by our media, press and television, creating a larger space for programs and campaigns for environmental protection.

This will help promote and encourage the use of sustainable travel modes and more responsible use of private cars in terms of travel behavior program. To facilitate and coordinate these activities, as part of the Plan, a new Sustainable Mobility Coordinator should be assigned to advance the new urban mobility agenda in the city, in support of the goals and vision of the SUMP.

Several activities have been proposed related to promotional activities. They include:

- Public awareness programs on climate change and how to deal with its impacts;

- Promotion and awareness of energy efficiency;

- Promoting public road transport;

- Promoting walking and cycling;
- Measures to improve air quality in the city center by introducing street parking controls, prioritizing low-emission vehicles;
- Develop sustainable travel plans with local businesses, schools and communities to enable citizens to understand how their ways of travel can contribute to achieving a more sustainable,

- cleaner and attractive environment by promoting more sustainable travel opportunities, such as "car clubs" and shared vehicle use (part of the overall mobility management strategy) etc;
- Awareness programs for public health workers and medical practitioners on climate change and health issues.



Figure 77. DisobeyArt/iStock Climate Change Campaign (NEW YORK)



Figure 78. 'Day Without Cars' Paris  
www.thelocal.fr





## 4. ACTION PLAN, IMPLEMENTATION ARRANGEMENTS/ PROVISIONS (INCLUDING FINANCIAL IMPLICATIONS)



### 4.1 Future structuring of the SUMP process

The application of a SUMP development process - as characterized by a strong participatory element and a stepwise approach to tackling the most challenging areas of urban mobility - resulted in a comprehensive urban mobility development strategy. Therefore, it is recommended to develop and deliver the SUMP, with the rationale being well coordinated and focused delivery of sustainable mobility outcomes at both strategic, as well as at the operational level.

#### 4.1.1 Creating a SUMP development and oversight team

From the relevant directorates within the Municipality of Mitrovica South (Directorate of Public Services and Infrastructure, Directorate of Planning and Urbanism, Directorate of Finance and Economic Development, Directorate of Geodesy, Cadastre and Property), is recommended setting up a SUMP development and oversight team.

In terms of the potential role and responsibilities, this group will mainly deal with:

- Coordination of strategic transport issues affecting Mitrovica South and the wider area (travel to work), in preparing, monitoring, implementing and reviewing the spatial strategy for the Municipality of Mitrovica South as a whole;
- Development and implementation of SUMP to ensure the continual improvement in the development and co-ordination of the sustainable mobility strategy with a particular focus on improving delivery of the agreed

objectives and targets (and the investment programmes that support these):

- Acting as a forum to seek to resolve any conflicts of interest which might arise on matters relating to the development and delivery of the SUMP;
- Revision and modification of SUMP implementation programmes to meet SUMP objectives;
- Giving proposals to decision-makers in relation to SUMP funding and investment of SUMP programme measures;
- Agreeing on interventions envisaged if objectives are not met;
- Providing mechanisms that empower technical staff/officers to achieve service delivery; and
- Coordinating SUMP activity with the broader transport agenda.
- Monitoring of the SUMP implementation progress and reporting to the City Council/ Major.

Figure 79. Basis of preparation of SUMP projects



### 4.1.2 Basis of preparation of SUMP projects

For the identified measures within SUMP certain economic and technical studies (pre-feasibility study), feasibility study, cost benefit analysis

(CBA) should be conducted, and then the project should be prepared with the necessary documentation. Some projects and preparation require close cooperation and joint efforts with more units of local or national level. Getting started on these projects should therefore initially involve signing a Partnership Agreement.

## 4.2 Continuation of the SUMP process

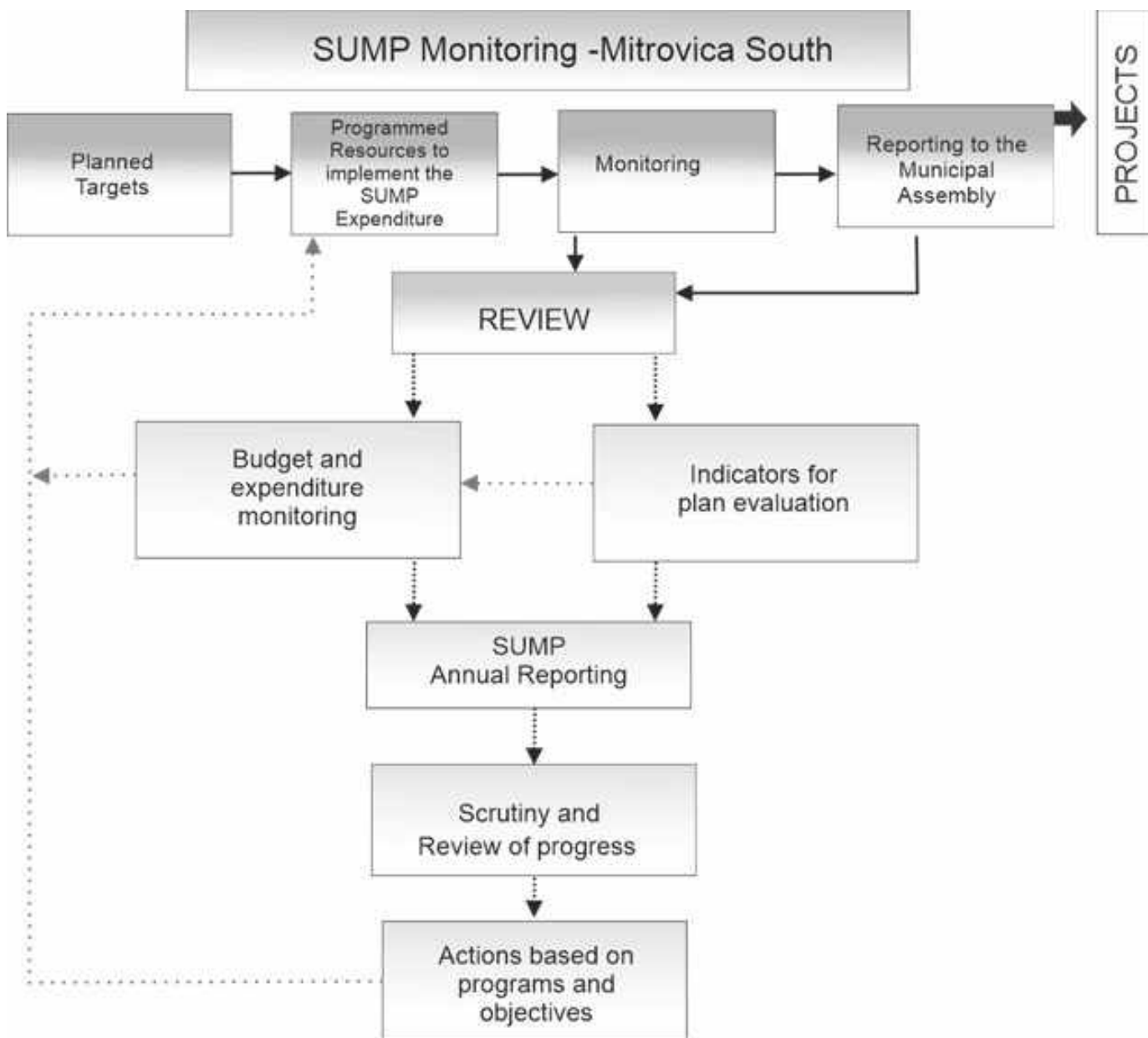


Table 16. SUMP Monitoring – Mitrovica South

### 4.2.1 SUMP Monitoring & Evaluation

It will be up to development and supervision team and local politicians to gradually prepare for the projects that are necessary and most suitable for implementing the SUMP for Mitrovica South. Alongside the planning objectives, Mitrovica

South’s Municipal Assembly will also keep an eye on current developments. The development of a strong monitoring and evaluation framework as part of a SUMP will help provide proof of the effectiveness of the SUMP and its’ measures.

## 4.2.2 SUMP Indicators

In developing the list/selection of indicators for the SUMP of Mitrovica South, there are number of key principles to consider:

**Acceptability:** Reflecting the need for acceptance by those who will apply them;

**Availability:** The need to easily obtain the data is important;

**Clarity:** Indicators should be simple and unambiguous;

**Limited in number:**

Greater focus on indicators linked to a few headline measures;

**Comparability:**

Important to adopt definitions/ methods which are sound, practically feasible and consistent across measures.

Table 17. List of SUMP Performance Indicators- Mitrovica South

Element	Nr.	Indicator name	Contribution Towards SUMP Objectives					
			Network Efficiency	Accessibility	Safety	Environment	Quality of Life	
Transport System	1	Traffic Flows into the City Center and Level of Transit Traffic	✓			✓		
		Proportion of journeys to work by public transport	✓		✓	✓		
		Increase in Total Number of Public Transport Trips		✓				
Road Safety	2	Number of traffic accidents (Fatalities and Injuries)			✓		✓	
		Road Traffic Accidents involving Pedestrians and Cyclists			✓		✓	
		Speed Monitoring - Law Enforcement			✓		✓	
Accessibility & mobility	3	Cycling monitoring: Modal split (proportion of trips by bicycle) and local cycling levels		✓		✓	✓	
		Pedestrian Monitoring: Modal split (proportion of trips by foot) and local walking levels		✓		✓	✓	
Parking	4	Parking Space Occupancy Rate	✓	✓				
		Parking Behavior (According to Regulations)	✓		✓			
Environment	5	Air Quality Monitoring: Concentration of Nitrogen Dioxide (NO2) and PM10				✓	✓	
Social	6	Level of Public Satisfaction with Public Transport Services					✓	
		Car ownership		✓			✓	
		Satisfaction with the Quality of Pedestrian and Cycle Environment		✓		✓	✓	

### 4.3 Networking and External Support

The adoption and implementation of the Sustainable Urban Mobility Plan (SUMP) creates preconditions for access to EU financial resources, respectively the possibility of applying for tenders for innovative transport, environmental and energy solutions, which increases competitiveness and capacity of available financial resources of Mitrovica South.

Projects that can be funded by various funds that support sustainable urban mobility include:

- Development of infrastructure for public transport companies, focused on implementing energy efficient ones solutions;
- Developing infrastructure and parking systems

- that supplementing public transport;
- Procurement and modernization of passenger rolling stock ow carbon park for carriers in public transport;
- Implementation of traffic control and management systems (ITS) within urban areas,
- Introduction of a unique map system and modern passenger information systems, construction and improvement of cycling routes and trails;
- Pilot installation of electric car charging stations and other related small infrastructure;
- Introducing other clean mobility solutions and innovative technologies if identified according to sustainable urban mobility plans.

Table 18. European Structural and Investment Funds and other financial options

<p><b>Mobilise your City</b></p> <p>Sasank Vemuri</p> <p>Coordinator of the Secretariat</p> <p>MobiliseYourCity Partnership</p> <p>Rue Archimède 61</p> <p>1000 Brussels – Belgium</p> <p>M: +32 4 560 46 158</p> <p>E: <a href="mailto:Sasank.Vemuri@giz.de">Sasank.Vemuri@giz.de</a></p> <p>I: <a href="http://mobiliseyourcity.net">http://mobiliseyourcity.net</a></p>	<p><b>GIZ Office Kosovo</b></p> <p>Director</p> <p>David Oberhuber</p> <p>Rr. Anton Çetta Nr. 1</p> <p>10000 Pristina</p> <p>+381 38 233 002 100</p> <p><a href="mailto:giz-kosovo-buero@giz.de">giz-kosovo-buero@giz.de</a></p>	<p><b>EBRD Kosovo</b></p> <p>Arianit Blakaj</p> <p><a href="mailto:blakaj@ebrd.com">blakaj@ebrd.com</a></p> <p>+38345 270 300</p> <p><b>World Bank</b></p> <p>Country Office Contacts</p> <p>Pristina, Kosovo</p> <p>Rruga Prishtinë - Fushë Kosovë 10060 Pristina</p> <p>+383-38-224-454-1100</p> <p><a href="mailto:wbg-kosovo@worldbank.org">wbg-kosovo@worldbank.org</a></p>
<p><b>Horizon 2020 - Research and Innovation Program</b></p> <p>Mobility for growth – urban (CIVITAS 2020)</p> <p><a href="https://civitas.eu/">https://civitas.eu/</a></p>	<p><b>INTERREG program - projects for sustainable regional development</b></p> <p><a href="http://www.interreg4c.eu/interreg-europe">http://www.interreg4c.eu/interreg-europe</a></p>	<p><b>URBACT III program</b></p> <p>knowledge sharing projects.</p> <p><a href="http://www.urbact.eu">http://www.urbact.eu</a></p>



Source: Mitrovica Guide

### 4.3.1 The level of cooperation/ coordination between Mitrovica South and Mitrovica North

Mitrovica South and Mitrovica North have separately drafted the Sustainable Urban Mobility Plans. But even though the plans are separate, by Municipal officials from both Municipalities, has been demonstrated willingness to cooperate and coordination of joint activities, so that some projects can be implemented together.

The municipality of Mitrovica South has expressed its full readiness for cooperation in all areas. The readiness for cooperation is given in the following Table.

The coordination exercise has been conducted and discussed jointly by Mitrovica South and Mitrovica North during the 2nd SUMP Stakeholder Workshop held in November. The table shows fields where Mitrovica South would agree to have cooperation with Mitrovica North into implementing SUMP measures jointly as neighboring cities. Of course, further coordination beyond the joint work in the workshop would require a commitment of both parties in order to select the operating mechanisms, joint funds, etc.

Field	Mutual Information	Coordination	Financing	Decision Making
a. Regional Public Transport System	Yes	Yes	Yes	Yes
b. Concept for Centre of the City (CBD)	Yes	Yes	No	No
c. Road Infrastructure and Traffic Management	Yes	Yes	No	No
d. Bicycle Strategy	Yes	Yes	No	No
e. Environmental Protection	Yes	Yes	Yes	Yes
f. Urban Public Transport System	Yes	Yes	No	No
g. Parking Management	Yes	Yes	No	No
h. Traffic safety	Yes	Yes	Yes	Yes

Table 19. Areas of cooperation in which Mitrovica South has expressed readiness for cooperation

Figure 80. SUMP Workshop 1, October 2019 Mitrovica South and Mitrovica North



**a. Regional Public Transport System:**

**Decision-making:** Establish the regional public transport agency operational and make joint decisions on the board of this agency.

**Financing:** Joint governmental and municipal subsidies.

**b. Concept for Centre of the City (CBD):**

**Coordination:** Informal and professional meetings.

**c. Road Infrastructure and Traffic Management:**

**Coordination and mutual information:** Exchange of practices, mutual information of municipalities on infrastructure intervention and traffic management.

**d. Bicycle Strategy:**

**Coordination:** During the development of the bicycle network plan to have

harmonization and cooperation.

**e. Environmental Protection:**

**Coordination in all levels:** The environment is of common interest, and in this case the organization of all activities must be joint, even at the regional level.

**f. Urban Public Transport System:**

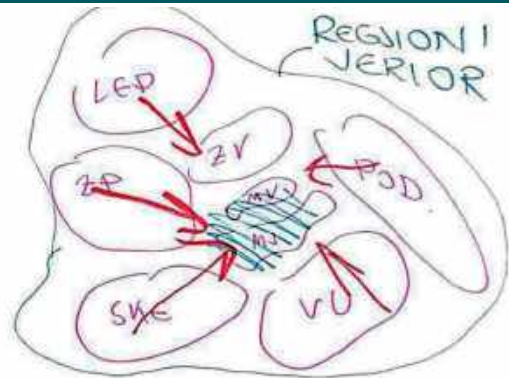
**Mutual information:** Information exchange during the planning of public transport.

**g. Parking Management:**

**Mutual information:** Information sharing on parking management including zoning and tariffs.

**h. Traffic safety:**

**Mutual information and joint financing opportunities.**



**MITROVICA JUGORE**

Në cilat pako të PMQU-ve doni të punoni së bashku?

	Informimi i përbashkët	Koordinimi	Financimi	Vendim-merita
1. Sistemi rajonal i transportit publik	✓	✓	✓	✓
2. Koncepti për Qendrën e Qytetit	✓	✓	—	—
3. Infrastruktura rrugore dhe rrethorë / trafikut	✓	✓	—	—
4. Strategjia e biçikletave	✓	✓	—	—
5. Mitrovica e Mijedit	✓	✓	✓	✓
6. Sistemi i transportit publik urban	✓	✓	—	—
7. Menaxhimi i parkimit	✓	✓	—	—
8. Siguria në komunikacion	✓	✓	✓	✓

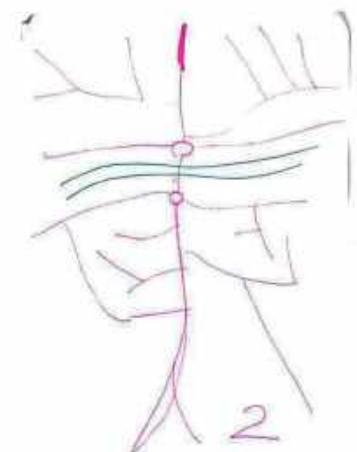


Figure 81. SUMP Workshop 2, November 2019  
Mitrovica South and Mitrovica North- Joint exercise outputs

## 4.4 Package of Measures (Agree actions and responsibilities)

### 4.4.1. Summary of Regional Public Transport Measure Implementation

The table below shows the Regional Public Transport measures proposed for Mitrovica South for implementation in short, medium and long-term plan periods.

Short-term period (2020-2021)	Medium term period (2022-2025)	Long-term period (2026-2030)	Description of the measure	Institution responsible for implementation	Approximate investment cost
Agreement on the establishment of the agency (Regional BODY)				Municipalities in collaboration with the MI	
Obtaining consent from the Ministry of Infrastructure (MI)				Municipalities in collaboration with the MI	
	Reorganization of the regional public transport system network		Reorganize the regional public transport system network. This planning should envisage that each municipality has its own bus station and the existing ones to be expanded and modernized in order to provide better communication with the regional public transport bus network.	Municipalities in collaboration with the MI	PPP
	Revitalization of railway transport Prishtina - Mitrovica		The Project aims at rehabilitation of the southern part of railroad 10 in the Republic of Kosovo. It has been structured in 3 Phases: Fushë Kosovë – Northern Macedonia Border section (Phase I); Fushë Kosovë - Mitrovicë section (Phase II); and Mitrovicë – Serbia Border section (Phase III).	INFRAKOS, supervised by the rail regulator and approved by the Government of Kosovo. This is a co-financing from the European Union through the Western Balkans Investment Framework (WBIF) and EBRD will be implementing the EU grant.	Project funded by another authority

Table 20. Summary of Regional Public Transport Measure Implementation



#### 4.4.2. Summary of Urban Public Transport Measure Implementation

The table below shows the Urban Public Transport measures proposed for Mitrovica South for implementation in short, medium and long-term plan periods.

Short-term period (2020-2021)	Medium - term period (2022-2025)	Long-term period (2026-2030)	Description of the measure	Institution responsible for implementation	Approximate investment cost
Improved Regulation and Monitoring of Taxi Services			Organizational measure to tackle the ongoing problem of illegal taxis operating across the city. Illegal taxis will be eliminated and the official taxi drivers will all have equal operating conditions.	Municipality of Mitrovica South	Internal Document
Feasibility for the new urban public transport network	ToRs to be prepared for the feasibility study  Timeframe to be decided  Main topics to be researched		At the outset of this measure, a feasibility study needs to be developed to define the priority areas/ locations for this measure.	Municipality of Mitrovica South	200.000
	Construction of a new Bus station		Construction of a new bus station (planned central station) near the train station.  Combined financial responsibility with private operator.	Municipality of Mitrovica South	PPP  300 000 (Municipality)
	Improvement and reconstruction of Bus stops	Improvement and reconstruction of Bus stops	Improvements of bus stops and cabs (including the provision of new cabs, rebuilding of bus stops, road reconstruction, sidewalk / sidewalks, etc.). This measure includes several locations across Mitrovica South. Therefore, at the outset, a feasibility study needs to be developed to define the priority areas/locations where measures will be implemented.	Municipality of Mitrovica South	100.000

		Integrated ticketing system	<p>The introduction of a new integrated public transport ticketing system will enable users to travel easily across different services and bus operators improving convenience and the travel experience for users.</p> <p>The costing depends on the relative contribution of the private operators towards the total cost of the scheme to provide a fully integrated and comprehensive ticketing system for the city.</p>	Municipality of Mitrovica South	500.000
	New public transport information system	New public transport information system	A new public transport information system including on vehicles, at the bus stops and also online.	Municipality of Mitrovica South	100.000

Table 21. Summary of Urban Public Transport Measure Implementation

#### 4.4.3. Summary for Centre of the City Measure Implementation

The table below shows the Centre of the City measures proposed for Mitrovica South for implementation in short, medium and long-term plan periods.

Short-term period (2020-2021)	Medium - term period (2022-2025)	Long-term period (2026-2030)	Description of the measure	Institution responsible for implementation	Approximate investment cost
	City Access Restrictions	City Access Restrictions	<p>Management of city access restrictions within the pedestrianized areas of the city including:</p> <p>New controls of vehicle operation, vehicle access and vehicle type;</p> <p>Enhanced facilities and signing for loading and delivery bays; and</p> <p>Stronger enforcement to reduce the level of nondiscriminatory parking and minimizing conflicts with pedestrians and other road users in the city center.</p>	Municipality of Mitrovica South	40. 000

Table 22. Summary for Centre of the City Measure Implementation

#### 4.4.4. Summary of Road Infrastructure Measure Implementation

The table below shows the Road Infrastructure Measure measures proposed for Mitrovica South for implementation in short, medium and long-term plan periods.

Short-term period (2020-2021)	Medium-term period (2022-2025)	Long-term period (2026-2030)	Description of the measure	Institution responsible for implementation	Approximate investment cost
Increase safety and improve capacity at the 5 affected junctions	Increase safety and improve capacity at the 5 affected junctions	Increase safety and improve capacity at the 5 affected junctions	The measure includes a number of downtown intersections. Therefore, a study should be undertaken at the beginning of this measure to identify priority areas / locations where the measure will be implemented.	Municipality of Mitrovica South	80. 000
Ring Road - Bypass in the southern part of town			Foreseen by the UDP and MDP.  New connection / new Bypass bring new capacity and safer link for the drivers. The location of the Industrial Park is closely related to the construction and functionalization of the south-eastern Bypass, because new businesses located there would be provided functional connections with the national road "N2" and regional roads R-101 and R-220.	Municipality of Mitrovica South and MI	2 000 000
Improving traffic signalization	Improving traffic signalization	Improving traffic signalization		Municipality of Mitrovica South	50 000
Reorganizing the movement of transport depending on the structure of traffic			Depending on the structure of the traffic, there will be a distribution of movements across different road axes (in terms of use).	Municipality of Mitrovica South	50 000
Road Construction 'Ali Zeneli'			Foreseen by the UDP and MDP. Residential, non-transit roads that would increase the flow in the city	Municipality of Mitrovica South and MI	700 000
Road Construction 'Lah Nimani' and 'Agim Ramadani'			Foreseen by the UDP and MDP. Residential, non-transit roads that would increase the flow in the city	Municipality of Mitrovica South and MI	600 000

Table 23. Summary of Road Infrastructure Measure Implementation

#### 4.4.5. Summary of Active Modes Measure Implementation

The table below shows the active modes Measure proposed for Mitrovica South for implementation in short, medium and long-term plan periods.

Short-term period (2020-2021)	Medium - term period (2022-2025)	Long-term period (2026-2030)	Description of the measure	Institution responsible for implementation	Approximate investment cost
Removing obstructions from existing sidewalks			Measures addressing the removal of barriers that impede free movement on existing pedestrian and bicycle paths, especially in the central part of the city.	Municipality of Mitrovica South	50 000
Existing sidewalk, and cycle path improvements	Existing sidewalk and cycle path improvements	Existing sidewalk and cycle path improvements	This measure includes a large part of Mitrovica South. Therefore, at the outset, a feasibility study needs to be developed to define the priority areas/ locations for implementation of specific measures.	Municipality of Mitrovica South	500 000
Measures to improve mobility for mobility constrained Users	Measures to improve mobility for people with disabilities		The measure should first address the problems of access and mobility on city center roads, as well as improvements to connect with bus stops to improve access to public transport services for Users with Special Needs	Municipality of Mitrovica South	100 000
	Enhanced pedestrianization scheme - Main corridors	Enhanced pedestrianization scheme - Main corridors	Footpath area modification (incl. construction works and new urban street furniture), plus the construction of pedestrian priority areas/zones. This measure will create a safe environment for pedestrians and will motivate people to use other transport modes than the private car.	Municipality of Mitrovica South	500 000
		Enhanced pedestrianization scheme - auxiliary corridors and		Municipality of Mitrovica South	400 000

		recreational Footpaths			
Existing cycle path improvements			Modification of existing cycle paths across the city. Existing cycle paths will be improved to provide safe and comfortable cycling routes and infrastructure to attract greater numbers of cyclists.	Municipality of Mitrovica South	100 000
	Construction of New Bike Lanes / Paths (Phase I)		This measure includes the main roads in Phase I (along the streets "Shemsi Ahmeti", "M. Teuta", "Ukshin Kovacica", "Safet Boletini" and "Adem Voca").	Municipality of Mitrovica South	300 000
	Construction of New Bike Lanes / Paths (Phase II)		This measure includes the completion of the cycling network and recreational routes for bicycles.	Municipality of Mitrovica South	250 000
	Bike and electric bike sharing system	Bike and electric bike sharing system	Measures appropriate to a PPP project. Firstly, a system can be built to cover only the city center with gradual expansion and covering larger areas of the city.	Municipality of Mitrovica South	PPP Interested Companies
		Construction of New Bike Lanes / Paths (Phase III)	This measure is foreseen in Phase III and mainly involves the completion of the network along the M2 main road and the "Hoxha Hasan Tasini" road.	Municipality of Mitrovica South	450 000
Marketing and promotion of Pedestrian and Cycle Transport	Marketing and promotion of Pedestrian and Cycle Transport	Marketing and promotion of Pedestrian and Cycle Transport	Promoting walking and use of cycle transport. The measure will help to promote active travel modes of transport and will result in higher usage of these sustainable modes of travel.	Municipality of Mitrovica South	30 000
Bike parking facility and cycling facility for cyclists.	Bike parking facility and cycling facility for cyclists.		Bicycle stands and other facilities in the vicinity of bus and railway stations, public squares and various other public buildings. The measure should be linked (time and place) to the network of cycling routes.	Municipality of Mitrovica South	40 000

Table 24. Summary of active modes Measure Implementation (pedestrians and cyclists)

#### 4.4.6. Summary of Environmental Protection Measure Implementation

The table below shows the Active Modes Measure proposed for Mitrovica South for implementation in short, medium and long-term plan periods.

Short-term period (2020-2021)	Medium - term period (2022-2025)	Long-term period (2026-2030)	Description of the measure	Institution responsible for implementation	Approximate investment cost
Regular measurement of air quality and increase Air Quality Monitoring Stations	Regular measurement of air quality and increase Air Quality Monitoring Stations	Regular measurement of air quality and increase Air Quality Monitoring Stations	Measuring stations would need to be established.	Municipality of Mitrovica South and MEE	
Development of Initiatives to Reduce Car Ownership			The campaign aims to change the habits of residents associated with the mode of travel and to attract more use of sustainable travel modes. In collaboration with the sustainable transport campaign, the population will use more sustainable modes of transport and fewer vehicles.	Municipality of Mitrovica South	20 000
Improving police activity-law enforcement	Improving police activity-law enforcement		In cooperation with the Police, the Municipality of Mitrovica South should insist on the enforcement of parking and traffic regulations in general.	Municipality of Mitrovica South	10 000
Sustainable transport campaign	Sustainable transport campaign		Develop a campaign to support and promote active modes of transportation and public transportation throughout the city, targeting residents, businesses and tourists. This measure will help promote and encourage the use of sustainable travel modes and encourage more responsible use of the private car in relation to the travel behavior program.	Municipality of Mitrovica South	20 000

Table 25. Summary of environmental protection Measure Implementation

#### 4.4.7. Summary of Parking Management Measure Implementation

The table below shows the Parking Management Measure proposed for Mitrovica South for implementation in short, medium and long-term plan periods.

Short-term period (2020-2021)	Medium - term period (2022-2025)	Long-term period (2026-2030)	Description of the measure	Institution responsible for implementation	Approximate investment cost
Designation of zones for parking restrictions and parking charges for each area.			Within the respective directories within the Municipality, must be established a team for precise segregation in parking areas, which will ensure the enforcement of parking rules and spaces throughout the city more effectively.	Municipality of Mitrovica South	150 000
Public campaigns for parking restrictions on relevant roads				Municipality of Mitrovica South	10 000
Draft all regulations for new buildings and construction of new private and public garages in full compliance with technical planning norms.				Municipality of Mitrovica South	Internal Document
Paid parking zone (Zone I)			Construction of a new controlled parking zone (construction works) and system for the city. The measures will improve traffic demand control and help manage the level of parking activity in the city center.	Municipality of Mitrovica South	PPP
Parking for Users with Special Needs			This measure includes a number of roads/locations in Mitrovica South. Therefore, at the outset of this measure, a feasibility study needs to be developed to define the priority areas/locations where measures will be implemented.	Municipality of Mitrovica South	PPP



	Paid parking zone (Zone II)		The measures will improve traffic demand control and help manage the level of parking activity in the city center.	Municipality of Mitrovica South	PPP
	New Pit stops for Taxis		The municipality would determine the locations, while the Taxi Association then would manage these spaces through a regulation to allow all taxi companies to use those pit-stops.	Municipality of Mitrovica South	PPP
	Parking spaces in the residential area		The measure will provide parking spaces dedicated to residents and will significantly reduce other road users parking in local residential areas.  The area for occupants of collective buildings should be regulated by a special regulation in an agreement between the Municipality and residents.	Municipality of Mitrovica South,  Possible Investors	30 000
Improved Law Enforcement	Lobby to allow for a parking law enforcement team with central government	Set up a parking law enforcement team	The measure will allow a stricter control of parking regulation.	Name of person responsible	Penalties will cover the costs of the enforcement unit.

Table 26. Summary of Parking Management Measure Implementation

#### 4.4.8. Summary of Traffic Safety Measure Implementation

The table below shows the Traffic safety Measure proposed for Mitrovica South for implementation in short, medium and long-term plan periods.

Short-term period (2020-2021)	Medium - term period (2022-2025)	Long-term period (2026-2030)	Description of the measure	Institution responsible for implementation	Approximate investment cost
Speed enforcement on the main routes	Speed enforcement on the main routes	Speed enforcement on the main routes	This measure includes a number of roads/ locations in Mitrovica South (traffic signs, humps, radars etc.). Therefore, at the outset of this measure, a study needs to be developed to define the priority areas/ locations where measures will be implemented.	Municipality of Mitrovica South	200 000
Traffic calming 20 - kph zones adjacent to local schools	Traffic calming 20 - kph zones adjacent to local schools	Traffic calming 20 - kph zones adjacent to local schools	Transport area modification (road + footpath, speed humps, traffic signs and other raised pavement areas.).  This measure includes a number of locations across Mitrovica South. Therefore, at the outset, a feasibility study needs to be developed to define the priority areas/ locations where measures will be implemented.  The administration should determine which measures to implement. See below <a href="https://www.ite.org/technical-resources/traffic-calming/traffic-calming-measures/">https://www.ite.org/technical-resources/traffic-calming/traffic-calming-measures/</a> <a href="https://www.sutp.org/publications/car-free-development/">https://www.sutp.org/publications/car-free-development/</a> <a href="https://www.sutp.org/publications/inua-4-enhancing-road-safety/">https://www.sutp.org/publications/inua-4-enhancing-road-safety/</a>	Municipality of Mitrovica South	80 000
Improving traffic signage	Improving traffic signage	Improving traffic signage		Municipality of Mitrovica South	150 000
Improved street lighting	Improved street lighting	Improved street lighting		Municipality of Mitrovica South	200 000
Campaign to improve road safety	Campaign to improve road safety	Campaign to improve road safety		Municipality of Mitrovica South	60 000
Increasing Traffic Control - Law Enforcement	Increasing Traffic Control - Law Enforcement	Increasing Traffic Control - Law Enforcement		Municipality of Mitrovica South and Kosovo Police	

Table 27. Summary of Traffic safety Measure Implementation

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INCLUSIVE DEVELOPMENT PROGRAMME  
PROGRAMI PËR ZHVILLIM GJITHËPËRFSHIRËS  
PROGRAM SVEOBUH VATNOG RAZVOJA

**UN HABITAT**

Ministries Building "Rilindja"  
10000 Prishtina, Kosovo  
Tel.: +383 38 200 32611  
info@unhabitat-kosovo.org

**PAX**

Sint Jacobsstraat 12  
3511 BS Utrecht, The Netherlands  
Tel.: +31 (0)30 233 33 46  
info@paxforpeace.nl

**CBM**

Bulevardi Isa Boletini 11-12  
40000 Mitrovica, Kosovo  
Tel.: +383 28530335  
info@cbmitrovica.org

