OHRID Challenge Project

ITP Enabling Local Democracy and Inclusive Urban Development through the SymbioCity Approach

FINAL REPORT "New horizons through advanced walking zone"

Liljana Jonoska Biljana Angjeloska

Municipality of Ohrid



Introduction and Background

The Lake Ohrid region is a **mixed World Heritage property**, recognized by UNESCO. It was inscribed for its natural values in 1979 and for its cultural values a year later. The natural heritage includes part of the lake which is territory of the country and part of the Galičica National Park.

The town of Ohrid is one of the oldest human settlements in Europe. As one of the best preserved complete ensembles encompassing archaeological remains from the Bronze Age up to the Middle Ages, Ohrid possesses exemplary religious architecture dating from the 7th to 19th centuries. The old center of Ohrid is a uniquely preserved, authentic ancient urban entity. It is adjusted to its coastal lake position and terrain, which is characterized by exceptional sacred and profane architecture. It is protected by law declaring old city of Ohrid as a cultural heritage of particular importance

The concentration of the archaeological remains and urban structures within the old urban centre of Ohrid, along the coast of Lake Ohrid as well as the surrounding area, creates an exceptional harmonious ensemble, which is one of the key features that make this region truly unique.

The region possess real historic, architectural, cultural and artistic values. Ohrid has experienced heavy urban coastal development during the recent decades and in all areas of the town as well.

Tourism is the most important and attractive sector of the regional development. The property is exposed to heavy pressures from tourism, especially during the summer season, when the visitors are attracted by relatively warm water of the lake, hiking trails in Galičica National Park, and cultural assets of the property. Tourism industry see the commercialization of the region as a key for development. They express constant need for modern hotels and accommodation

The process of legalization of illegally built constructions in all areas is in progress. This inappropriate urban development has bad impacts to the region. Incorporating the legalized constructions in urban plans, in line with the existing regulatory framework, will be a real challenge.

Considering all above mentioned, finding appropriate balance between urban, economic and infrastructure development from one side, and protection of the cultural and natural heritage on the other side, has been and still is a real challenge for the municipality. The Ohrid project team, as an urban challenge during the Training Programme, will develop the project ,,New horizons through advanced walking zone", which refers to adaption of the *Makedonija Street* to pedestrian zone. One of the ideas for increasing the attractiveness of the area is having advanced- extended walking zone with banned car traffic along *Makedonija Street*. The objective of the intervention is to put an accent on wider pedestrian zones, planning bicycle lanes, increasing the safety of the visitors, solving the problem with parked cars crowd and car traffic as well. The area could be even more visited as the views to the Lake would be unlimited without parked cars.



Step One: Organizing the process

Project organization

The Training Programme and the Ohrid challenge project were presented to a part of the employees at the municipality.

Municipality of Ohrid- Presentation – 26.02.2018



Steering committee, nominated by the Mayor

Steering committee, as an existing decision body, was nominated by the Mayor by letter of certification and included six members:

- Jovan Stojanoski, Mayor of municipality of Ohrid
- Ognen Marina, mentor of the project
- Antonio Gavriloski, financial advisor at mayor`s office
- Goran Lekoski, advisor at mayor`s office
- Branko Arnaudovski, head of sector for urban planning
- Ilija Piperkoski, chief and PR of mayor's office

Each of these members was involved in the project for Ohrid urban challenges as a support to the project and by giving directions from their professional aspect.

J	Република Македонија Општика Охрад		T	PenyGunsa Masegonnja Onniyana Oxpag LETTER OF COMMITMENT	Димитар Влахов бр. 57
	LETTER OF COMMITMENT This letter is to certify that Municipality of Christ	Januarup Roman 6p. 57 6000 Ouput Pergénesa Mascanonja Tea. (946) 202-492 Ous. (944) 202-492 www.ohrid.gov.mk		This letter is to certify that Municipality of Ohrid nominates:	6000 Oxpeq PenyGanea Makeaonnja Tea. (046) 262-492 Φax. (046) 262-545 www.ohrid.gov.mk
	nominates:			Liljana Jonoska, counselor at sector for urban planning Biljana Angjeloska, collaborator at sector for urban planning Jones Chilmente and the sector for urban planning	
	Jovan Stojanoski, mayor of municipality of Ohrid Ognen Marina, mentor of the project			 Zoran Schikaloski, counselor at communal development fund Tanja Kovacheska Jamandieva, senior collaborator at communal development fund 	
	3. Antonio Gavrilovski, financial advisor at mayor's office 4. Goran Lekoski, advisor at mayor's office 5. Branko Arnaudovski, head of sector for urban planning	Aler	Sec.	 Vesna Angjeleska Celeska, senior collaborator at sector for tourism and local economic development Gordana Jovanoska, director at PE "Biljanini izvori" 	
	6. Ilija Piperkoski, chief of mayor's office			 Goran Patchev, architect/conservator at NI Institute for protection of monuments of culture and Museum - Ohrid 	
	as a members of the Steering committee for implementation of the Ohrid urbar challenge project "New horizons through advanced walking zone". The project will be developed by participation in the International Training Programme: "Enabling Local Democracy and Inclusive Urban Development through the SymbioCity Approach 2018-2019. Ohrid.	and the second		as a members of the Working group for implementation of the Ohnid urban challenge project "New horizons through advanced walking zone". The project will be developed by participation in the <i>International Training Programme</i> ": Frabiling Local Democracy and Inclusive Urban Development through the SymbioCity Approach 2018-2019.	
	01.03.2018 Mayor of municipality of Ohid Jovan Stojanoski PhD			Ohrid, 01.03.2018 Mayor of municipality of Ohrid	
	- Contraction	n		Ruyor of municipality of Oring	

Working group, nominated by the Mayor

Working group was nominated by the Mayor by letter of certification and included seven members:

- Liljana Jonoska, counselor at sector for urban planning
- Biljana Angjeloska, junior collaborator at sector for urban planning
- Zoran Shikaloski, counselor at communal development fund
- Tanja Kovacheska Jamandieva, senior collaborator at communal development fund
- Vesna Angjeleska Celeska, senior collaborator at sector for tourism and local economic development
- Gordana Jovanoska, director at PE Biljanini Izvori
- Goran Patchev, architect/conservator at National Institute for projection of monuments of culture and Museum –Ohrid

Each of these members was included in project developing. We had several meetings in the city hall as well as meetings at member's working place. They were included at the project by giving us information, suggestions and improvements about the challenge we develop.

The members from communal development fund, gave us an information about the communal infrastructure and traffic. The problems that come with closing the whole street, the traffic collapse in the center, the solution of one-way street, closing only one part of the street, combination of pedestrians and traffic. Together we saw the disadvantages of the current situation and the further situation that will come together with next changes.

The member from the sector for tourism and local economic development helped us by making contact with the director of the Association of Travel Guides. He helped us with the survey of foreign and our tourists, just to see how they see the space from their aspect.

The director of Public Enterprise *Biljanini Izvori* gave us data about the number of parking places along the street (the quay), the problem of having no multi-layer garage, lack of parking places and how all of that is regulated by law.

The member from National Institute and Museum Ohrid exposed their vision about Ohrid as a city protected by UNESCO, about cultural and natural heritage, about the character of the city in general.

Working group meeting in the city hall -13.03.2018



Map of organization

The Project team was in constant contact and consultation with the members of the working group. In meantime we considered there is an institution we should try to include into the project because they have direct influence on it.

We decided to contact the Ohrid Port Captains office. The street that we adapt to pedestrian zone is located right next to the lake and to the port. The captain gave us information about the highest level of the lake water, how the wind has a direct impact on the lake, how to manage with the floods which are our big problem, how to receive tourists from the boats who are directly exposed to the street full of traffic, how to improve the building material of Ohrid quay etc...

We included the Red cross volunteers to survey the citizens along the quay.

Primary school was included just to see how do young people / students perceive and conceive the space around *Makedonija Street*, the children's vision about the place through the art expression.

Police department gave us info about the safety of the street and how it is regulated.



WORK PLAN

			WORK PLAN			
REF.	ACTIVITY	RESPONSIBLE	DELIVERABLES	WHEN	WHERE	NOTES
1	Organizing and delivering a ppt-brief presentation of ITP SymbioCity in our Municipality about what we have learnt so far	Project team	Presented SymbioCity to municipal administration: department of communal services -traffic and streets, department of urban development, department of tourism and local economic development, Institute for protection of monuments of culture and museum, RE Biljanini Izvori (main activity to manage with public parking space)	26.02.2018	City smal hall	Presentation is publicated at web site of municipality and other local e-newspapers
2	Letter of nomination members of Working group	Mayor of municipality	to members of Working group	01.03.2018		Made a short meeting separately with those who will be included in group
3	Letter of nomination members of Steering committee	Mayor of municipality	to members of Steering committee	01.03.2019		Made a short meeting or give an information to those who are included in group
4	Working group meeting	Project team	to members of Working group	13.03.2018	City hall	Describe developing the projec and why is important to contact with members of working group. Exchange of opinions and sugestions
5	ldentify stakeholders (internal / external)	Project team	Red Cross volunteers, Ohrid Port captains office, Police department, Local tourist guide association, Primary school "Grigor Prlicev", residents, visitors, turists, busines sector etc.			Can they make or break the project?
6	Stakeholders meeting - Red cross	Project team	manager of red cross	20.03.2018	Red Cross office manager	Talking about including the volunteers in project to make a poll on a field
7	Stakeholders meeting - Ohrid Port captains office	Project team	captain of ohrid port	20.03.2019	Ohrid Port captains office	Talking about the safty considering of nearest of the lake. Make a poll with the boatmans and ship managers
8	Stakeholders meeting - Police office	Project team	Police comander	20.03.2020	Police comander office	Talking about the security of pedestrians and street traffic
9	Stakeholders meeting - Primary school "Grigor Prlicev"	Project team	The director of school	21.03.2021	The director office	Talking about including the school children and their vision through art paintings / drawings
10	Design a Poll / question list and a badge for identification	Project team		23.03.2019		Design a question list and a badge with logos of municipality, red cross, icld and skl
11	Make official letters to invite the stakeholders for coolaboration	Project team	stakeholders	26.03.2018		Invitation for colaboration
12	Appointment with stakeholders	Project team	stakeholders	27.03.2019		Appointment with stakeholders to define the terms of reaction (what to do and when)
13	Map your organization	Project team				describe your organization in a chart
14	Develop a working plan	Project team				2.
15	Develop a communication plan	Project team				in a chart: who, why, what, when, how, responsible
16	Organize and implement a public poll on a field	Project team and Red cross	to the users of the street	29.03.2018 30.03.2018 31.03.2018 01.04.2018	on the field	
17	Organize and implement a public poll at local e-newspapers, tv, municipality web site	Project team	to everybody, busines sector etc		web	
18	Do and finalize a grid, steepl and swot analyses of the city of Ohrid	Project team	started with a smaller internal (city administration) stakeholder and working group then get information from implemented survay			in a chart
19	Do and finalize a grid, steepl and swot analyses for your challenge project	Project team				get information from survay results
20	Organize a Community participative event	Project team with facilitator		23.04.2018	City hall	
21	Develop a Vision for the challenge project	Project team				

Stakeholder Analysis

Stakeholders included in the chart: visitors, tourists, local residents, business sector, accommodation, Ohrid Port Captains office, school children, drivers, taxi drivers, Police department.

Visitors, tourists, Ohrid Port Captains office, schoolchildren, drivers, taxi drivers, Police department were recognized as <u>external stakeholders.</u>

Local residents, business sector and accommodation at the area were recognized as *internal* stakeholders.

The visitors, tourists, drivers and taxi drivers were engaged through walk & talk process, taken by the Red Cross volunteers and by answering four questions.

The Ohrid Port Captains office was engaged through consultation with the Captain.

The traffic police department were engaged through consultation with leadership team.

The school children were engaged through art expression of their vision for the *Makedonija Street* and the area.

The local residents, business sector and accommodation at the area were invited to participate the Participatory event, held on 23 April at the City hall. The invitation was announced at municipality web site.

All above mentioned stakeholders could give their opinion about the project by voting at municipality web site poll. An on-site survey was taken by local Tv as well, including six interviewed persons.

Participation process

Given in the chart- strategy for engaging the stakeholders.

	External or internal?	Characteristics e.g. citizen, shop owner, politician etc.	Impact - How much does the project impact them? (Low, Medium, High)	Influence – How much influence do they have over the project? (Low, Medium, High)	Potential – what can they contribute to the project?	Strategy for engaging the stakeholder
TARGET GROUPS	External	Visitors	High	Low	Increase economy Promote NCH	Walk & talk
	External	Tourists	High	Low	Increase economy Promote NCH	Walk & talk
	Internal	Local residents	High	Medium	Community support	Participatory event
	Internal	Business sector	Medium	Medium	Community support	Web site vote Participatory event
	Internal	Accommodation	Medium	Medium	Community support	Web site vote Participatory event
	External	Ohrid Port captains office	Medium	Low	Information support	Consultation
	External	School children	Medium	Medium	Community support	Art vision
	External	Drivers	High	Medium	Information support	Walk & talk
	External	Taxi drivers	High	Medium	Information support	Walk & talk
	External	Police department	Medium	Medium	Information support	Consultation
BENEFICIARIES	External	Visitors	High	Low	Increase economy Promote NCH	Walk & talk
	External	Tourists	High	Low	Increase economy Promote NCH	Walk & talk
	Internal	Business sector	Medium	Medium	Community support	Consultation
NEGATIVELY AFFECTED	Internal	Local residents	High	Medium	Community support	Participatory event
ACTORS	Internal	Mayor	High	High	Political support	Formal consultation
	Internal	Municipality departments	Low	Low	Problem solving	Information
	Internal	City council	Medium	Medium	Financial support	Formal consultation

Communication plan

COMMUNICATION PLAN

Who	Why	What	When	How	Responsible
Visitors	increase income	to make area most attractive	start	walk & talk	volunteers
Tourists	increase income	to make area most attractive	start	walk & talk	tourist guides
Local residents	a part for improving the project	improve environment safety	middle	participatory event	project team
Business sector	high property value increase income	increase income	start middle	participatory event web site vote	project team
Accommodation	increase income	improve environment safety	start middle	participatory event web site vote	project team
Ohrid Port captains office	safety issues	security	start	consultation	project team
School children	youth vision	security	start	art expression	project team
Drivers	get an information	improve environment	start	walk & talk	volunteers
Taxi drivers	get an information	improve environment	start	walk & talk	volunteers
Police department	get an information	safety	start	consultation	project team

1. The visitors, tourists, drivers and taxi drivers were engaged through walk & talk process, taken by the Red Cross volunteers and by answering four questions.

1. What is good with the place?

- Some of the answers were as follows:
- The view **Tourist attraction** Connection with other streets Near the lake The location Not too much cars Existing parking Everything Nothing positive about the street Car traffic close to buildings Main street by the coast Wide and covered with asphalt Lights, benches, pedestrian zone Separated from existing pedestrian zone Crowded in summer Parking in front of the restaurants A lot of restaurants The architecture

2. What is bad with the place?

Some of the answers were as follows: Ruined street Bad infrastructure Summer-winter traffic change No bicycle lane No skate park Too many cars Existing car traffic Small space Existing parking zone Pedestrian zone usurpation The crowd **One-way traffic** Too narrow for two-way traffic Everything A lot of garbage No disabled zone Paying to restaurants for parking Nothing bad Small pedestrian zone **Confused traffic** Lack of parking space High parking fee Difference in architecture Not safe for children

3. Suggest improvements!

Some of the suggestions were as follows: To repair the street - new asphalt To rearrange and widen the street Control of parked cars Infrastructure improvement Cultural improvement To have fun park To build parking garage To have children playground To change into pedestrian zone To have bicycle lane To ban car traffic during summer To have parking zone To have more greenery Illegal building removal To ban parking To give fine for garbage Nothing to change To have baby carriage lane Separate parking for employees To build underground parking Better regulated traffic Traditional architecture To plant roses

4. Will the city of Ohrid benefit from adapting the *Makedonija Street* to pedestrian zone? POLL RESULTS:



YES-190 NO - 38





	POLL RESULTS (29.03.2018)	13:30 -	15:30))										c		~		~ ~	~								
_	1. What is good with th			AGE	405	AGE	AGE			PO	ll r	esi	ults	tro	DN	nż	<u> 2</u> 9.	03	.20)1	8 \						
No.	ANSWER	-	DER	<20	21-40	41-60	>61												_								
		F									POLL	RESULTS	5 (29.03.2018	8, 13:30	· 15:3	KO)											
1	Near the lake	11		3	7	10	2					2. What is	s bad with th	he plac	e?												
2	Nothing positive about the street	3	13	3	7	5	1	No.	ANSWER					GE	NDER	AGE <20	AGE 21-40	AGE 41-60	AGE >61								
3	big number of hotels	1	П			1								F	м						POLL RESULTS (29.03.2018, 1	3:30 -	15:3	0)			
4	a view towards the old part of the city	2	\square	1		1		1	View lake o	bstruction				1	1		1	1			3. Suggest improveme	-	_	AGE		AGE	AGE
5	big number of pedestrians, turists, bustling city	1	3		1	1	2	2	Traffic					14	19	6	14	9	4	No.	ANSWER	GEN	DER			41-60	AGE >61
6	wide space / street	6	3	2	2	3	2	3	Pedestrian	afety				1	4	2	1	2	-				м				
7	good for date	+	1	-	1	-	-		combined t	affic landes	trian and co	vi at same ti	me and same pla	(e 2	2	2		1	1	1	To forbite using the place for parking or like a street, to change into podestian zone, all over the year	28	23	4	19	10	8
8	the groonery	1	1	1	-	1	-		different his			-		1	-	<u> </u>		<u> </u>	-	2	More urban facilities	1				1	
9	the name of the street.	+	3	-	1	2								-				1		3	More greenery / park	4	8	1	4	5	2
10	dean and fresh air	+	1	-	-	1	-	6	bad pedeste the sidewal		int along th	e buildings/c	afé bar, usurpatik	on 3	5		4	4		4	To enrich the place with different activities	1				1	
11	kinder garden place	-	-		-	-	-	7	the trash co	ntainers				1				1		5	To enrich the place with sport activities	1	1		2	-	
	the street is regularly cleaned	· ·		<u> </u>		L	<u> </u>	8	big space fo	e parking pla	ce			3	8	1	5	3	2	6	At the period of summer time to use only pedestrians, and per year	1	1		1	1	-
		-						9	it is turned	into a parkin	g place			2	3	-	1	3	1	7	to use like a street integrating the street with the seafront.	1	1		1	1	-
	have a parking place	,	1		2			10	badly regula	ited street, b	ioth sides v	ith cars		1	2	<u> </u>	2		1	8	uniform height and appearance of buildings	1	1		1	1	-
14	in the summer period is used as pedestrian zone only		1			1		11	small open	shoos alone t	the street v	which are not	unified	1	+	-		1	_	9	to put modern trash containers	2	2		-	2	2
15	increase income of municipality with paying parking		1			1		12						-	2			-		10	to make a bicycle lane	-	-		3	-	-
		27	40												-			1	1				-		'	·	
								13	no names, r	to titles on th	he street				1				1	11	to close the street for vehicles at the day time only			1			
	10 40 00				~	\sim		14	lack of park	ing place				1	1			2		12	more fountains	2	1	1		2	
	(from 13:30	to	ר C	15	:3	(U)		15	to much sal	es stalls				+	1			1		13	place for pablic toalets	4	2		1	4	1
	, `							<u> </u>	-					21	49	-				14	to remove only the parking zone	4	1	1	2	2	1
							, 13:30							31	49					15	need to fix the street / reconstruction	П	4	1	1	2	1
	4. Will the city of Ohrid be	nefit	fron	n ada	pting	the '	Make	donij	a" str. to	pedes	trian z	one?								16	multi-storey garage	H	7	2	2	2	1
	No. ANSWER						G	ENDEF	AGE	AGE	AGE	AGE	1							17	small open unified sales stalls with authentic ohrid products	1	H	1			
									<20	21-40	41-60	>61	1 1							18	to mark it correctly	H	1	1			
	SUGESTIONS					YES	NO F													19	to find a place for street artist and performers	1	H		1		
	1					63	1 2	5 38	9	27	17	11	64							20	to find a way to take care of the wandering dogs	\vdash	1				1
	2 Especially at the period of the y	ear wh	en we	have m	nore	3	2	1		1	1	1	3							21	public house	\vdash	2		2		-
	visits from domestic and foreign	visitor	rs					-					II							22	expanding sidewalks		Ĺ		1		-
	3 only in summer time					3		3			3		3							23	all administration from the municipality to leave and to get new	1.	1		-		<u> </u>
	4 combined traffic (pedestrian, bi	cycles a	and ca	rs) at s	ame	1		1			1		1 1								ones						
	time and same place																			24	to change the name		1			1	
													71									44	63				

2. The Ohrid Port Captains office was engaged through consultation with the Captain.

Talking in theirs and in the name of boat owners, their opinion is that the adaptation of the street into pedestrian zone will benefit the city coastal area. What they need is to have approach for vehicles to the existing port, which is at the start of the street from the west side.



3. The traffic police department were engaged through consultation with leadership team.

Data given by Police department:

- □ adjusted driving speed along the street
- □ during tourist season and holidays, presence of a lot of pedestrians, cyclists and roller scaters along the street
- D presence of buses, which is not allowed

4. The Schoolchildren were engaged through art expression of their vision for the *Makedonija Street* and the area.





5. The local residents, business sector and accommodation at the area were invited to participate the Participatory event, held on 23 April at the City hall. The invitation was announced at a municipality web site.

The participatory event was held on 23 April 2018. Presenters were the Ohrid ICLD team and the facilitator. After presenting the Programme and the SymbioCity approach, the challenge project was elaborated. It was positively rated by attendants, especially the approach and the used methods and steps. The idea of the project was accepted, with remark of the residents for finding a solution to approach their homes.





6. All above mentioned stakeholders could give their opinion about the project by voting at municipality web site poll.

<u>RESULTS:</u>

WEB POLL ,1'

Q: Will the city of Ohrid benefit from adapting the *Makedonija Street* to pedestrian zone?



WEB POLL ,2'

Q: Will the city of Ohrid benefit from adapting the Makedonija Street to pedestrian zone?



An on-site survey was taken by local tv as well, including six interviewed persons.

LOCAL TV SURVEY ,3'

Q: Should Makedonija Street be adapted to pedestrian zone?

(attached .mpg file of the survey)

YES-5

One-way traffic - 1



7. The Public enterprise for parking *Biljanini izvori* were engaged through consultation with general manager.

Data given by PE Biljanini izvori for existing parking places at Makedonija Street.

330 parking places-total60 of them reserved by hotels

Step Two: Diagnosis of the current situation

City Profile and Diagnosis

City vision

Ohrid is a well known city on the map of touristic Europe, with high promotion of the world natural and cultural heritage. Tourist season is extended to 365 days a year. Every family has extra income from tourists. There are new sport facilities, parking garage and chained-brand hotels. The boat traffic is improved, the car traffic is highly regulated and the Ohrid airport is connected with more than 100 cities in Europe. There is a new attractive pedestrian zone by the Lake coast which becomes a new landmark of the city.

STEEP/L ANALYSIS of the city of Ohrid

	Demographic profile change-migration
Social	Multiethnic structure of residents
	High number of university educated
	Migration of labor-efficient citizens
	Hospitality
	Lack of educated tourist workers
	Poverty
Technological	Impact of the internet and social media
	Skills and know-how
Economic	Employment possibilities
	Tourism
	Lack of industry development
	Small and medium business environment
	Subventions for economic development
Environmental	Public awareness of environmental issues
	Cultural heritage protection
	Natural heritage protection
	Waste-
	Good climate
	Abundance of endemic flora and fauna
	Abundance of water
	Illegal waste landfill
	Lake pollution
	Wastewater treatment
Political	Municipality- local governing
	Freedom of speech
	Level of bureaucracy and corruption
	Public enterprises
	Politically separated citizens
Legal	National framework
	Urban planning regulation
	Construction and building regulation
	Frequent changes of the laws
	Low practical law implementation

SWOT ANALISYS of the city of	
STRENGHTS	OPORTUNITIES
City of UNESCO	Good health conditions
Cultural heritage	Good sport conditions
Attractive environment	Extension of the tourist season
Good educational system	Increasing of income
Good climate	Utilization of natural resources
Healthy environment	Sport fishing
Existing airport	Rural tourism
Traditional dishes	Sacral tourism
Existing University and Faculty	Health tourism
	Bicycle lanes
	Light industry development
	Organic food production
WEAKNESSES	THREATS
Short tourist season	Losing UNESCO status
Lack of new educational courses	Lack of employment possibilities
Lack of educated tourist workers	Illegal waste landfill
Lack of hotel facilities	Low informed residents
Frequent changes of national legal framework	Low youth involvement
Lack of financial resources	Uncontrolled forest cutting
Lack of traffic culture	Illegal archeological excavation
Bad road infrastructure- local and regional	Macedonia naming dispute
Illegal buildings	Ecological catastrophe of the Lake
Leak of perking space	
Lack of parking space	
Lack of modern landfill	
Lack of modern landfill	

SWOT ANALISVS of the city of Ohrid

GRID ANALISYS of the city of Ohrid

	DO NOT WANT	WANT
HAVE	Waste landfill Frequent changes of national legal framework Homeless dogs on the streets Industry mixed zones Vehicle traffic by town lake coast	Tourism development Increasing of income Municipality feedback Promotion of WCNH
DO NOT HAVE	Criminal Pollution Heavy industry Losing UNESCO status Heavy urbanization	Improved and adaptive educational system Extension of the tourist season Sustainable, functional and useful legal framework More pedestrian zones Solving the traffic problem More sport facilities Bicycle lanes Higher utilization of the Ohrid airport Licensed tourist guides Winter tourism Water airport Cable car Boat tour Ohrid-Pogradec Parking garage Shopping malls More greenery Light industry Chained-brand hotels Wastewater treatment

Challenge Project

SWOT ANALISYS of the CHALLENGE PROJECT

STRENGHTS	OPORTUNITIES
Near the lake Big number of hotels A view towards the old part of the city Big number of pedestrians, tourists Wide space / street The greenery The street is regularly cleaned Having parking space Increase income of municipality with paying parking Part of it during summer is used as a pedestrian zone only Main street by the coast Wide and covered with asphalt Lights, benches	To forbid using the place for parking or car traffic, to change into pedestrian zone, all over the year More urban facilities More greenery / park To enrich the place with different activities To enrich the place with sport activities Integrating the street with the coast Uniformed height and exterior of buildings To put modern trash containers To make a bicycle lane More fountains Need to fix the street / reconstruction Small open unified sales stalls with authentic Ohrid products To mark it correctly To find a place for street artists and performers To have a place for selling souvenirs To lower the noisiness Traditional architecture To build underground parking Separate parking for employees To have baby carriage lane
WEAKNESSES	Cultural improvement THREATS
View lake obstruction Traffic Pedestrian safety Combined traffic (pedestrian and car) at same time and same place Pedestrian walking along the buildings/café bar, usurpation of the sidewalk The trash containers Traffic in chaos, both sides with cars The street is not regulated at all no names, no titles on the street Lack of parking place It is not a street Too much sales stalls Pedestrian zone usurpation The crowd No disabled zone	Homeless dogs Traffic The trash containers Noisiness Bad infrastructure Confused traffic High parking fee Difference in architecture Illegal buildings

GRID ANALISYS of the CHALLENGE PROJECT

	DO NOT WANT	WANT
HAVE	View lake obstruction Car traffic Combined traffic (pedestrian and car) at same time and same place Pedestrians walking along the buildings/café bar Traffic in chaos, both sides with cars The street is not regulated at all- no names, no titles on the street Lack of parking place Pedestrian zone usurpation The crowd	Near the lake Big number of hotels A view towards the old part of the city Big number of pedestrians, tourists Wide space / street The greenery Parking place Main street by the coast Wide and covered with asphalt Lights, benches, pedestrian zone
DO NOT HAVE	Difference in architecture	Pedestrian zone, all over the yearMore urban facilitiesMore greenery / parkTo enrich the place with differentactivitiesTo enrich the place with sport activitiesIntegrating the street with the coastUniformed height and appearance ofbuildingsTo put modern trash containersTo make a bicycle laneMore fountainsNeed to repair the street / reconstructionSmall open unified sales stalls withauthentic Ohrid productsTo mark it correctlyTo find a place for street artists andperformersTo lower the noisinessTraditional architectureTo build underground parkingSeparate parking for employeesTo have baby carriage laneCultural improvement

Vision for the Challenge project

The *Makedonija Street* is adapted to pedestrian zone all over the year. There are new solutions for approaching hotels, restaurants and residential houses along the street. The area has become a new landmark of Ohrid, with its unlimited views to the beautiful Lake Ohrid. The zone is completed with bicycle lane, roller scater area, widened green area, places for cultural activities, all of it integrated with the existing pedestrian zone by the coast. It is safe area for children, no pollution and clean. The new pavement patterns, according the proposed activity, are small works of art, each.

Sustainability Analysis of the City

From the city Spatial (Master) Plan we can notice that most of the land is used for housing. Coastal city area is combined with housing, hotels and accommodation. Working places (industry) are located at the north part of the city, along the main streets. Schools and health services are located at the central part of the city. Shopping area exists at the centre of the city and closely to the working area. Recreational areas exist at the centre of the city and its eastern part. There are three main transportation routes: west, north and south.

Two natural barriers affect urban development: the Lake to the south and the mountain to the east. Accordingly, urban development is possible to north part of the city.

Assets and opportunities of the City:

- Natural and cultural heritage
- Tourism and health tourism

- Airport

Challenges:

- Water waste treatment system
- Infrastructure
- Illegal buildings

Trends:

- Tourism development
- Migration of young people
- Industry development







Economy

A. Employment – Score: 0-5 (SCORE 3)

Employment office in Ohrid gave information about the unemployment in Ohrid Municipality. According to the 2002 census, there were 42,033 inhabitants **in the city** and belonged to the group of medium-sized towns. Together with the **tourist suburban areas** the city of Ohrid has 43,305 inhabitants. As a municipality, Ohrid has 55 749 inhabitants (the city and the villages around the city).

The ethnic composition was the following:

- Macedonians: 33,791 (80.4%)
- Albanians: 2,959 (7.0%)
- Turks: 2,256 (5.4%)
- Others: 3,027 (7.2%)

народ 💠	вкупен број 🜩	% од вкупното население	Етнички групи ^[7]	
Македонци	33.791	80,39	Македонци	80,
Албанци	2.959	7,04	Албанци	7,0
други	2.290	5,45	други	5,4
Турци	2.256	5,37	Турци	5,3
Срби	331	0,79	Срби	0,7
Власи	308	0,73	Власи	0,7
Роми	69	0,16	Роми	0,1
Бошњаци	29	0,07	Бошњаци	0,0

The next data were obtained from the latest statistics made in July 2018.

- review of unemployed persons in Ohrid, 31.07.2018:
 - total 3256
 - o city 2636
 - o village 620

> review of unemployed persons according to gender structure, 31.07.2018:

- total 3256
 - o female 1492
 - o male 1765
- > review of unemployed persons according to age structure, 31.07.2018:
 - from 15 to 19 years (total 29)
 - o female 13
 - o **male 16**
 - from 20 to 24 years(total 167)
 - o female 89
 - o **male 78**
 - from 25 to 29 years (total 313)
 - o female 173
 - o male 140
 - from 30 to 34 years (total 304)
 - o female 149

- o male 155
- from 35 to 39 years (total 283)
 - o female 150
 - o male 133
- from 40 to 44 years (total 275)
 - o female 138
 - o male 137
- from 45 to 49 years (total 275)
 - o female 124
 - o **male 151**
- from 50 to 54 years (total 369)
 - o female 174
 - o male 195
- from 55 to 59 years (total 651)
 - o female 293
 - o male 358
- from 60 years and more (total 590)
 - o female 188
 - o **male 402**

> review of unemployed persons according to nationality, 31.07.2018:

- Macedonian 2760
 - o female 1278
 - o male 1482
 - Albanian 133
 - o female 51
 - o male 82
- Turks 123
 - o female 54
 - o male 69
- Roma 51
 - o female 19
 - o male 32
- Serb 9
 - o female 6
 - o **male 3**
 - Other 180
 - o female 83
 - o **male 97**

> review of unemployed persons according to degree of education, 31.07.2018:

- without education and primary education (total 995)
 - o female 451
 - o **male 544**
- incomplete secondary education (total 716)
 - o female 196
 - o male 520
- completed secondary education (total 888)
 - o female 468
 - o **male 420**
- two years of high education (total 108)
 - o female 54

- o male 54
- high education (total 511)
 - o female 297
 - o male 214
- Master of Science (total 37)
 - o female 24
 - o **male 13**
- Phd (total 1)
 - o female 1
 - o male 0
- review of registered applications for established labor relations (01.01.2018 – 31.07.2018):
 - total 5226
 - o indefinite time 1740
 - o fixed time and seasonal job 3486

So, according to statistics, 70% of the entire population in the city is working-age persons (from 15 to 64 years). (Data are taken from the statistics of *The World Bank:* <u>https://data.worldbank.org/indicator</u>.

The working age population is defined as those aged 15 to 64. The basic indicator for employment is the proportion of the working age population aged 15-64 who are employed. The age dependency ratio is the ratio of dependents (people younger than 15 or older than 64) to the working-age population. This indicator is measured as a percentage of population.

The total population in Ohrid is 43 305 inhabitants. 70% of them are labor-capable. It means that 30 313 persons are capable for a job. The review of unemployed persons in Ohrid, taken from the Employment office in Ohrid, says that 3256 people are looking for a job. So, the employment percent is 90 % calculated by formulas.

But the real situation is different because not everyone is registered as employed or as someone who is looking for a job, unemployed. The employment percent should be much lower than 90 %.

From scale 1 – 5 we rate the score 3.

Comparison with other countries:

Macedonia, working age population 70.05 %

Population ages 15-64 (% of total)

World Bank staff estimates based on age/sex distributions of United Nations Population Division's World Population Prospects: 2017 Revision.



Serbia, working age population 66.18 %



Sweden, working age population 62.48 %



B. Economic Growth – Score: 0-5 (3)

The budget of the municipality is adopted by the City Council. It is composed of 2 parts: the basic and the budget received from the state. The first one is defined with income and outcome, and the second is intended for things mostly in education but also for other activities. For the 2018, 8 130 000 euros have been provided as a basic budget. For the second one, the state provided 7 000 000 euros.

Changes are made to the budget minimum once per year with budget rebalance.

Ohrid municipality also has a debt that exists and has been owed since 1995 and has been obtained from the construction of the collector. First it was the task of the state and then shift it to the local level of the municipality. The second debt is related to the construction of the sports and recreation center *Biljanini Izvori* from 1999.

The budget is not enough to cover the needs of the city, so we strive as a municipality to increase the income.

(This information was obtained of the municipality finance sector)

o Economic growth of the local economy

The Economy in Municipality of Ohrid represents a combination of small and medium enterprises mostly from manufacturing and service industry (Tourist agencies, trade companies and industrial capacities).

□Tourism □Electric industry □Metal Industry □Textile industry □Chemical industry □Foodprocessing industry □IT and communication □Agribusiness □Medicine and Health Care Energetic sector Construction

These are the main economic branches in the southwest region, which involves the largest number of working population. The enterprises are located in the housing zones, but there is a small concentration of industrial objects mainly in the periphery, in the suburbs of Kosel and Leskoec and on other locations in the region. The big agricultural landscapes in the rural part of the regions are a good precondition for economic development and creation of new businesses.

According to the Mayor and politics of municipality, it is necessary to establish a system of constant communication and cooperation between business entities in the city in order to create adequate solutions for improving the business climate in Ohrid. This would mean promotion of local businesses and growth of the local economy, as well as faster creation of opportunities for increasing the number of employees in Ohrid.

The cooperation between the business community, banks and local self-government is the basis for local and state economic development.

According to the State statistical office until 2014 year in Municipality of Ohrid there were 2 757 active businesses, with the following structure: By size:

- 2.023 micro enterprises, or 73,4 %
- 708 small enterprises, or 25,7 %
- 22 medium enterprises, or 0,8 %
- 4 big companies , or 0,2 %

By activity:

- 1.011 enterprises, or 36,7 % are in wholesale and retail trade, repair of motor vehicles and motorcycles;

- 321 enterprises, or 11, 6 % Manufacturing industry;
- 301 enterprises, or 10, 9 % Accommodation and food service activities;
- 234 enterprise, or 8, 5 % Professional, scientific and technical activities;
- 172 enterprises, or 6, 2 % Other services;
- 169 enterprises, or 6, 1 % Construction
- 169 enterprises, or 6, 1 % Transport and storage, etc.

Industrial giants from Europe, like Kostal and ODV factories, invested with their own production capacity in Ohrid.The companies are a leading exporters of technologically advanced products in the field of electronics, electromechanics and mechatronics for automotive and other related industries.

There are other big companies that contribute to economic growth in the city, like Learnica (produces parts for car industry and some electronic housing components), ASP-PAK (one of the biggest manufacturers of packaging solutions and netted products) etc.

This leads to raising the local economy and creating new jobs for the local population and consequently leading to a safe rise in the standard of living in Ohrid.

(This information was obtained from the municipality sector for Tourism and local economy development)

0 Tourism

Tourism is one of the fastest growing service industries that contributes significantly to the growth of local economies.

The tourist policy of the municipality of Ohrid results in attracting tourists in the city not only in the summer but also in the remaining periods of the year.

Local self-government works to attract tourists from other parts of the world who have not been present in the city in the summer and throughout the year.

Signing of the Memorandum of Cooperation between the Municipality of Ohrid and other cities is an opportunity to promote Ohrid tourism and networking of Ohrid businessmen in the field of tourism as well as greater sales of tourist facilities.

The tourism industry has played a big role in urban economy.

In the city we have several large hotel complexes that exist long ago as well as many smaller accommodation facilities.

(This information was obtained from the municipality sector for Tourism and local economy development)

C. Local economic development – Score: 0-5 (2.5)

Companies think that the general economic situation, state regulation and domestic competition have the greatest **negative impact** on their current and future development.

If Macedonia becomes a member of the EU, companies as a **positive factor** for them will perceive a stable business climate, access to a larger market without customs duties and other obstacles; while as negative factors are pointed higher labor costs, strong competition.

Most of the companies mainly sell in the Municipality of Ohrid and the Republic of Macedonia. A smaller proportion of them are export oriented, mainly in the European market.

(This information was obtained from the municipality sector for Tourism and local economy development, from Business Attitude Survey (BAS Analysis))

The biggest problems for companies from Ohrid region are unfair competition, unequal opportunities for doing business whereas the biggest expectation is to develop and improve local infrastructure. These are the conclusions of the business meeting organized by the Business Confederation of Macedonia with entrepreneurs and representatives of micro, small and medium-sized companies from this region.

Environment

D. Urban greenery and forest – Score: 0-5 (3.5)

National Park Galicica - Galicica is a high mountain in Macedonia. Due to the special natural beauties and the characteristic flora and fauna of the forests and forest areas of Mount Galicica, a large part of it, on an area of 22,750 hectares, was declared a national park in 1958. It is characterized by the position it occupies between the two lakes - Ohrid and Prespa.

The city has a big green area in the old part of the city which is characterized much with the pine forest and almond plantations.

• Trees in the city

The city is divided into urban communities. Almost every urban community has its own recreational part with a small greenery and a children's park.

E. Blue spaces (water) – Score: 0-5, (5)

Ohrid is located on the northeast coast of Ohrid Lake.

The lake covers an area of 358.2 km2 and extends in a length of 30.8 km and the widest width is 14.8 km. Its depth reaches up to 289 m. The lake is located in a deep and closed valley, in the east bounded by Mount Galicica and in the west by Mount Jablanica. Ohrid Lake is the oldest lake in Europe with a large variety of endemic species.

World importance of the lake is confirmed in 2010 when NASA and the International Astronomical Union decided one of the lakes of Saturn's moon Titan to bear the name "Ohrid Lake".

F. Contamination and pollution – Score: 0-5 (4.5)

The heavy metal contamination in Lake Ohrid, a lake shared between Albania and Macedonia, was studied. Heavy metal concentrations in water, vegetation, and fish were investigated at selected sites of the lake and a study of the heavy metals in five tributaries was conducted. The lake surface water was found to have low levels of heavy metals, but sediments contained very high levels mostly near river mouths and mineral dump areas. Water can be used for drinking, constantly being maintained.

Because of its proximity to the lake and the national park, the air in the city is quite clean.

G. Mobility – Score: 0-5 (1.5)

In 2017, for the first time in the city center, one part of the main street was adapted with a bicycle lane.

The city has access to public transport but it is only intended for transport to the nearest villages and tourist settlements. The city doesn't have sustainable transportation modes. The city has a long quay which is adopted for pedestrians.

H. Solid waste- Score: 0-5 (O)

- The municipality doesn't have landfill (only Bukovo which is not regulated by standards)

- No recycling
- No reuse
- No waste management system

I. Energy – *Score:* 0-5 (1.5)

Projects in the field of renewable energy sources and energy facilities that use the sun as a source of energy need Ohrid. Solar power plants as a source of electricity, although expensive investments, would have positive implications and strong energy efficiency on the operation of the commercial and hotel facilities, but also on the accounts of the citizens. With 280 sunny days in the year, the Republic of Macedonia belongs to the countries with the highest and highest quality solar radiation in Europe, and Ohrid is a region with strong sunshine.

Small hydropower plants (facilities) are becoming more attractive for investing in the country and there are more in the Ohrid region.

Social

J. Social inclusion – Score: 0-5 (3.5)

Despite the benefits from the state, however, abuses in the employment of persons with disability, discrimination and prejudice in their inclusion on the market still exists. With European money, disabled people are trained for their employment. According to the Employment Agency records, 80 people are unemployed in Ohrid, registered in 2017.

Conversations with employees in the municipality and wider show that such persons can be engaged.

The Ohrid Association for Disabled works on the removal of physical barriers and greater accessibility of people with disability on the Ohrid beaches. During the summer, over 600 people from Macedonia are coming to the apartments of the association for summer vacation. Otherwise, the Ohrid Association for disabled people has 145 regular members and 7 extraordinary and honorary members (2017).

K. Education – Score: 0-5 (4.5)

- The Faculty of Tourism and Hospitality watches closely the changes in the area of tourism and service activities for 45 years. It is one of the oldest high education institutions in the tourist area on the Balkan.
- The University of Information Science and Technology (UIST) *St. Paul the Apostle*, is a high education state institution. UIST is committed to providing excellence in education and research in the field of information sciences and technology.
- FIOFA is a new film academy, situated in Ohrid. It continues in the long tradition of the Prague Film and TV School (FAMU), the fifth oldest film school in the world.
 FAMU's graduates include many influential filmmakers and scriptwriters, many known within international context as Oscar winners or laureates of international film festivals.

L. Health– *Score:* 0-5 (3.5)

Mortality rate (2017): 9.8 deaths per 1000 inhabitants in Macedonia. (Mortality rate - shows the ratio of the number of deaths throughout the year and the average number of people (middle of the year) for that year, calculated per 1000 inhabitants.)

According to the data of the State Statistical Office, in the Republic of Macedonia the number of deaths has decreased by 0.5% compared to the previous year, amounting to 20 318 deaths. Most of them are male, 10544 or 51.9% of the total number of deaths.

According to the month of death, the highest number of cases, 2 681, was registered in January.

(The information are taken from the official site of State Statistical Office.)

The city offers special conditions for life, clean air, beautiful nature ...
Which country has the	highest Gini coefficient?	^
Here's the list of the co the Allianz report.	untries with the highest wealth inequality	, according to
• U.S.A. — 80.56.		
 Sweden — 79.90. 		
• U.K. — 75.72.		
 Indonesia — 73.61. 		
 Austria — 73.59. 		
 Germany — 73.34. 		
 Colombia — 73.18. 		
 Chile — 73.17. 		
More items		

GINI index (World Bank estimate)

World Bank, Development Research Group. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments. For more information and methodology, please see PovcalNet (iresearch.worldbank.org/PovcalNet/index.htm).

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Ecosystem Services

Ecosystem services relevant to municipal management in Ohrid

Provisioning services:

Fresh water

Water from the Lake is used to fill reservoirs and after purifying is used as clean drinking water. The catchment areas are located closely to the city.

Regulating services:

Local climate

Trees and other vegetation are considered as important for shade at build-up areas. Trees and other vegetation are planted and maintained in the city, especially along the streets in build-up areas.

Extreme events

The city contains wetland which is highly protected and any urban intervention within it is forbidden.

Soil erosion

The Mountain Galichica with its forests and vegetation cover slows the flow of rainwater and protects the soil.

Pollination

Crop farming is practiced in villages around the city which relies on insects for pollination of vegetables and fruits (cherry).

Habitat services:

Habitats for species

The Lake Ohrid is a healthy habitat for endemic Ohrid trout (the best fish in the world).



Cultural services:

Recreation and mental and physical health

Many citizens use pedestrian paths within the city for recreation. The Galichica Mountain is used for hiking and has a potential for developing nature-based recreation.



Tourism

The natural beauty of the city definitely attracts visitors to the area.

Aesthetic appreciation

Citizens appreciate the natural beauty by enjoying the area and taking photos of the breathtaking views.



Spiritual experience

Religions are practiced within the city as many churches exist at valued locations, highly connected with the nature.



Ecosystem services relevant for the project

Regulating services:

Local climate

Adaptation of the street to a pedestrian zone will eliminate the carbon dioxide emission at the area, thus it will have better climate and cleaner air. Trees and other vegetation could be planted along the pedestrian zone which will have a positive effect on the climate as well.

Cultural services:

Recreation and mental and physical health

The project will increase the possibility for recreation within the city, for pedestrians and bicycle users.



Tourism

The area can become a new landmark of Ohrid, with its unlimited views to the beautiful Lake Ohrid. Visitors will be more attracted by this natural beauty which can be experienced completely without obstacles.

Step Three: Key issues and objectives

Problem tree



Outcome (main objective(s))



Report back to citizens

The participatory event was held on 25 September 2018. Presenters were the Ohrid ICLD team in front of employers in municipality, members of the working group and citizens.

The team presented everything that was done earlier in the phases and the middle phases with short explanation, and in more detail it focused on presenting the task and analyzes that followed the workshop in Kiev.

The team exposed the working papers from workshop in Kiev and present the homework done in meantime. A discussion about the traffic solution and the sustainable development of the city has developed from different aspects.





The results obtained from the survey were published on the municipality website along with the announcement on the participatory event for the SymbioCity project.



Step Four: Alternative proposals

Scenarios and evaluation Scenario analysis



During the workshop, four scenarios for implementation of the project were analysed. For each scenario were given different solutions, regarding them as:

1. low or high scale of possible implementation and

2. low or high technology developed solutions:

-Scenario A (low scale – high tech)

This scenario gives low scale-high tech solutions:

- alternative forms of transport at the area for the residents (car park speed limit)
- increasing of electric bicycle use
- implementation of wi-fi meeting points at the area

-Scenario B (high scale – high tech)

This scenario gives high scale-high tech solutions:

- efficient public transport (bio gas fuel buses)
- underground street at the area
- tax payment for car use at the area

-Scenario C (low scale – low tech)

This scenario gives low scale-low tech solutions:

- increased bicycle use
- mindset change campaign on bicycle use
- mindset change campaign on walking
- location for children playground
- location for public open glassy veranda
- ecosystem services (trees and other vegetation could be planted along the pedestrian zone which will have a positive effect on the climate as well)

-Scenario D (high scale – low tech)

This scenario gives high scale-low tech solutions:

- city council resolution needed
- finding new parking solutions, eg. parking garage
- mindset change campaign on public transport use
- increasing of boat transport
- building the streets according existing urban plans

Vision: UTILIZED PUBLIC SPACE

Objectives	(5) Fulfills	(3) Fulfills to some extent	Does not
No pollution	A B	C D	
Safety space	0	a	
Increasing the attractiveness		•	
People own the space			
Efficient traffic		0	
More urban facilities	0	Å	0 0
	(26)	(26)	(20) (16)
	(29.5%)	(29.5%) (2	3%) (18%)

During the workshop, an evaluation of the four developed scenarios in relation to the vision and previously described objectives was made. It was analyzed which of the scenarios, in what range, fullills each objective of the Challenge project.

There were three possible groups:

- fulfills the objective (given 5 points)
- fulfills to some extent (given 3 points)
- does not fulfill (given 1 point)

As mentioned previously, the objectives were:

- no pollution at the area
- the area is safety space
- increasing the attractiveness of the area

- people own the space
- there is efficient traffic at the area
- there are more urban facilities at the area

For each objective points were given and the analysis was presented by diagram. As shown at the diagram, the results are:

- □ the scenario A got 26 points, which is 29.5% of total 100 points.
- □ the scenario B got 20 points, which is 23% of total 100 points.
- □ the scenario C got 26 points, which is 29.5% of total 100 points.
- □ the scenario D got 16 points, which is 18% of total 100 points.

The conclusion is that the scenario A and C can fulfil the objectives better than scenario B and D, so the final proposal can be developed using scenario A and C.

Synergies and Ecosystems analysis

The next step was identifying the synergies between urban systems. All urban systems are of crucial importance for sustainable urban development. They relate differently to the four dimensions of urban sustainability:

- environmental
 - economic
 - socio-cultural
- spatial (build) environment

Defined urban systems in SymbioCity are:

- buildings
- urban functions
- public space
- landscape / ecosystems
- information and communication technology (ICT)
- waste and material
- water and sanitation
- energy
- traffic / mobility

Buildings are linked with urban functions and landscape. Included solutions are green roofs and public glassy veranda at the area.

Urban functions –housing, industrial production, commercial services, culture, education, healthare linked with traffic, buildings, energy and ICT. Included solution is parking garage closely to the area.

Public space that is accessible and used by citizens for different purposes is linked with landscape, traffic and urban functions. It includes a solution as children playground.

Landscape planning – the provision of attractive open space systems, parks, green corridors and greening of streets- is linked with traffic and public space and urban functions as well. A solution that would affect the landscape is increasing the attractiveness of the area, which is closely connected with the Ohrid Lake.

ICT is linked with energy use and urban functions and includes solutions like wi-fi meeting points at the area.



Waste is linked with landscape, public space and urban functions. It includes reduce of waste volumes, recycling of waste and waste water treatment.

Water is linked with landscape and includes solutions for greenery at the area and rain water use.

Energy is linked with traffic mobility and includes solutions like electric bicycle use, solar energy use and green roofs.

Traffic / mobility is linked with energy use, public space use and affects the landscape. It includes solutions like management and operation of efficient public transport, boat transport, alternative forms of transport, parking garage and bicycle use.

Synergetic solutions that solve several problems at once are often more cost-effective and sustainable.

Project proposal

The challenge project ,,New horizons through advanced walking zone" was developed through SymbioCity approach. Having on mind the vision and the objectives of the project, the Ohrid team developed four different scenarios. These scenarios were evaluated and two of them that fulfilled the objectives the most, were chosen for implementation. The necessary solutions for the final **project proposal** consists of three groups:

1. Effective traffic

This group of solutions includes:

- increasing bicycle use at the area which is very close to the centre of the town
- and limited car use at the area (only residents can use cars at the area driving with car park speed limit)





2. New facilities at the area

This group of solutions includes;

- public glassy veranda _
- wi-fi meeting points
- children playground ecosystem services (trees and vegetation)





3. Mindset change

This group of solutions includes

- mindset change campaign on bicycle use -
- mindset change campaign on walking.

BICYCLE COMMUTING CHECKLIST As Provided by The League of American Bicyclists HOW TO COMMUTE BY BICYCLE Bike parking Clothing Showering Maintenance Weather Share the road Signals and signs Cycling safety Route choice COMMUTER GEAR **BICYCLE CARRYING CARGO** Choose an appropriate bike Rear rack Front rack

Carrying cases, racks, trailers Tools for fixing flat tires Visible clothing Fenders, lights, helmet, lock

Baskets Packing panniers (bags) Rain gear

BICYCLE SECURITY





GET STARTED



Walking Campaign Texts for Mobile Devices

1. Do you need some encouragement to become physically active?

Step Five: Impact assessment of proposals

Sustainability Impact Assessment



The Sustainability Impact Assessment (SIA) is a specific tool that was used to analyze the impact of the project from aspect of several factors (analysis of the potential economic, social, human rights and environmental impacts)

We came to conclusion that the project has a positive impact from a social and environmental point of view the most. The area we use for development leads to greater security in people, health and sustainable lifestyle are high, pollution is reduced, greenery is increased ... Due to the proximity of the lake, eco systems and energy efficiency have the possibility of real use. This analysis leads to a positive impact on tourism and local economic development. Because of the

additional functions such as city bike sharing, the introduction of car tax that use the surrounding space near the project location etc.. municipality will have income.

Step Six: Strategy for implementation

Implementation plan table

And a	Solution MINDSET CHANGE ON BROYCLE USE	WHAT should be done and what is the expected result?	WHO is responsible for the activity?	WHEN will the activity begin and end?
i	Activity 1 BUJIDING NEW PRICYCLE CANES	MANE, A MAIN PROJECT AND APPEDDE STARTING INFLETING INFLETING FIELD PREMARING TO INFLETING PREMARING	TRAFFIC DEPARTMENT FINANCE - 11- · CITY COUNCIL) DEP. OF URBANIZAN/PROB	· BEGIN WITH APPROVENDA PROJECT · AS SEON AS POSSITIVE :)
	Activity 2 BICYCLE PARKING SPACE	- currenties and of the of tension - make of successful where the the points for porum - located the perumon space - construction to the	et ales of intervision/ according to approved project fund and , commence interturburg	· Copie when the love is finished, and defined porning space. · and north retine up the construction as field li
	Activity 3 CTTY BALLE POINT	To produce pp uppers Bioyree suidele for unbou environments. . Speus succe on counter bud prophication inclead of cheert.	. stry carried it public executions of public recomment . The . finance deportment.	· Beories with procure went a cild with softing the during orgentation.
	Activity 4 CAXIPATENE ON HEACTHY. LIFE	· organize compiant include mention to the change minos et of people survey /poll	· public relation-depers · media	. Begin with parcelell with implementing the project for conside lake. . never ecid)
Mar de la constante de la cons	Activity 5 SUBSIDIES FOR ELECTRIC Bridycles	promotion through.	· vity conuncil	activities

Each solution in our main Project Proposal depends of a number of activities to be orderly implemented. We chose one solution and worked out a tabular and timed axis. For that solution we identified the different activities we have to carry out, and in what order. And for each activity we also identified the different stakeholders that we have to involve.

Solution: Mindset change on bicycle use - described in five activities

Activity 1 – Building new bicycle lanes

- WHAT should be done and what is the expected result?
 - make and approve a main project
 - to begin with field implementation (field preparation)
 - to have different and sustainable type of transport
 - satisfied citizens
- WHO is responsible?
 - traffic department
 - city council
 - department of urbanism (project)
 - finance department
- WHEN will the activity begin and end?
 - will start with approving the project
 - ends with its realization

Activity 2 - Bicycle parking space

- WHAT should be done and what is the expected result?
 - find a location
 - bicycle parking system (racks, stands)
 - storage facilities (lockers, cycle centers)
 - safe public bicycle parking facilities

- a well-organized public space
- increase the attractiveness of cycling
- WHO is responsible?
 - department of urbanism
 - business sector (donation)
- WHEN will the activity begin and end?
 - begin when the lane is finished and defined parking space
 - end with seting up the parking system on a location

Activity 3 – City bike point

- WHAT should be done and what is the expected result?
 - to procure an urban bicycle suitable for urban environment
 - focus more on comfort and practicality instead of speed
 - find a location to settle them
 - bicycle sharing system (public)- on a short term for a price
- WHO is responsible?
 - department of urbanism
 - department of communal development
 - city council
 - department of public procurement
 - finance department
- WHEN will the activity begin and end?
 - begin with procurement
 - ends with setting up the sharing system
- Activity 4 Campaign on healthy life
 - WHAT should be done and what is the expected result?
 - organize campaign
 - include media to share the news
 - include volunteers, schools, institutions ..
 - to change mindset of people
 - survey/poll
 - WHO is responsible?
 - department of public relation
 - media
 - WHEN will the activity begin and end?
 - begin parallel with implementing the project for the lane - never end

Activity 5 – Subsidies for electric bicycle

- WHAT should be done and what is the expected result? - organize campaign / promotion through media
- WHO is responsible? - city council
- WHEN will the activity begin and end?
 - after finishing all previous activities

Implementation plan table



Main Project Proposal is developed of analysis made by previous scenarios. The necessary solutions for the final project proposal consists of three groups: effective traffic, new facilities and mindset change. These are selected because they are most suited for development. They are explained using time table and identified by **Who** is responsible for **What** kind of function, **How** to do the job (with what kind of activities) and **When** the activity will start or finish.



Implementation is a process that converts strategies and plans into actions in order to achieve strategic goals and objectives. Strategic Implementation Plan (SIP) is a document we use to

define our strategy for implementation. Usually, it presents the resources, assumptions, short-term and long-term results, roles and responsibilities, and the budget.

Our project refers to the adaptation of the *Makedonija Street* into pedestrian zone. For that purpose, the street should be closed and re-loaded into a pedestrian zone by adding additional contents.

1. Effective traffic

Namely, the street is approximately 1 km long and stretches along the quay of the lake. A small section of the street has already been closed for traffic (with a yellow line on a graphic attachment), but the project aims to close the whole street. From the previously made surveys, discussions and public presentations, as well as consultations with the Traffic and Street Department, the following conclusion was reached:

All the streets (normally set) leading to Makedonija Street, should be closed. There are 5 larger and several smaller streets (blue arrows on the graphic attachment). Traffic regulation will be done through input-output terminals (barrier ramps) using cards (pink squares on the graphic additional vehicles attachment). and on will be put appropriate stickers. Purchase of 5 barrier ramps is foreseen. The closure on smaller streets will be done by placing concrete planters (pink squares on the graphic attachment). In the vicinity of the location there are several larger public institutions and they are provided with access from Partizanska Street (that means that they are not in the boundaries of the project), marked with yellow circles on the graphic article:

- House of Culture Grigor Prlichev cinema
- Student dorm
- Catholic church
- Faculty of Tourism and Hospitality
- Secondary catering school

Along the location, at *Makedonija Street*, there are objects of different purpose. The majority are residential buildings, while the rest are smaller or larger hotel accommodation, restaurants, etc. (purple circles on a graphic attachment). Only those on the first or second line will have access by car from the *Makedonija Street*. It will be regulated by issuing electronic cards for entry through the barrier ramp.

Conclusion:

The street will be closed for all vehicles except for residents whose access to their buildings can not be provided from another street, as well as catering facilities for supply of goods. For catering facilities, delivery of goods is planned to be in the street regulated mode, in the early hours of the morning, within a specified time period, at the latest by 9:00. The collection of waste will be carried out in the same time period. The street is defined as a low-traffic zone and will be one-way. It is planned that part of the greenery will penetrate into the street in certain parts, in order to show the vehicle users that it is a low-traffic zone and the signs along the street should be respected to limit the car speed to 5 mph. The speed of the motor vehicles is equal to the speed of movement of a pedestrian.

By regulating the street in this way, or by regulating the dense flow of vehicles, the safety of pedestrians comes to a higher level. Along the street will be placed 20 traffic signs. Construction of a cycling route is foreseen. A part of the street has already been built and marked as cycle lane (with a red line on the graphic attachment). As a part of effective traffic and for encouraging citizens to use bicycles, it is planned to set up a city bike point and a bicycle sharing system.

2. New facilities

After the adaptation and reconstruction of the street and traffic regulation, the location will be supplemented with the additional elements necessary for enriching the space and for its interoperation.

Since there is already a children playground near the beginning of the street, another children playground is planned near the final part of the street. Public glassy veranda is a public building planned for rest and recreation. It can be a semi-open space enriched with vegetation and will be a connection between the lake and the greenery. The glass casing can be used as solar or photovoltaic panels.

Along the street, wi-fi meeting points will be set up, with a slightly arranged surroundings, benches and pavilions. It is planned to be set 4 points.

The location will be enriched with trees, greenery and landscaped park, approximately 400m2. That will start with preparation of the soil, then planting of grass seeds with all operations (plowing, milling, baling, sowing, valing). At the end it will be decorated with seasonal flowers and shrubs.

3. Mindset change

For all above mentioned to be effectively implemented, the location to be attractive and visited for the goods of the city of Ohrid, the citizens' mindset about healthy life should firstly be changed. It is planned to be conducted a healthy life campaign for using bicycles and for walking. The proximity of the lake to the location, clean air as well as nicely arranged space are an incentive for citizens to use less vehicles and more bicycles or walking. The campaign will be conducted through the local media, the website of the municipality of Ohrid and also through a participatory event where the citizens will be able to be informed in detail about the news in municipality.

Financial budget

Everything above mentioned is defined in the time table and the activity table. A financial calculation for the required budget has been made as well:

• adaptation and reconstruction of the street which includes:

- pavement boundary	7000eur
- excavation	1000eur
- cutting of asphalt etc. =	1000eur
bicycle lane	5500eur (coloring etc.)
traffic signs (20 pieces)	1400eur
• input-output terminals (barrier ramps)	
(5 pieces)	12000eur
• city bike	20000 eur
 wi-fi meeting points (4) 	6000eur
 public glassy veranda 	25000eur
 children playground 	8000eur
• campaign	2000eur
 greenery and parks 	
- planting of grass seeds with all operations	
(1.12eur/m2 x 400m2)	450eur
 seasonal flowers (200 pieces x 0.5eur) 	100eur
- shrubs (30 pieces x 5eur)	150eur
Total	89600 eur

Graphic attachment:



Graphic attachment:





closed street for traffic (now) street that need to be regulated a bicycle path that is built street that need to be closed

public institutions

accomodations, restorants ...

input-output terminals (ramps) or jardiniers

Presentation and discussion



The presentation was held on January 24, 2019. Presenters were the Ohrid ICLD team in front of municipality employees, members of the working group and citizens.

The team presented everything that was done earlier in the phases and the middle phases with a short explanation. A short presentation about visit to Stokholm and Malme (Stockholm Royal Seaport, Hammarby sjöstad, Comprehensive Plan Malmö, Media Evolution City, New Slussen, Lake Mälaren, Gamla Stan) was displayed to present people. The focus was on presenting the task and analyses that followed the workshop in Stockholm in more details.

A discussion about the traffic solution was developed. Closing the street would change the traffic mode of the surrounding streets that leads to finding new solutions. Also, existing parking spaces along the street should be dislocated into a new multi-storey garage. A solution has to be found for accessing residents to their own houses by car. Mindset change campaign on walking and bike using is necessary to be done because of low consciousness of people.

Attendants accepted the proposal for development of three chosen groups and gave support for implementation.

Activities Feb – May 2019

Analyzing the results, we can conclude that the idea for adapting the *Makedonija Street* into pedestrian zone is very acceptable for all target groups included in the project. The town of Ohrid will get a utilized public space enriched with different activities. People will be on the top of the urban mobility pyramid. The intervention will change the area by offering more social interaction options and providing safety traffic. Visitors will be attracted by unlimited views to the endless beauty of the Ohrid Lake. By emphasizing protection of the natural heritage, this attractive pedestrian zone will become a new landmark of the town. A lot of new breathtaking horizons will be waiting to be discovered and experienced.

First phase of implementation –part of the street is adapted into pedestrian zone







Next phase of implementation – the rest of the street to be adapted into pedestrian zone





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For further information

Please contact <u>ohrid.icld@gmail.com</u>. More information on this and related projects can be obtained at <u>https://ohrid.gov.mk/icld/</u>.