**City:**Ioannina, Greece

**Integrated Action Plan for Urban Resilience**

# 1. Introduction

## 1.1. General Introduction

Ioannina is the capital and largest city of Epirus, an administrative region in north-western Greece, with a population of 112,486 (2011 census). It lies at an elevation of approximately 500 m above sea level, on the western shore of Lake Pamvotis and is located 450 km northwest of Athens – Capital and 290 km southwest of Thessaloniki, the two biggest cities of Greece. The city presents a significant cultural and educational activity. Offices, shops, museums, athletic facilities and coffee shops keep the city center live and vivid all time long.

The Municipality of Ioannina constitutes the traditional dynamic urban centre of the Region of Epirus and the main urban center of Western Greece, after Patras. With a population of approximately 112.486 inhabitants the Municipality of Ioannina is one of the 10 largest Municipalities, in terms of inhabitants, in Greece.

Located at the north-west of the Greek Peninsula it is found at the cross-border area between Albania and Greece. Geographically, the Municipality of Ioannina is found in the internal area of the European Union and specifically at the cross-border region between Greece and Italy.

Strategically, the M. of Ioannina forms a geopolitical crossroad of the development axis of north Greece, especially after the construction of the EgnatiaOdos Motorway. Combined with the Ionian Odos Motorway and the E65 motorway, Ioannina is a strategic Interchange Node of combined transportation due to its proximity to the country's international gateway, the port of Igoumenitsa.

The city's modern development is marked by its advancement in arts, literature, trade and tourism and is supported by the development of the regional infrastructure including Ioannina National Airport (King Pyrrhus), the Water Sports Center, the motorways and the city's hospitals. The University of Ioannina, with its extensive research and technological activity, and the Technological Institute of Education (T.E.I.) of Epirus, also help the rate of progress and development of the city.

The Regional Unit of Ioannina produces 56,5% of the total GDP of the Region of Epirus. For 2009, GDP per capita, for the regional Unit of Ioannina, was at a level of 79% compared to that of the average EU 27 (Eurostat 2009).

For the Municipality of Ioannina, out of the total Economically Active Population 42.781 persons declared "employed" and 8.231 persons declared "unemployed" (Greek Statistic Agency, 2011).

Although, one of the smallest and poorest of the Greek regions, Epirus has a potential to develop a specialized regional development strategy. Infrastructure investments (Egnatia road, Ionia road, Igoumenitsa port, etc.) over the last decade have better connected the region both nationally and internationally. Epirus is also home to a number of food and natural resource based businesses and

the growth potential of alternative tourism (eco-tourism, etc.) is recognized. Moreover, regional scientific specialization is more in line with regional needs than in some other Greek regions, with a number of specialized centers (notably in agro-food technology).

The structure of employment for the municipality of Ioannina is the following: the primary sector is small; the secondary is responsible for almost 18% of employment, while the tertiary sector has overwhelming superiority with 78%.


**Map: The City of Ioannina and Euope**

**Map: The City of Ioannina and Greece**

**Photo: Ioannina, a lake city**

**Photo: Ioannina, a city with history**

1.1.1 Why examining urban resilience is relevant for the city

The City of Ioannina represents a complex, urban ecosystem vulnerable to a series of environmental, social and economic threats. Some of them include extreme poverty, environmental and climatic hazards, air pollution, infrastructure issues, mobility problems etc. Despite the variety of challenges, it is critical for the Municipality to address the issue of RESILIENT CITY with a focus on the Urban Lake Front.

Undoubtedly, one of the areas where the most intense pressures appear, both in urban and extraurban level, with respect to the natural and human environment, is the contact zone between the land and the lake Pamvotis. The increased interest in relation to the lakefront area is clearly

reflected not only in the image and character of the landscape but also in the environmental, cultural, economic and social value of the lake system for the Municipality of Ioannina.

Therefore, the relationship between the city of Ioannina and the lake, such as the re-designing αnd development of its lakefront, evolve in proportion with the social and economic development of the city itself. Today, the exploitation and development of the lakefront of the city follows the contemporary policies of exploitation of coastal fronts, as these are determined by the European Union. It is connected with the directions on the development of the city of Ioannina as a tourist destination and a business center and leads to the overall commercial exploitation of the lake area.

Hence, it is clear that the overall capacity of Ioannina to address a series of challenges and therefore render the city RESILIENT is directly linked to the development of the urban lakefront area.

The main challenges regarding Urban Resiliency and the Urban Lakefront of the City of Ioannina include:

- Maintaining the public waterfront accessible to more and more people.
- Rethinking the existing concrete revetment that is in poor condition and results in restricted or eliminated public access to the Lake Pamvotis shoreline.
- Re-designing land uses of the entire area with a focus on accessibility, sustainable urban mobility and respect to the natural and manmade environment.
- Setting requirements for the determination of land use in the urban lakefront area and settle conflicting land uses.
- Protecting the lake environment by maintaining the high quality of the natural ecosystems and at the same time, focusing on environmentally degraded areas.
- Developing new leisure activities for citizens and tourists.
- Design of the waterfront bike path up to … km width along with the consummation of the pavement to accommodate a healthy and busy reach of the Pamvotis lakefront.
- Thinking innovative interventions and improvements to reduce flood risks of vital infrastructure
- Re-connecting local economy and the lakefront.
- Developing new business opportunities directly related to the intrinsic cultural, touristic, social and environmental value of the urban lakefront ecosystem.
- Standardizing open and participatory approaches for designing and implementing policies for all actions.

On another level, these directions should be incorporated to the City's zoning plan, the layout of the city of Ioannina and other spatial and proportional plans.

Therefore, the challenge needs to be addressed is the "establishment of a new connection between citizens and visitors of the city of Ioannina and the urban lake front, through an overall action plan that will guide environmentally compatible interventions in order to develop new recreational, cultural, touristic and economic activities in the area.

### 1.1.2 Is urban resilience as a policy issue a priority at local level?

Urban resilience has never been addressed in the past in the way that now is incorporated in an integrated, strategic and participatory process. In the previous years, design and development had a strong focus in the City Centre. Major development projects took place in the "historic" city centre,

including pavement, lightning and public spaces. This process resulted in a massive reformation of the city that highlighted the urban centre.

However, this lead to a development model that focused in one urban area, leaving others, and the lakefront out of the agenda.

For these reasons, the coastal area has attracted the recent interest of the local authorities, urban planners, specialists and has become a research and policy field because it forms the environmental and aesthetical identity of the city guiding cultural and touristic activities.

A crucial question raised is to resolve conflicts in land use and in particular cases where the dynamic uses such as tourism, trade, often and leisure, threatens to crowd out weaker but essential uses such as agriculture and the special qualities of extraurban area unable to defend themselves, such as biodiversity and landscape. Other approaches questions concerning the optimal morphological exploitation of the possibilities offered by the proximity to the water element, addressing environmental problems by often urban sprawl and the increased risk of pollution and legal issues in nature as is the character of coastline and ensuring seamless connection for the citizen and the city visitor to the lake.

Therefore, urban resilience, as an independent policy niche, is a rather modern concept for the Municipality of Ioannina. However, it has become a part of the agenda and for the 1st time in the city's history, a map of stakeholders and interested parties is involved, in order to ensure that new policies and interventions are safeguarded through participatory approaches and democratic procedures.

On a strategic level, the Municipality is for the 1st time designing an integrated urban resilience plan through a multilevel approach that include the following strategic design:

- The MoI has joined the Covenant of Mayors for the fight against Climate Change.
- The MoI is drafting the Strategic plan for Sustainable Urban Development.
- The MoI is drafting the Sustainable Urban Mobility Plan (SUMP) in order to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life.
- The MoI is drafting the Action Plan for Sustainable Urban Energy in order t map the city's energy needs and achieve the EU and global goals for CO2 reduction by 2030.

### 1.2 General data for the city of Ioannina

The City of Ionnina seeks a waterfront that is a place of public enjoyment and secures ample visual and physical public access – all day, all year - to both the water and the land. The city also wants a waterfront that serves more than one purpose and combines a place to work and to live, as well as a place to play. In other words, they want a place that contributes to the quality of life in all of its aspects – economic, social, and cultural".

A balance needs to be established between nature and social life for a sustainable development of the city of Ioannina. Urban natural water elements play an important role in the establishment of this balance. Water is the most important planning element which is comfort of human physical and psychological.

1.2.1 Demographic mapping of the city (data, descriptions)

*1.2.1.1 Population size of partner city*

Population of the Municipality of Ioannina:

| Year | Town | Municipal unit | Municipality |
|---|---|---|---|
| **1981** | 44,829 | – | – |
| **1991** | 56,699 | 63,725 | – |
| **2001** | 61,629 | 70,203 | – |
| **2011** | 65,574 | 80,371 | **111.737** |

*Population census, 1981–2011.*

The municipality of Ioannina, in terms of population size, ranks 1st among the municipalities of the Region of Epirus and is one of the 10 largest populated cities in Greece. The last census of The Greek Statistic Agency, conducted in 2011, reveals that the real population of Ioannina municipality amounts to 111.737 inhabitants (Government Gazette 699 / B / 3.20.14) and has a population density of 278,90 inhabitants per square kilometer. The 2001 census had recorded 97.657 inhabitants with a population density of 242.13 inhabitants per square kilometer.

*1.2.1.2 Demographic profile – age, gender*

Regarding the age structure of the municipality's residents, the majority of the population belongs to the age group 1-39 years, which amounts for 52% of the population. Analytically, the distribution of population by age groups is shown in the following Table.

| Age Group (yrs) and size of population | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **0-9** | **10-19** | **20-29** | **30-39** | **40-49** | **50-59** | **60-69** | **70+** | **Average age** |
| 11.200 | 12.745 | 17.664 | 17.206 | 15.774 | 13.813 | 10.781 | 13.303 | 39,5 |

From the above it becomes evident that the population of 60 years and older has the lowest participation (22%) in the total population, while the youth group of ages between 20-39 years, holds 31%. Particularly encouraging is the fact that the participation of the productive ages are very high at this distribution.

The percentage of female population of the municipality is greater than that of men, which is consistent with the distribution of the population by gender in the Region of Epirus. Men account for 48% of the municipality's population (49.2% in the Region) while women account for 52% (50.8% in the region).

| | Male | Female |
|---|---|---|
| **Municipality of Ioannina** | 53.975 | 58.511 |
| **Region of Epirus** | 165.775 | 171.081 |

*1.2.1.3 Economic profile – per capita GDP, key industry sectors*

The Region of Epirus, is in terms of Gross Domestic Product, is the poorest region of Greece, and one of the poorest in relation to the EU average . Overall, the Region produces 2.2% of the total GDP of the country and 0.04 % EU27. Ioannina produce about ½ of the GDP of the Region of Epirus (50.7%). The steady growth of Ioannina population reflects the inherent dynamics of the city, which is a result of the concentration of a significant number of economic activities, providing employment and training opportunities, and a generally high level of everyday life.

The economically active and inactive population and the registered unemployment in the Regional Unit of Ioannina and the Municipality of Ioannina is presented here:

| **Economically active, Employed and Unemployed (data for 2011)** | | | |
|---|---|---|---|
| **Area / Municipality in the Regional Unit** | **Economically active** | **Employed** | **Unemployed** |
| ***Regional Unit of Ioannina*** | ***71.069*** | ***59.656*** | ***11.413*** |
| **Ioannina** | 51.012 | 42.781 | 8.231 |
| **North Tzoumerka** | 1.754 | 1.520 | 234 |
| **Dodoni** | 3.334 | 2.632 | 702 |
| **Zagori** | 1.390 | 1.139 | 251 |
| **Zitsa** | 6.079 | 5.297 | 782 |
| **Konitsa** | 2.284 | 1.909 | 375 |
| **Metsovo** | 2.343 | 2.007 | 336 |
| **Pogoni** | 2.873 | 2.371 | 502 |

*1.2.1.4 Level of education*

As shown in the following table, the majority of the population in the municipality of Ioannina is formed of secondary and post-secondary graduates, accounting for 43.70%. This is an approximately similar proportion to the percentage of the country. Graduates of Higher Education cover a percentage of 22.78%, which is higher than the average level of the country, where the participation of higher education graduates amount for 17.84% of the total population.

| **Population / Level of Education** | | | | |
|---|---|---|---|---|
| | **Primary education** | **Secondary education** | **Higher education** | **Rest of the population** |
| **Municipality of Ioannina** | 23.172 | 45.911 | 23.936 | 12.049 |
| **Region of Epirus** | 97.158 | 119.856 | 47.865 | 52.759 |
| **Greece** | 2.524.345 | 4.462.965 | 1.809.087 | 1.343.534 |
| ***Census 2011*** | | | | |

The school dropout, meaning, students quitting school, forms an indicator that is linked to social and economic problems directly associated to social exclusion. According to official data of the Ministry of Education (Research Pedagogical Institute for the student leakage, data ELSTAT and Eurostat) early school leaving in primary education is almost negligible. Very with few exceptions are there for roma and immigrants. During the first cycle of secondary school (junior high school) the student leakage is much lower (3.81%) than the national average (13.1% in 2011). Concerning high school,

the percentage is relatively small (1.73%), while the numbers get worse regarding technological education where rates are close to those of the national average 20.28% average.

1.2.2 Economic mapping of the city

*1.2.2.1 Economic sectors*

During 2008 – 2011, and according to statistics collected for the Region of Epirus, employment increased significantly in the trade sector and the scientific and technical activities. Moreover, sectors such as the hotel sector, restaurants and manufacturing also showed an increase. Conversely, employment has been declining mainly in construction and agriculture, two thriving sectors in the past. Reduction was also observed in the transport sector, the arts, entertainment as well as mining and quarrying.

The structure of employment in the municipality varies relative to that exhibited by the Region and the whole country: the primary sector is small, the secondary accounts for almost 18% of employment, while the tertiary sector has the overwhelming superiority with 78%.

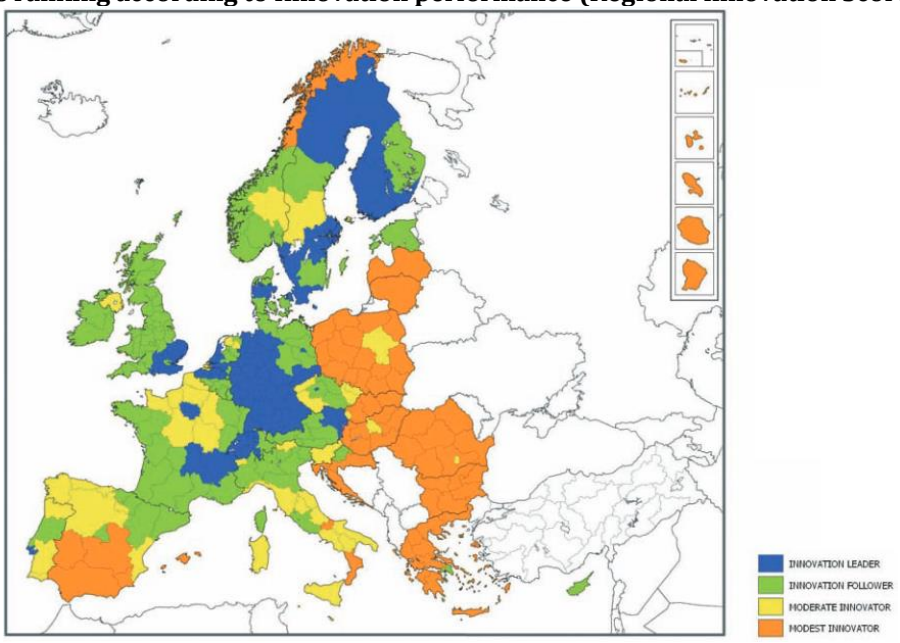
| **Employed by sector of economic activity** | | | | |
|---|---|---|---|---|
| **Municipality of Ioannina** | **Year** | **Primary sector** | **Secondary sector** | **Tertiary sector** |
| | 2001 | 1.988 | 7.840 | 26.027 |
| | 2011 | 1.676 | 7.091 | 30.520 |
| *Greek Statistic Agency* | | | | |

The total number of businesses operating in the Region of Epirus amounts to 30.854 enterprises, with a turnover that amounts to 5.138 million €. From the business structure it is evident that about 68% of the total number of enterprises belong to the tertiary sector, while the secondary sector enterprises constitute approximately 25.4%. Finally, entrprises of the primary sector account for 6.3% of the Region business.

*1.2.2.2 Innovation levels*

The region of Epirus is one of the most important regions of the country in the production of research activity. This is due to the existence of a significant number of research and educational infrastructure. However, the sector does not have the expected effectiveness, based on the developed infrastructure and expenditure incurred for Research and Innovation. Therefore, the Region of Epirus rank in the group of "Modest Innovators" according to the Regional Innovation Scorecard (RIS 2012), together with all other Greek regions outside Athens.

**Map of regions ranking according to Innovation performance (Regional innovation Scoreboard 2012)**




Located in the Region of Epirus, the University of Ioannina and the Higher technical Institute of Ioannina, constitute the main drivers of knowledge, research and innovation. The following institutions also contribute:

- The Biomedical Research Institute.
- The Institute of Transport and Telecommunications.
- The Hydrobiology Research Centre.
- The University of Ioannina Research Support Laboratories Network.
- The Science & Technology Park of Epirus.
- The Business Innovation Centre of Epirus (BIC Epirus).
- The Institute for Milk and dairy production.
- The Ioannina Agricultural Research Station of the National Agricultural Research Foundation

# 2. Current Situation (stresses and shocks)

## 2.1General description of *Stresses and shocks* in the Urban Lake Waterfront

The city of Ioannina has been on a steady course of identifying urban stresses and shocks and trying to categorize them, in order to be able to address them. Some of the main categories are described here:

1. **Ecosystem Stresses**

The lake ecosystem is chronically stressed due to agricultural and horticultural waste inflows. Moreover, urban wastewater from areas characterized by lack of integrated sewage system further contributes to the pollution of the lake.The lake is naturally eutrophic and therefore the stress from waste income is multiplied.Another major issue is the fact that the majority of agricultural land is geographically attached to the lake, leaving the ecosystem unprotected, since there is no buffer zone for drainage of fertilizers and other waste.

2. **Institutions' Stresses**

**Disrupted communication and discontinued inter-agency collaboration**: Communication between the different urban agents in the city (including the local government, chamber of engineers, different departments and planning agencies functioning under the auspices of the local and regional government) is discontinuous and transparency about actions and decisions is frequently compromised. This results in disrupted inter-agency collaboration and a lack of continuity in planning across time horizons. As such, inter-agency collaboration remains temporary and at an ad-hoc base, frequently responding to demands from the citizens and businesses rather than proactively and anticipatory to needs and developments. This also results in islands of ideas within the city: creative ideas for solutions that come from different agents are not communicated, deliberated neither connected to problems and to under formulation plans.

**Rigid policy at strategic level that delays plans and programs at operational level**. During the workshop, participants identified that regional planning policy creates a paralysis at local level since there is neither ratification nor enforcement of strategic urban agenda for livability and sustainability deeming local actions ill-legitimised. This stress is further intensified by the lack of institutional memory that the city has, with much knowledge and assessments performed not connecting to policy programming design and adaptation.

**Considering ecosystem-based planning and design as conservative**. The orientation and discoursive positions of the environmental agencies and NGOs in the city adopt an advocacy position on environmental position turning every infrastructure planning process into an arena of controversy. This further deepens the discontinuity of communication and the perception that environmental protection and design with ecological principles is old-fashioned. During the workshop, a shift of thinking has been addressed as catalytic to the co-creating process for urban resilience and especially for co-designing infrastructures that foster ecosystem resilience: the shift from conservatism to an innovative approach on integrated nature-based design of the lake waterfront.

## 2.1 Stresses and shocks challenging people's resilience

As part of the ongoing effort to improve the city's resiliency and at the same time connect the community a series of works and living labs have been organized, which focused on explicit threats in the form of stresses and shocks regarding the area of the IAC. The authorities and the participants identified the following threats:

**Shocks**

- Infrastructure failure: Old, broken and fragmented infrastructure that require massive investment plans to repair.
- Ecological shocks in the water body, especially during the summer period when temperatures are high and incoming water is depleted.
- Refugees that are settled in the city mainly in camps.
- Lack of a perception of "common ownership" between the residents of the city that creates a gap of common values and eventually lack of common vision.

**Stresses**

- Aging infrastructure
- Vacant spaces that constitute barriers between the water body and the urban fabric
- Unsustainable transportation model
- Congestion
- Flooding phenomena (caused mainly on heavy rain periods)
- Urban poverty
- Social stresses linked to poverty and unemployment.
- Bad governance and lack of coordination between local authorities, institutions, the University of Ioannina and the citizens.

# 3. Working for urban resilience in urban living labs (co-creation, description of process in ULL = TM)

The Municipality of Ioannina has produced strategic plans in the past, while the last one was for related to the programming period of 2007-2013. The city is currently undertaking the task of completing the following strategic plans:

- Strategic plan for Sustainable Urban Development.
- Sustainable Urban Mobility Plan (SUMP).
- Action Plan for Sustainable Urban Energy.

Ensuring participatory approaches and an open democratic dialogue the city has organized separate public consultations with a variety of stakeholders.

However, none of the above mentioned integrated urban strategy/ action plan derive elements from transnational cooperation project?

The Action Plan that will be delivered from the work performed in the framework of the RESILIENT EUROE project is expected to focus in the most important aesthetical, environmental, economic, cultural and touristic landmark, the urbal lake front of the city.

The main target of the project is the revitalization of the urban lake front with a strong emphasis on the principles of:

1. Sustainable mobility.
2. Sustainable land uses.
3. Sustainable infrastructure and buildings.

The expected outputs from the Integrated Action Plan will focus in:

- Delivering a master plan of the urban lake front revitalization.
- Propose new design and architectural interventions in order to bring the lake water in the daily life of citizens and visitors.
- Introduce walking and bicycle along the total length of the study area.
- Design new land uses that combine recreation with touristic and cultural enhancement.
- Combine buildings and spaces in an integrated plan that delivers a new identity in the lake front area.

Urban waterfront regeneration, which is a phenomenon in global dimension, provides social, economic and environmental benefits to the community. Some of the most pronounced benefits of the urban waterfront regenerations are:

- The preservation historical and local heritage also re-use of historic building,
- The improvement of water quality and water ecology by means of the advanced management processes,
- Providing of opportunities for new uses and activities,
- Representing of new economic regeneration opportunities for declining inner city areas,
- Attracting tourists not only at the regional level, but also nationally and internationally,

- The provision of many new homes,
- Providing new jobs,
- The improvement of the environmental conditions,
- The advancement of better services of transport and social service,
- Providing of relationship between water and the city,
- Encouraging of economic investment on degraded areas,

## 3.1 Overview of the workshops that took place until today

The City of Ioannina does not have a long tradition of consultation, participation and facilitating local bottom-up experiments.

The proposed set of participating bodies and institutions, as presented below, has been a very new and fresh group of stakeholders that come together to discuss. This group built on the dynamic of a stakeholders meeting that took place for the very first time in the city, in 2015, in order to discuss, in the framework of the Integrated Territorial Development, the concept and design of the Sustainable Urban Development strategy. Some of the stakeholders that were invited and took place in the workshops include:

- The Municipality of Ioannina (with participation of its relative personnel such as policy makers, infrastructure managers, urban planners, etc.) and especially the following departments:
    - Programming and Development
    - Technical Services
    - Urban Planning Applications
- The University of Ioannina.
- The Technological Educational Institute of Epirus.
- Polytechnical universities focusing on marine projects and flood protection.
- The Technical Chamber of Greece.
- Chamber of commerce.
- The Management Body of Pamvotis Lake.
- The Ioannina Environment Protection Association.
- Architects and the School of Architecture / University of Ioannina.
- Mobility and Energy agencies, public companies operating in the transport sector or private-public enterprises managing transport or mobility related services at various levels.
- The biker's association.
- Associations and organizations for disable people.
- SMEs and associations related to food and hospitality (Restaurants, Hotels).
- Directorate of Antiquities of Ioannina
- Professional associations (e.g. Association of Merchants), in particular the ones related to trade and commerce whose members are present in the areas interested by urban logistics processes
- Retailers, distributors, wholesalers, shopkeepers, hoteliers, tourist operators, etc.
- Citizens (including residents, commuters, visitors and tourists)
- Traffic Police Department

- Sponsors, Press and Media organizations that will also be targeted in representing relevant key actors as they has the potential to influence decision makers and spread the word about city logistics procedures

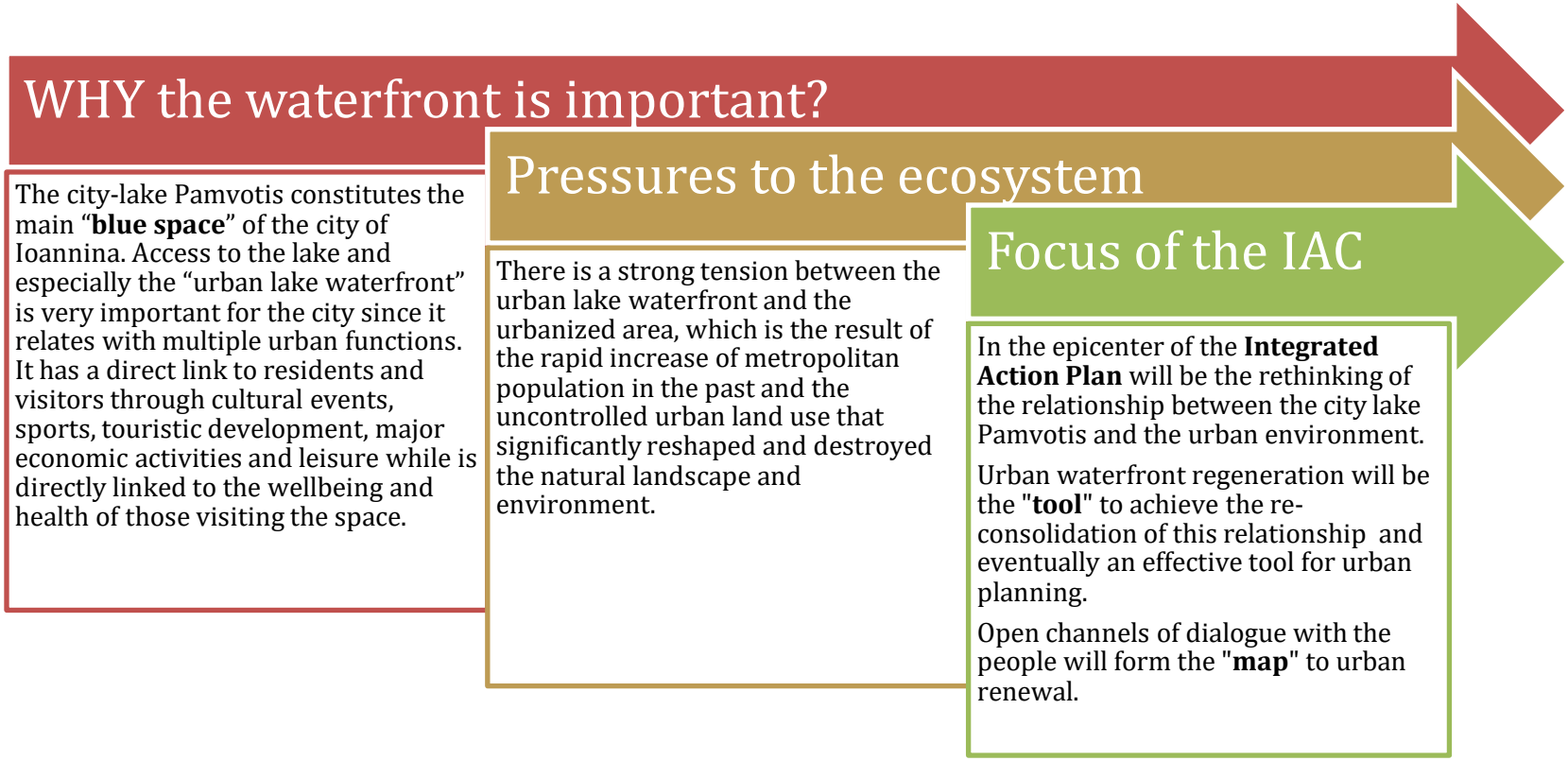
The overall aim of the work of the ULG is the activation of potential stakeholders with the aim of ensuring a fully democratic and participatory approach during the design and implementation of the RESILIENT EUROPE city strategy and eventually the IAC. The steps that the city followed included:

- Planning the process.
- Selecting and defining the topic and the area of intervention.
- Identifying key stakeholders.
- Collecting and recording information from all stakeholders

# 4. The vision of Urban Resilience (vision and objectives)

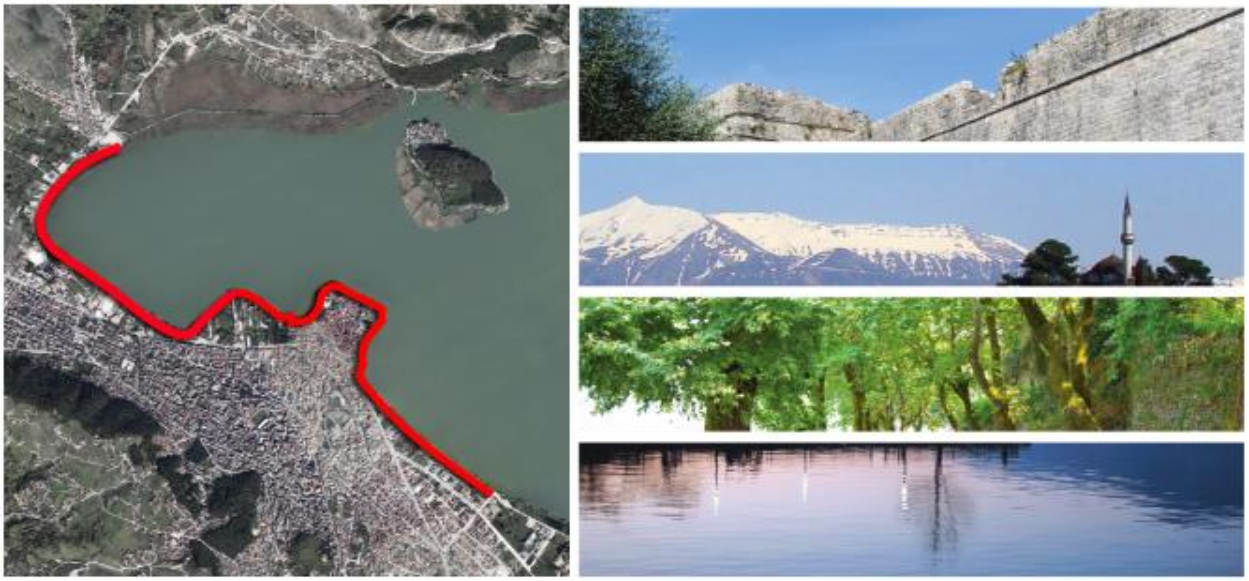
- Description of the urban resilience vision you produced in your Urban Living Lab.
- Description of the objectives operationalized from the vision statements.
- Note: See the slides from the Vision Webinar on how you derive objectives from vision statements.

### 4.1 Scope and vision of the IAC for the city of Ioannina



## 4.2 The vision

The ultimate goal is to create more than 5 kilometres of a lakefront ribbon with bike and walking paths, securing at the same time green spaces along the entire distance.



Some of the challenges that the IAC need to take into account and co-evaluate are presented here:

- Re-establish a novel relationship between water and the city.
- The preservation of historical and local heritage while highlighting all the cultural landmarks (castle, buildings, old docks and small natural and manmade harbors etc),
- The improvement of the environmental conditions and water ecology by means of the advanced management processes and the use of environmental friendly material
- Providing of opportunities for new uses and activities,
- Attracting tourists not only at the regional level, but also nationally and internationally,
- Ensuring sustainable mobility along the urban lakefront ribbon and the areas linked to it, and access to walkers, runners and bikers.
- Representing of new economic regeneration opportunities for declining inner city areas,
- Providing new jobs and especially "green jobs".
- Attracting economic investments and especially on degraded areas,
- Improve of the city's image which causes right marketing strategies.

Therefore, the urban lakefront constitutes the intersection between different aspects of urban life, community and cultural heritage. Thus, it demonstrates a great potential for becoming a central axis in a new and articulated public space for the entire city.

According to the "Urban Land Institute[1]" *Cities seek a waterfront that is a place of public enjoyment. They want a waterfront where there is ample visual and physical public access – all day, all year - to both the water and the land. Cities also want a waterfront that serves more than one purpose: they want*

[1] https://uli.org/

*it to be a place to work and to live, as well as a place to play. In other words, they want a place that contributes to the quality of life in all of its aspects – economic, social, and cultural.*

With this view in mind, the vision, can be approached as follows:


**We want an open-to-the – people lakefront, free from obstacles and constructions that distract visual and physical contact to the water body for residents and visitors.**
**We need to move along the lakefront using our feet and bike in in a car-free space**
**Finally, we need a lakefront that respects the history and the culture of the city, integrates environmental management for the lake and contributes in a positive way in the city's economic situation.**

**The city of Ioannina seeks to re-invent its urban lake waterfront as a place of public enjoyment.**

### 4.3 Main components of the vision

A sustainable vision for a large regeneration project needs to take into account the following ingredients, as they were pointed out by workshops and living labs, where residents, institutions and the local authorities opened a detailed dialogue:

1. Reconnect the lake (water body) and the waterfront to the urban fabric without creating discontinuities.
2. Create high quality green and blue spaces, open to the public.

3. Respect the historic identity of the city and the lakefront by integrating existing cultural and historic landmarks as well as providing new spaces for new cultural activities.
4. Provide sound environmental management through novel processes and materials integrated in the urban planning process.
5. Maximize accessibility for pedestrians and bikers:
    a. Maximize accessibility to the lakefront by providing physical linkages to the urban core.
    b. Maximize accessibility along the lakefront by creating bike and pedestrian routes safe from cars and vehicles
6. Render the regeneration planning and implementation phase a community matter by creating a sense of "common ownership". This will be achieved through an on-going dialogue with all potential stakeholders.
7. Do not design with excessively commercial-tourist functions only in mind. On the contrary, promote a mixed use that aims at the highest social, ecological and economic result.

# 5. Pathways to Urban Resilience (actions for people, places, institutions)

- Description of pathways as mixes of actions over time. Identification of who (which actors) can contribute in realizing every pathway.
- Note: See slides from the Pathways Webinar on how you create pathways from your workshop on actions in your Urban Living Lab.
- Tip: You need at least 3-5 pathways of action. You may have one pathway per urban resilience theme (people, places, institutions) but you may also have more integrative pathways that address different themes at the same time.
- Describe the experiment or experiments you plan to try out. Describe how the experiment or experiments relate to the pathways you described above.

There are many pathways from a non-resilient urban system to urban resilience, in order to ensure, in the long run, resilience in ecological, economical and social terms. Some of the pathways are direct (e.g. investments in green and blue infrastructure) and some pathways are more indirect (like being able to bike in the city that makes people feel happier, healthier and eventually able to cope with stresses and acute shocks).

## 5.1 Ecological resilience:

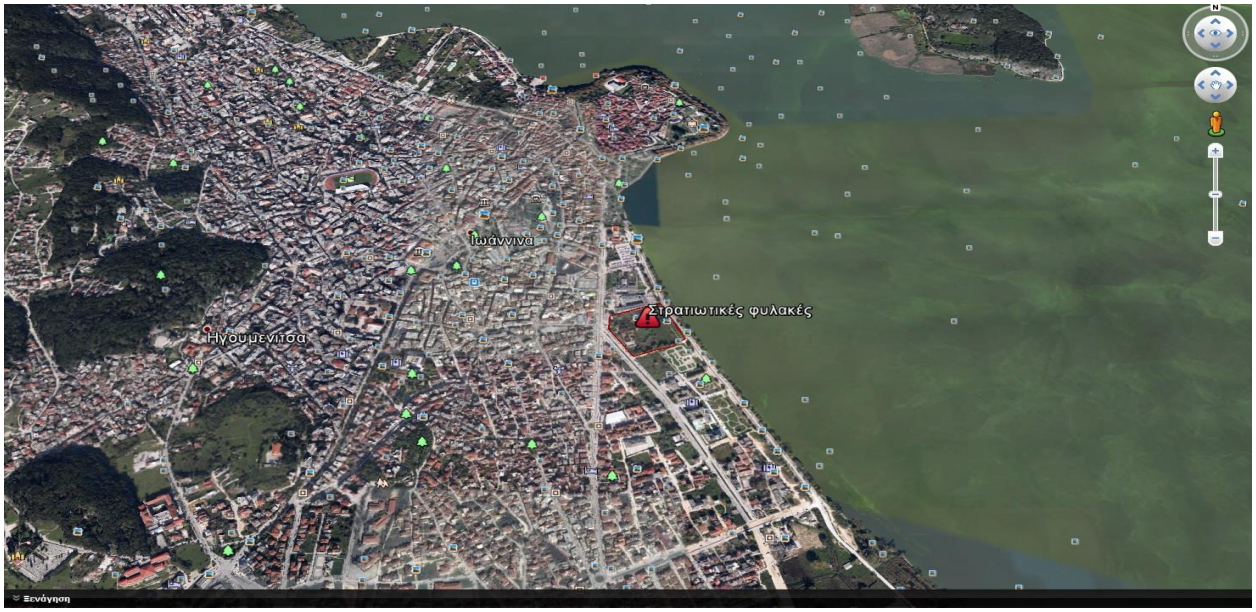
**Large, green infrastructure projects**

Green infrastructure has multiple definitions within a common understanding of the system under scrutiny. Therefore, a simple definition will be used here to pinpoint some of the major steps that the city of Ioannina is willing to take towards urban resilience. This definition includes relies on green infrastructure seen as large green spaces that can be seen as an interconnected network of green spaces that conserve natural ecosystem values and functions and promote biodiversity in the city.

Therefore, here we present

1. **Old military prisons**

The vacant of the “old military prisons” stands right between the border of the urban fabric and the lakefront. Therefore, it constitutes a manmade obstacle for people moving to and from the lake. This public space has the dynamic to become a high quality green space with unlimited accessibility.




The space that stands right between the lake and the city is a public space of approximately 20.000 sq. m. ($m^2$). The city of Ioannina secured funding from the National Operational program "Mobility Infrastructure, Environment and Sustainable Development" (ERDF) a significant budget in order to regenerate the area while at the same time respect its cultural and historic value by preserving the buildings of the "park".

At the moment, in the park, several informal activities take place. There is a soccer field and there is also space for homeless people and stray dogs. Therefore, the space has to be delivered to the people in a democratic and transparent way. The city has organized an open, architectural competition while the best proposals will be put in a public consultation process.

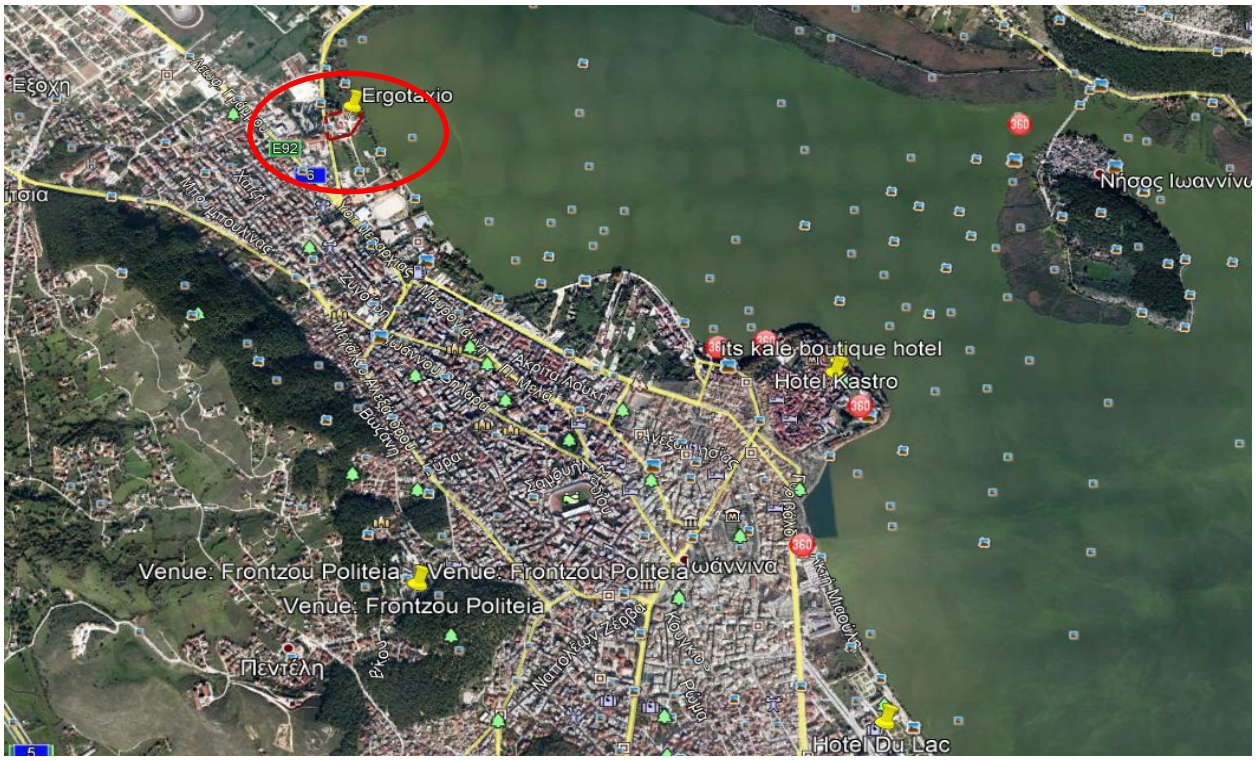
## 2. The building complex of Center of "Traditional Industry of Ioannina" (KEPAVI)

Focusing in the study area, there is an example of critical infrastructure that needs to become resilient. In particular, the Traditional Crafts Centre of Ioannina, is a building of 10,000 sq.m. Approximately, only a surface 1.000 sq.m. is covered by silversmith workshops, museum, cultural hall, cafe - restaurant and of course the Gas Products Retail Sale Silversmithing. More recently, the MoI has transferred some of its Social Services there. This fact means that a building of roughly 9.000 sq.m. is left unused. This, combined with the fact that the building is located next to the lake, create a sense of abandonment.


Furthermore, due to the large surface unused, the building can be used for a variety of reasons. Also, given the fact that it is located next to the Lake Pamvotis, the area of the study, offers to the building a unique identity. There is a strong debate in the city about the Functional unification of the Municipality's services in this building, since there is enough space to accommodate them. Moreover, given the geographical spot and its surface, the building can accommodate entrepreneurial activities and

The Municipality of Ioannina has already initiated a process in order to regenerate the entire complex and turn it into a modern, energy efficient complex of buildings that will be used as the Municipal administration headquarter. Given the fact, that the municipal services and offices are located in the city center, the new headquarters will operate as the critical "glue", which, on one hand will bring employees in one, common working space, while on the other hand it will bring citizens closer to the lake.

### 3. The removal of the Municipal Technical Service Facility from the lakefront

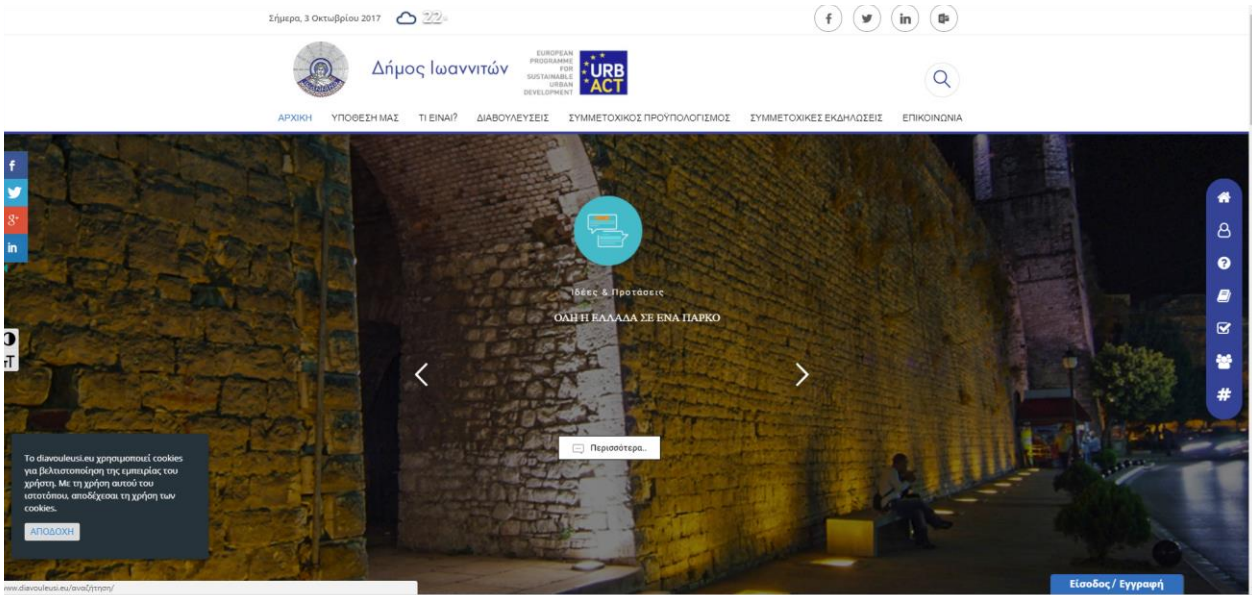



The removal of the Municipal Technical Service Facility from away from the lakefront is a bet for the Municipality of Ioannina. The reason is that on this site all the vehicle and waste collection equipment services and repair take place. This can cause serious damage and pollution to the lake ecosystem. Actions are put in place for the removal of this facility. After the removal, the site will be completely remediated and green space will be created.

## 5.2 Institutional resilience

For the 1st time, the Municipality of ioannina created a platform for public dialogue:

http://www.diavouleusi.eu/




Inspired by the Resilient Europe project the Municipality of Ioannina introduced the **Participatory budget mechanism**. It is an open, democratic process in which community members directly decide how to spend part of the municipal budget on a grassroots level. Its basic principle lies in strengthening engagement by involving citizens and civil society groups in local governance and common ownership of the municipal budget.

In this context, the Municipality of Ioannina launched an unprecedented process and invited all citizens to submit their own ideas for projects and to decide the cost of each idea. The proposed projects can have a broad thematic scope as long as they meet the following targets:

1. Tto improve day-to-day life
2. Propose projects that enhance urban resilience
3. Eventually, upgrade the public services provided by the municipality to residents and businesses.

Securing the success of the Participatory Budget program, EUR 200.000 out of the budget of the Municipality of Ioannina will be dedicated in order to implement the proposals that will be evaluated as the most complete and the most effective.


Σήμερα, 3 Οκτωβρίου 2017
Δήμος Ιωαννιτών
ΑΡΧΙΚΗ
ΥΠΟΘΕΣΗ ΜΑΣ
ΤΙ ΕΙΝΑΙ?
ΔΙΑΒΟΥΛΕΥΣΕΙΣ
ΣΥΜΜΕΤΟΧΙΚΟΣ ΠΡΟΫΠΟΛΟΓΙΣΜΟΣ
ΣΥΜΜΕΤΟΧΙΚΕΣ ΕΚΔΗΛΩΣΕΙΣ
ΕΠΙΚΟΙΝΩΝΙΑ
#simmetoxikos_ioannina
#ioannina #diavouleusi_ioannina
#thisisepirus
Δήμος Ιωαννιτών
European Union
European Regional
Development Fund
RESILIENTEUROPE
Είσοδος / Εγγραφή

# 6. Monitoring and assessing the progress towards urban resilience

In order to monitor and assess the progress towards urban resilience it is vital to realize the level of readiness and understand the way citizens feel about the level of urban resilience. In this way we will be able to assess the results of the process of building resilience and also find out if the city is on the right path with the actions planned.

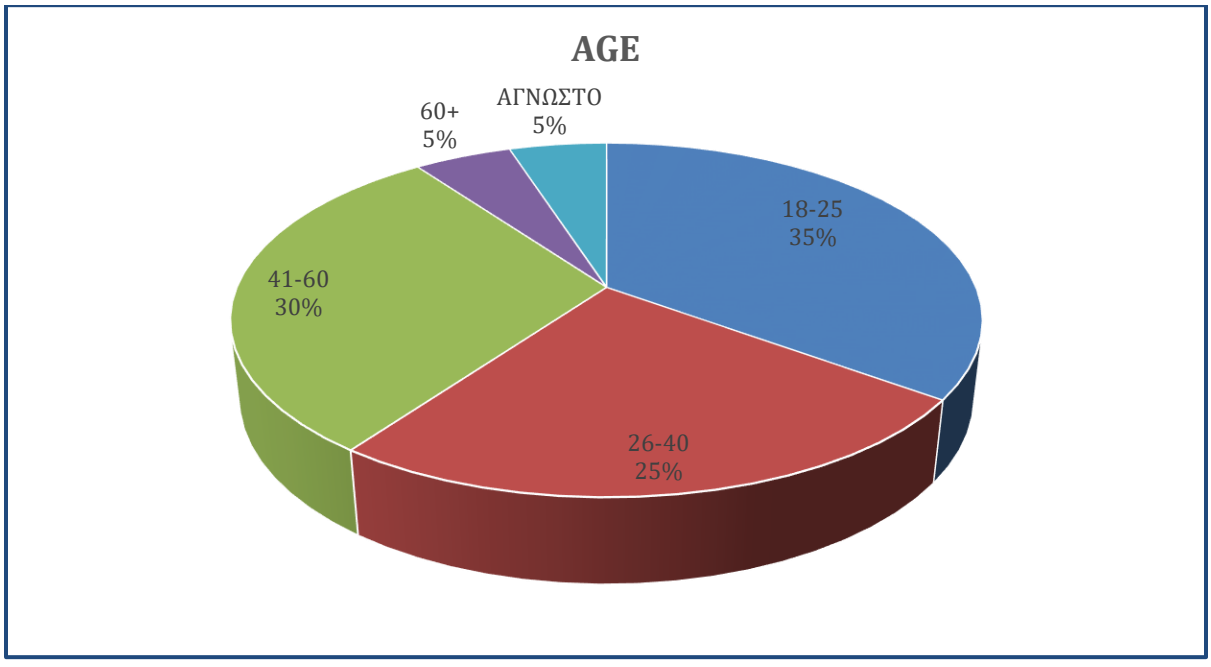
Here we present the results of a structured questionnaire that we used to assess the current situation and understand the citizen's perception for the space

## 6.1 Description of persons participating in the Survey

**Living Labs - Total Questionnaires= 20**

| | | | | | | |
|---|---|---|---|---|---|---|
| **AGE** | **18-25** | **26-40** | **41-60** | **60+** | **Unknown** | |
| | 7 | 5 | 6 | 1 | 1 | |
| | **35,00%** | **25,00%** | **30,00%** | **5,00%** | **5,00%** | |
| **PROFESSION** | **Public employee** | **Private employee** | **Freelance** | **Retired** | **College Student** | **Unknown** |
| | 2 | 2 | 7 | 1 | 7 | 1 |
| | **10,00%** | **10,00%** | **35,00%** | **5,00%** | **35,00%** | **5,00%** |

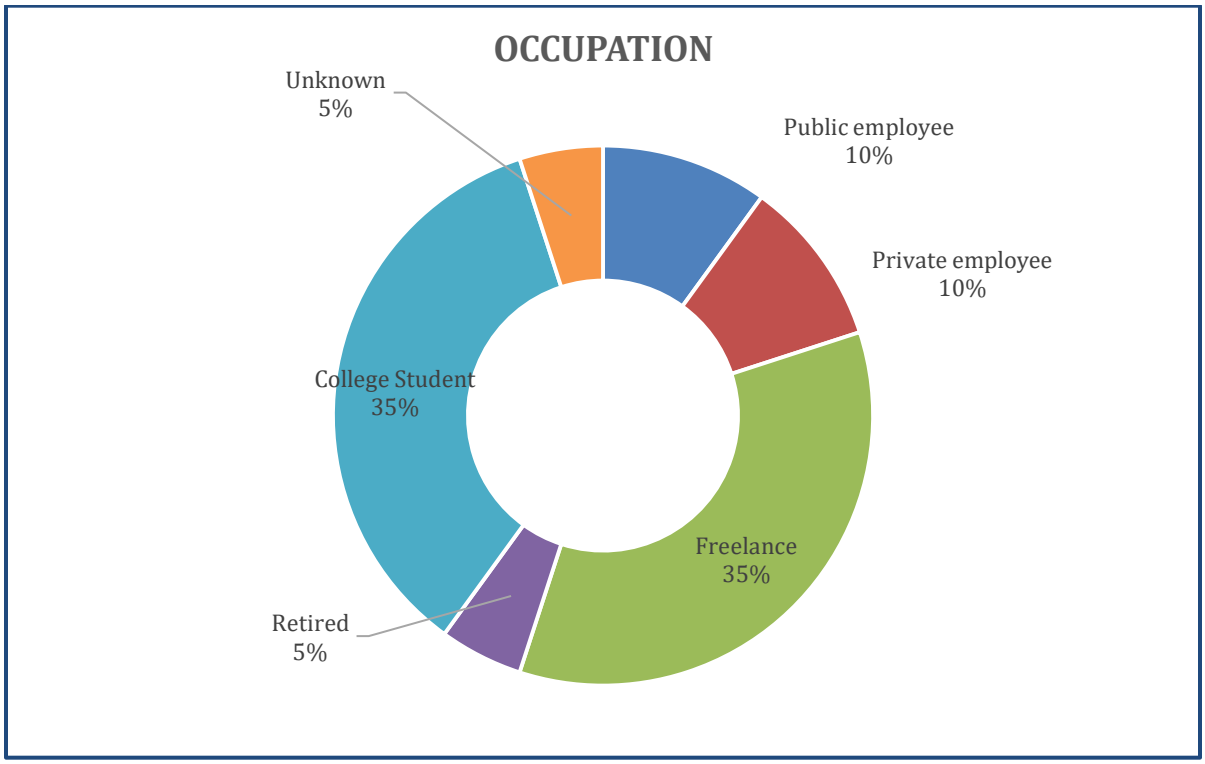
As far as the age range of the participants is concerned, it can be observed that 90% is under 60 which means that we refer to active citizens. 60% of the participants were under 40 years of age.



The distribution of the participants per occupation included the following categories:

- Public employee
- Private employees
- Freelance
- Retired
- College
- Student
- Unknown

From the abovementioned categories self-employed and students were the most numerous categories constituting 35% of the sample.



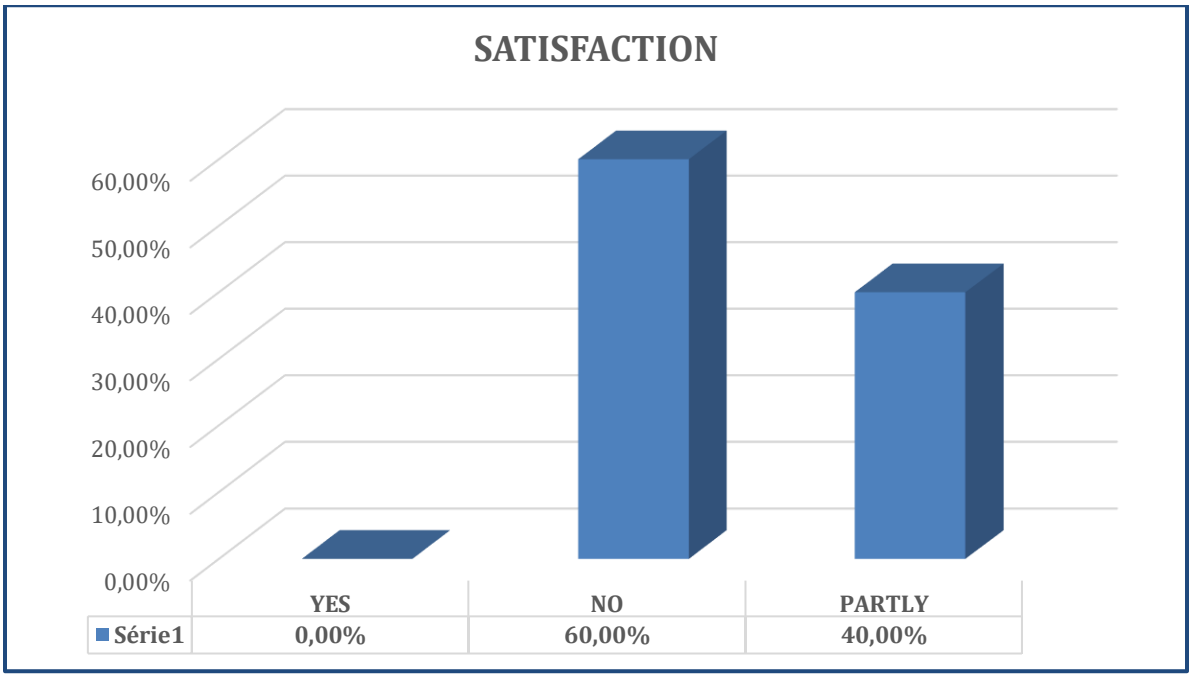

## 6.2 Evaluation of the people's perception for the urban lakefront

The questionnaire was formed of a total of 11 questions:

6.2.1 Overall image of the urban lake waterfront

**The primary question** focused on the overall image of the urban lake waterfront:

| Question | YES | NO | PARTLY |
|---|---|---|---|
| Are you satisfied with the overall image of the urban lake waterfront | 0 | 12 | 8 |
| | 0% | 60% | 40% |

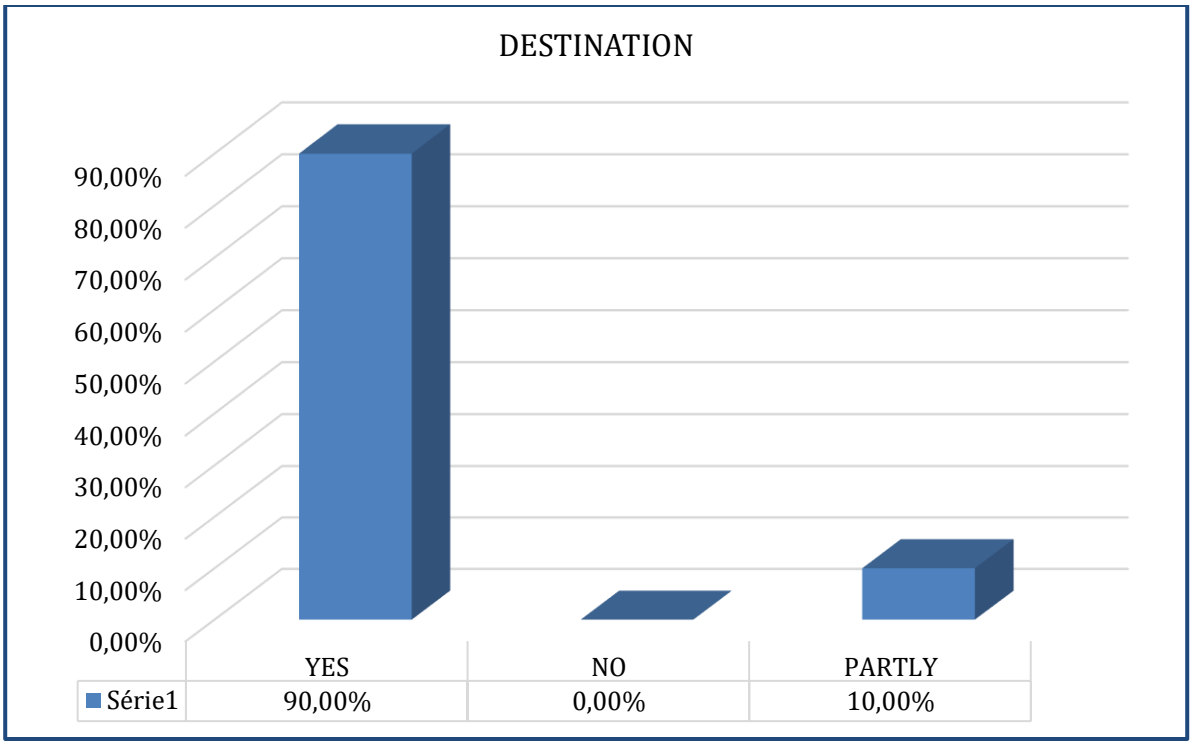



It is absolutely clear that no one is completely satisfied with the overall image of the urban lake waterfront. This clearly implies that targeted interventions are needed.

6.2.2 The urban lake waterfront as a destination

The second question clarified the use of the urban lake waterfront in reference to those asked. The total of those asked stated that they use the space as a destination

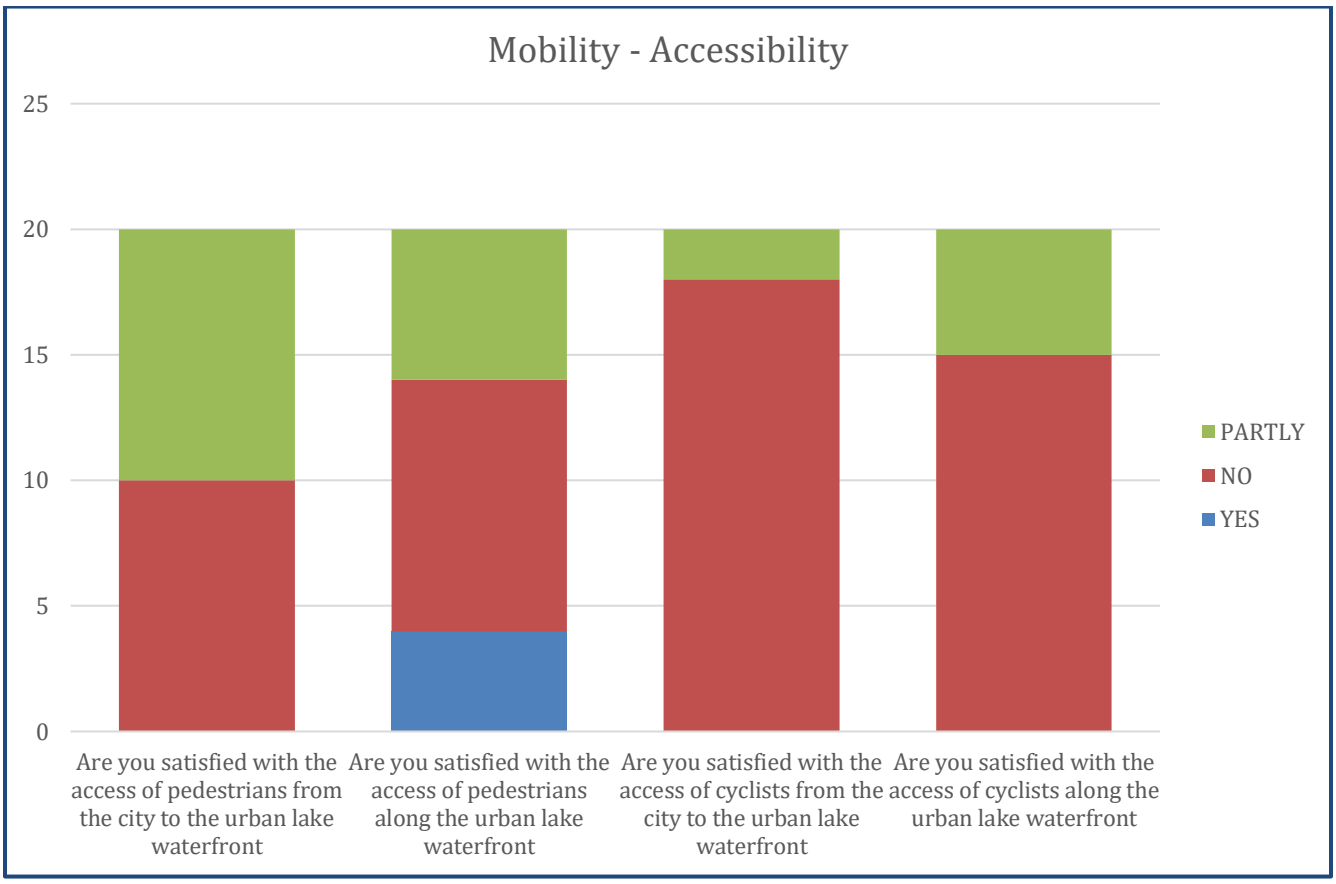
| Question | YES | NO | PARTLY |
|---|---|---|---|
| Is the urban lake waterfront a "destination" for you | 18 | 0 | 2 |
| | 90.00% | 0.00% | 10.00% |




6.2.3 Mobility and Accessibility in the urban lake waterfront

The next 4 questions focused on mobility and accessibility mainly for pedestrians and bikers along the urban lake waterfront

| Question | YES | NO | PARTLY |
|---|---|---|---|
| Are you satisfied with the access of pedestrians from the city to the urban lake waterfront | 0 | 10 | 10 |
| | **0,00%** | **50,00%** | **50,00%** |
| Are you satisfied with the access of pedestrians along the urban lake waterfront | 4 | 10 | 6 |
| | **20,00%** | **50,00%** | **30,00%** |
| Are you satisfied with the access of cyclists from the city to the urban lake waterfront | 0 | 18 | 2 |
| | **0,00%** | **90,00%** | **10,00%** |
| Are you satisfied with the access of cyclists along the urban lake waterfront | 0 | 15 | 5 |
| | **0,00%** | **75,00%** | **25,00%** |




In regards to **pedestrians** the participants stated that no one is satisfied with the access from the city to the lake waterfront. Moreover, just 20% stated satisfied with the access along the lakefront.

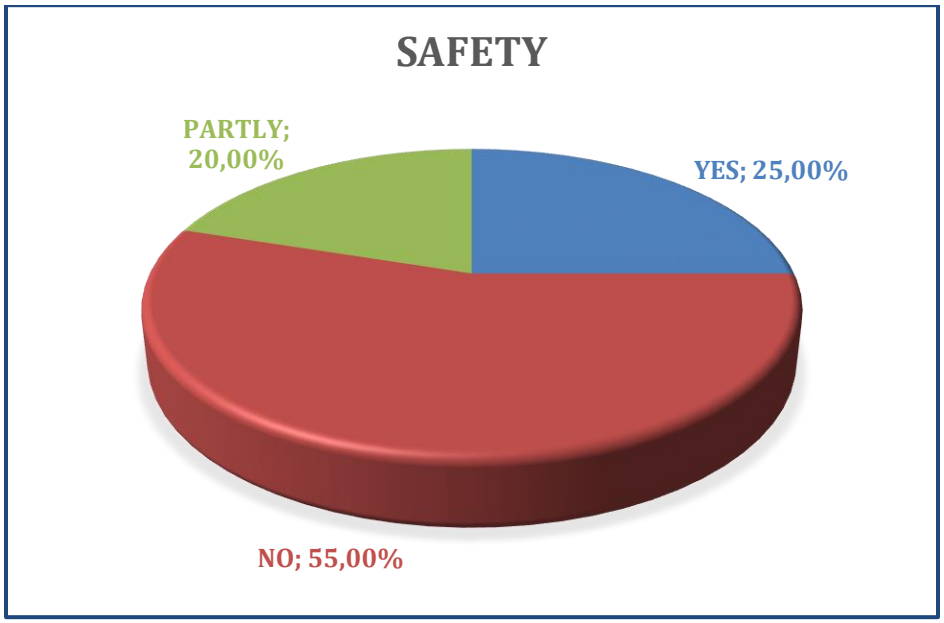
Bikers stated that the lakefront is not accessible. Specifically, they stated that only 10% think that can access from the city to the lake while only 25% find the pathway along the waterfront accessible. Therefore, accessibility turns into a major issue.

| QUESTION | YES | NO | PARTLY | COMMENTS FROM PARTICIPANTS |
|---|---|---|---|---|
| Can you easily approach the area on foot? | 10 | 4 | 6 | Movement is particularly difficult for those moving with babies and strollers |
| | **50,00%** | **20,00%** | **30,00%** | |
| Can you easily approach the area with a bike? | 1 | 16 | 3 | There is no connection of the area with the city. Therefore, movement from the city to the lake is very difficult and unsafe |
| | **5,00%** | **80,00%** | **15,00%** | |
| | 1 | 16 | 3 | - |

| QUESTION | YES | NO | PARTLY | COMMENTS FROM PARTICIPANTS |
|---|---|---|---|---|
| Can you easily approach the area with public transportation? | 5,00% | 80,00% | 15,00% | |
| Are there obstacles in moving from the city to the lake and along the lakefront? If yes, please state some of them. | 17<br>85,00% | 3<br>15,00% | 0<br>0,00% | There is no public transportation till the castle (cultural milestone of the area).<br>Damages to the pavements.<br>The bikepath is damaged and interrupted.<br>There are no places for parking for visitors.<br>There is significant lack of lighting.<br>Big numbers of cars that create problems for pedestrians and bikers |
| Can disabled people move freely from the lake to the lake? If yes, please state some of them. | 0<br>0,00% | 17<br>85,00% | 3<br>15,00% | There are no ramps and special infrastructure to the roads and pavements. Only in certain and isolated places access is feasible. |

6.2.4 Sense of security in the urban lake waterfront as a destination

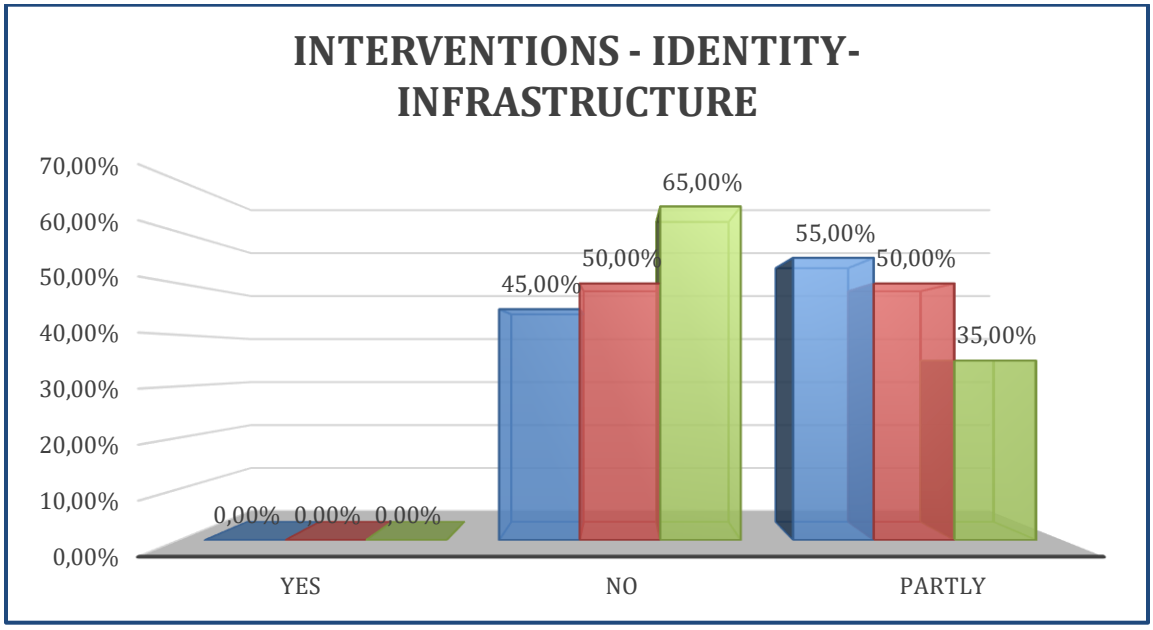
In regards to the **sense of security** especially during the night, 55% of those questioned stated that they do not feel safe.



6.2.5 Level of satisfaction

Next 3 questions focused in the level of satisfaction of those questioned in regards to the necessary **interventions**, existing **infrastructures** and the **identity** of the urban lakefront. None of the participants hold a positive opinion towards this 3 issues.

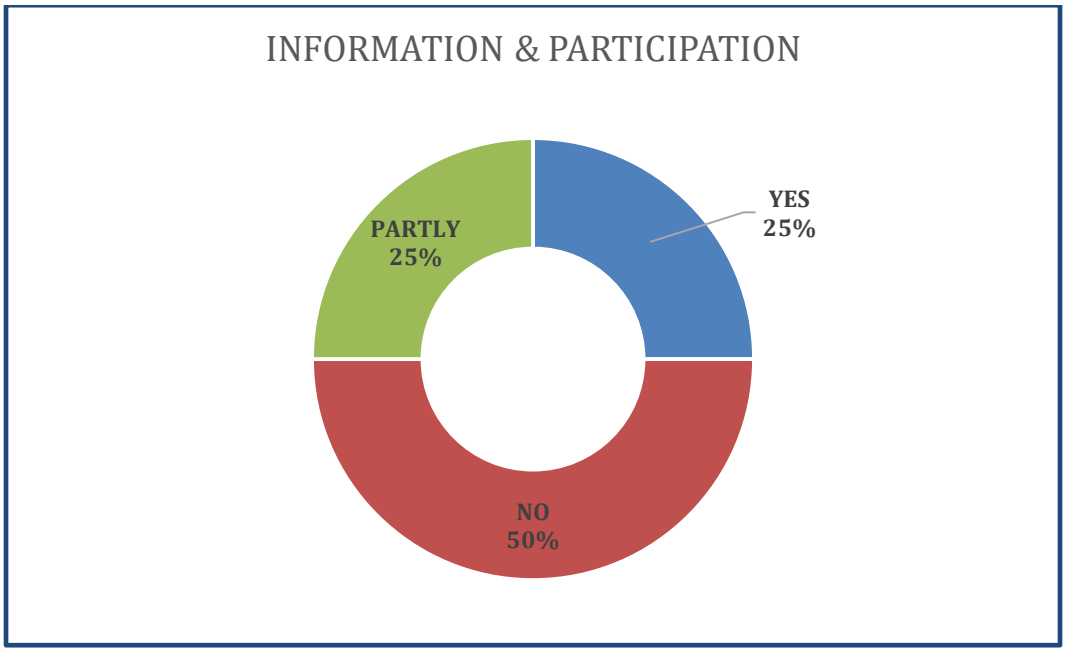
| QUESTIONS | YES | NO | PARTLY |
|---|---|---|---|
| Are you satisfied with the regeneration interventions that take place in the lakefront? | 0 | 9 | 11 |
| | **0.00%** | **45.00%** | **55.00%** |
| Are you satisfied with the infrastructure of the lakefront? | 0 | 13 | 7 |
| | **0.00%** | **65.00%** | **35.00%** |
| Are you satisfied with the identity of the lakefront? | 0 | 10 | 10 |
| | **0.00%** | **50.00%** | **50.00%** |




6.2.6 Level of citizen's engagement

This section was about how satisfied citizens feel about the level of information and access to the process of designing solutions and decision-making. Results show that there is a sense of satisfaction. However, 50% replied that they need more information and active participation

| QUESTIONS | YES | NO | PARTLY |
|---|---|---|---|
| Are you satisfied with the level of information and access to the planning and decision-making process for interventions on the lakeside front? | 5 | 10 | 5 |
| | 25.00% | 50.00% | 25.00% |

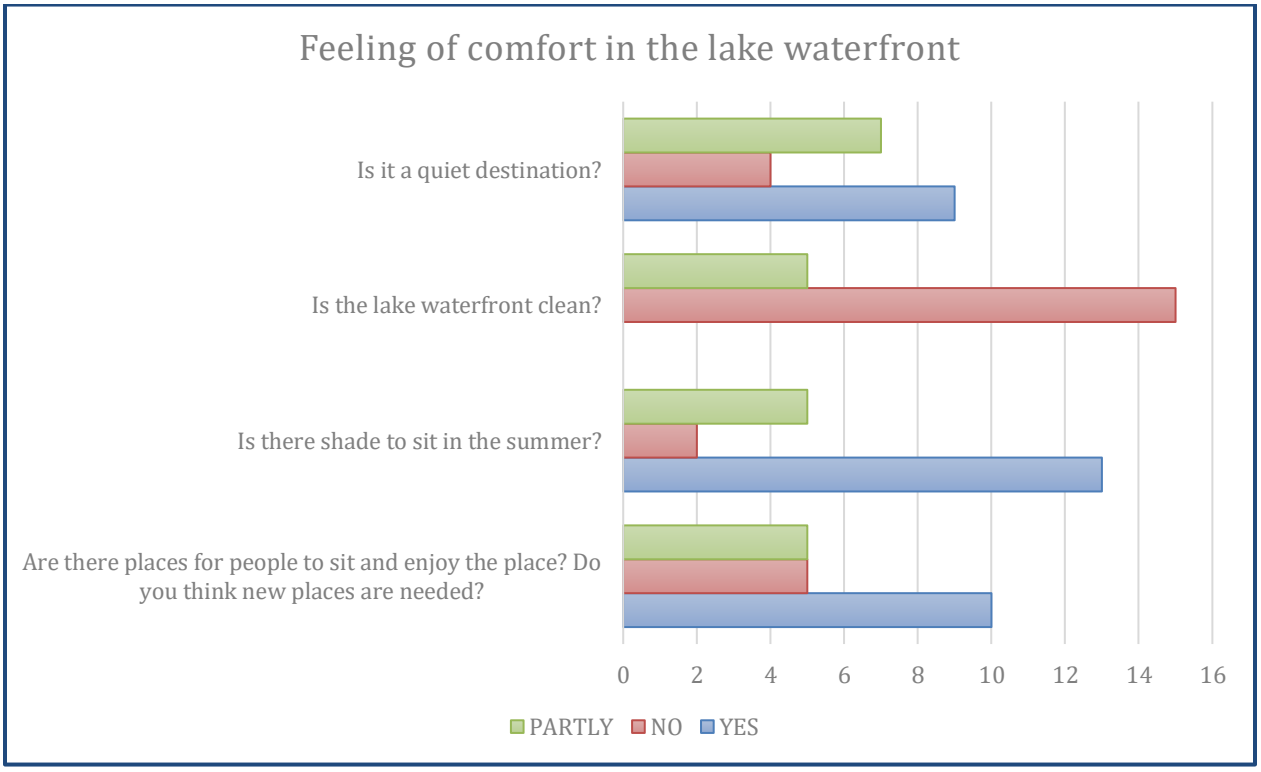



6.2.7 Feeling of comfort in the lake waterfront

Regarding the question, is there enough space for someone to sit and enjoy the space. Moreover, they were asked if they need new spaces. Based on these questions the citizens expressed opinions about proposed actions towards the direction of comfort and relaxation in the area:

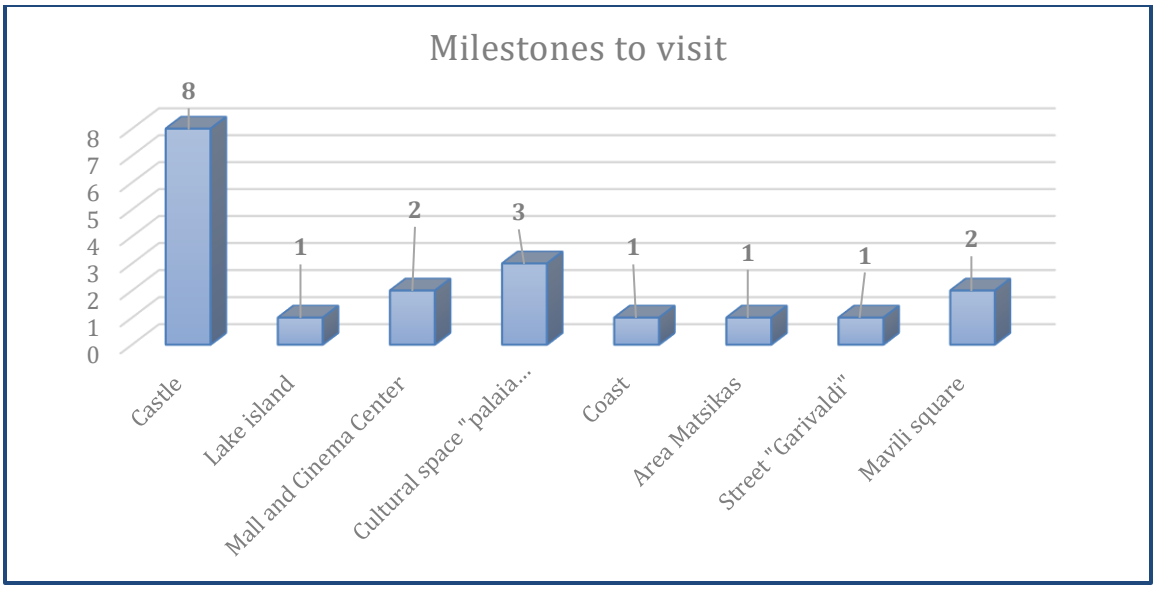
| ΕΡΩΤΗΣΗ | ΝΑΙ | ΟΧΙ | ΜΕΡΙΚΩΣ | ΣΧΟΛΙΑ |
|---|---|---|---|---|
| Are there places for people to sit and enjoy the place? Do you think new places are needed? | 10 | 5 | 5 | The existing ones are few, broken and wrongly oriented. New seats are needed.<br>Modern spaces should be created with the incorporation of technological elements and be very used for multi-purposes. |
| | 50,00% | 25,00% | 25,00% | |
| Is there shade to sit in the summer? | 13 | 2 | 5 | |
| | 65,00% | 10,00% | 25,00% | |
| Is the lake waterfront clean? | 0 | 15 | 5 | |
| | 0,00% | 75,00% | 25,00% | |

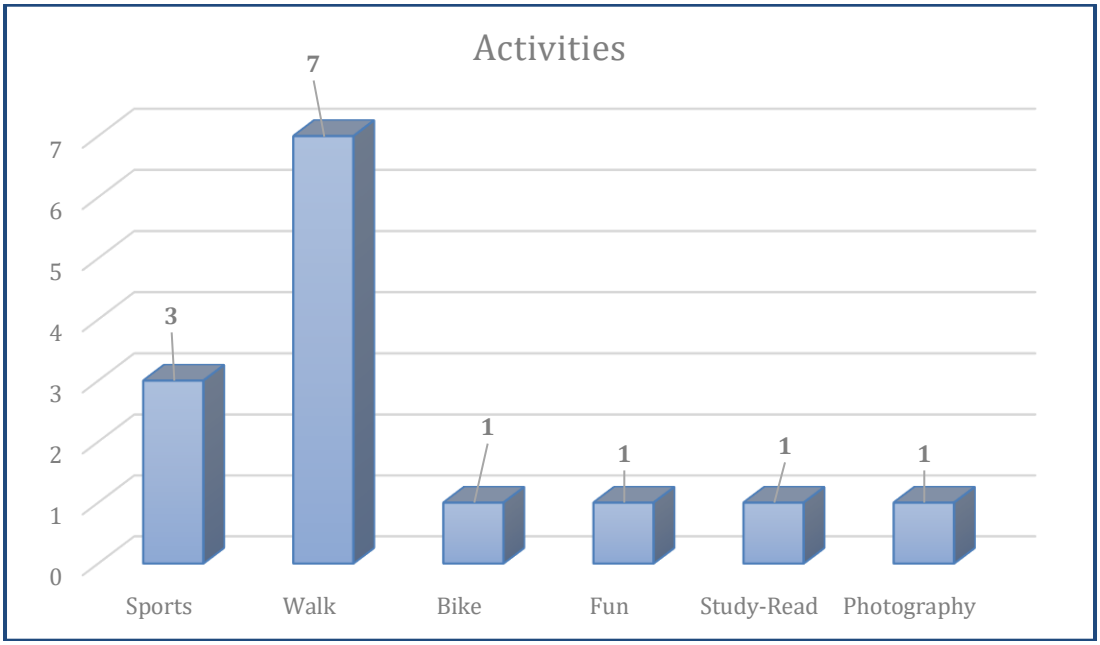
| ΕΡΩΤΗΣΗ | ΝΑΙ | ΟΧΙ | ΜΕΡΙΚΩΣ | ΣΧΟΛΙΑ |
|---|---|---|---|---|
| Is it a quiet destination? | 9 | 4 | 7 | It is quiet in places where there are not many tourists and during the winter months. There is a lot of noise caused by cars. |
| | 45,00% | 20,00% | 35,00% | |




6.2.8 Which places and why do people visit the lake waterfront

To complete the analysis we asked citizens to tell us what are the main locations (geographical milestones) that they visit and what are the main activities performed in the artea.



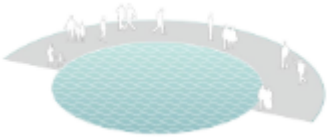




## 7. Experimenting for urban resilience

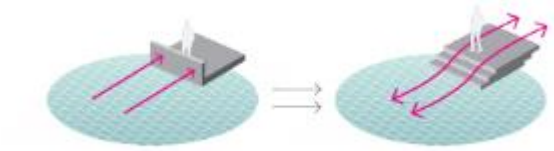
The city of Ioannina has not yet conducted an experiment. Therefore, in this chapter we describe the planning activities that took place during this period as well as the solutions presented focusing in turning the urban waterfront into a more resilient place, incorporating the concerns of the citizens as they were developed during the Living Labs and ULGs.

In this chapter the city is exploring a new master plan for the urban waterfront. This master plan is a result of the participatory approach produced by the RESILIENT EUROPE project.

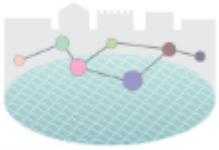
## 7.1 The key design objectives



Creation of a vibrant lakefront
for the citizens of Ioannina & all visitors



Restoration of the citizens'
experiential relationship with the lake



Reconnection of the city with the lake

Ecological approach

## 7.1 Design principles and challenges

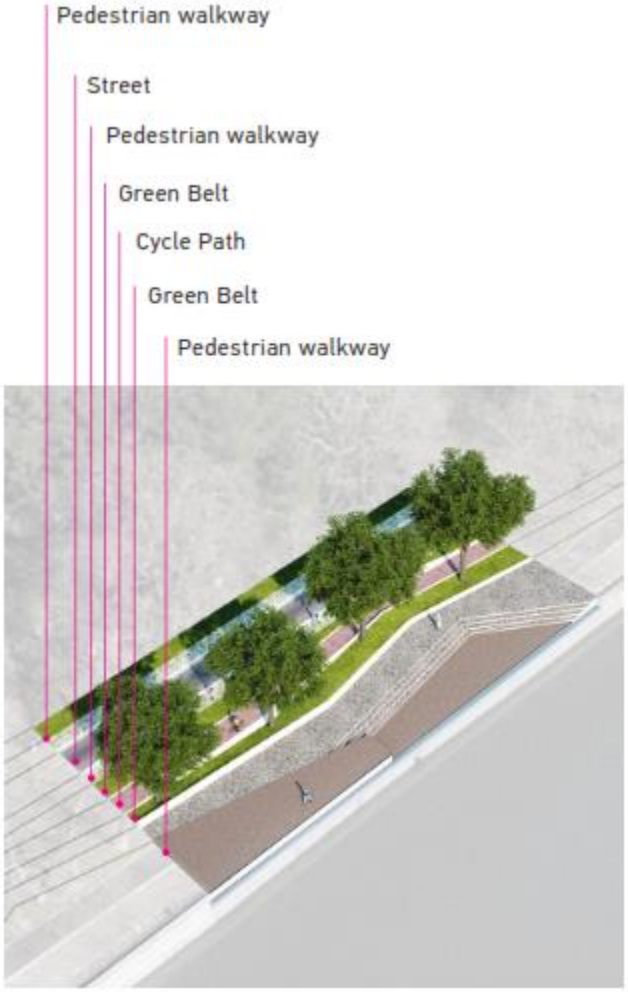
The challenges involved in the re-design of the area under study included:

- Successful organisation and integration of various existing elements (infrastructure and natural assets) as well as mobility paths (vehicular, pedestrian, cycling).
- Accommodation of various uses and needs
- Connection and integration of the urban fabric

The General strategy of the design was based on the following principles:

- Restoration of the natural & visual contact with the water
- Pedestrian priority. Sufficient space for safe and comfortable pedestrian movement and resting as well as sports activities
- Safe and comfortable cycle path surrounded by green belts, featuring appropriate entrance/exit points
- Formation of a low traffic street

**Challenges and principles in re-approaching the design of the urban lakefront**

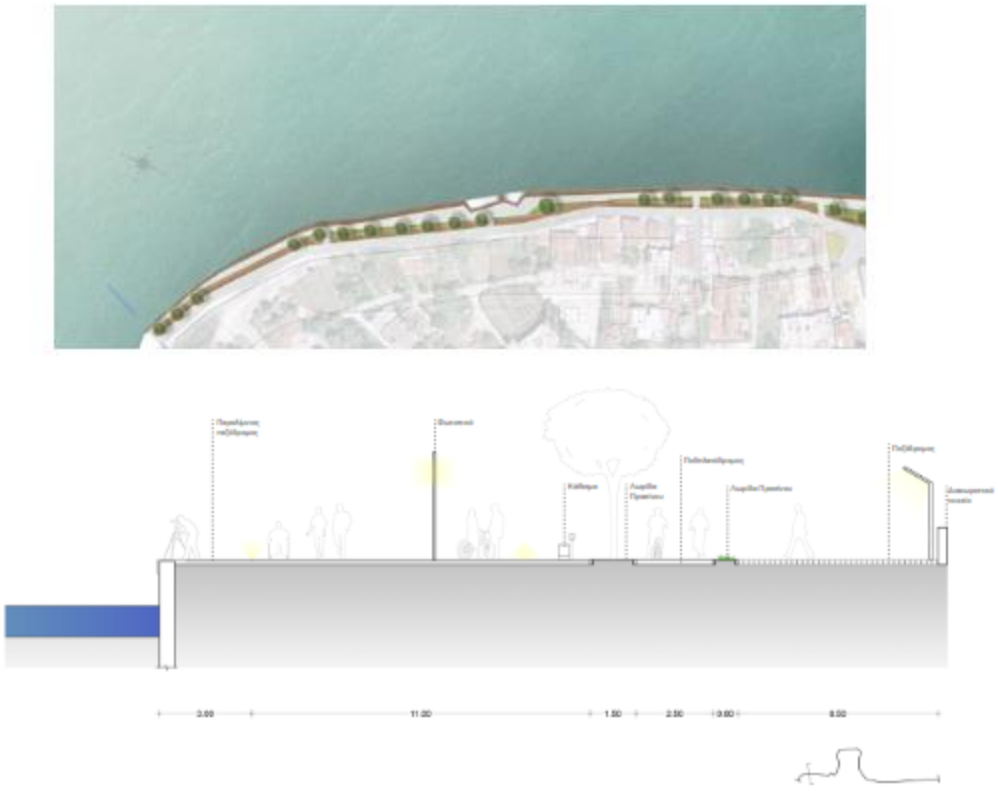



## 7.2 Development Proposal for the wider area

7.2.1 Area: From Matsikas to Mavili Park

Main challenges and design principles in this area involve:

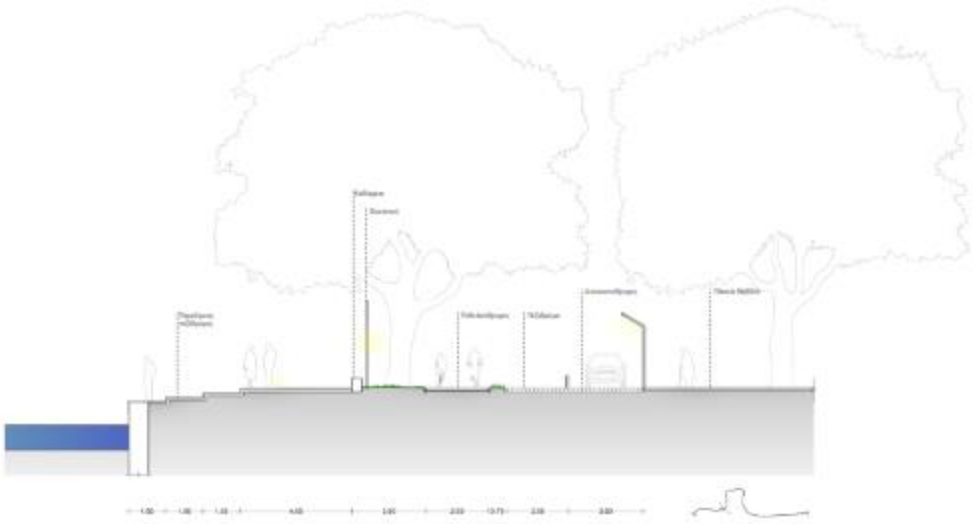
- Attribution of the wider lakefront area to the unobstructed use of pedestrians and cyclists
- Removal (or relocation) of the street leading to the repositioning of the seating areas close to the built zone
- Localised development of the area as an observatory
- Shaping of rest areas and seating spots



7.2.1 Area: From Mavili Park to Karamanli Avenue. / Dionysiou Philosophou

Main challenges and design principles in this area involve:

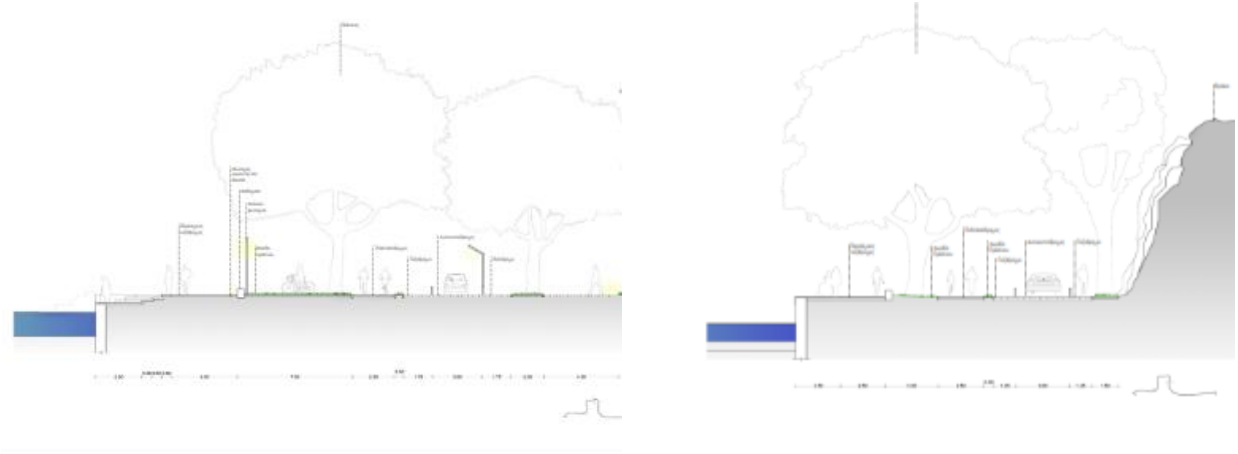
- Unification of Mavili Square with the lakefront
- Redevelopment of Mavili Park
- Creation of a small harbour for sports activities (sailing) & recreation
- Enhancement of vegetation
- Creation of a seating area overlooking the lake



7.2.3 Area: From Karamanli Av./Dion. Philosophou to The Castle's Southern Entrance

Main challenges and design principles in this area involve:

- Creation of seating points next to the Castle wall
- Morphological enhancement and highlighting of the Castle's entrance points
- Creation of controlled drop-off points for large touristic vehicles
- Restoration of the area's original relationship with the lake, by degradation of the existing configurations



7.2.4 Area: From the Castle's Southern Entrance to Miaouli Shore

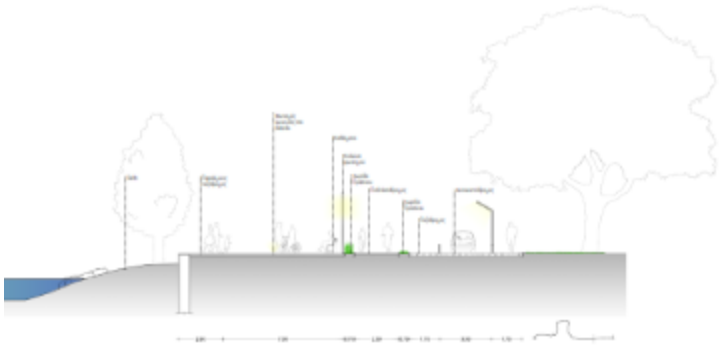
Main challenges and design principles in this area involve:

- Creation of new axes for the highlighting of the Castle's main entrance
- Redesign of the existing car park
- Creation of controlled drop-off points for large touristic vehicles
- Connection of the area with the existing Tampakika Park
- Water treatment and redevelopment of the small harbour for sports activities (paddling)

7.2.5 Area: From the start of Miaouli Shore to Vogianou St.

Main challenges and design principles in this area involve:

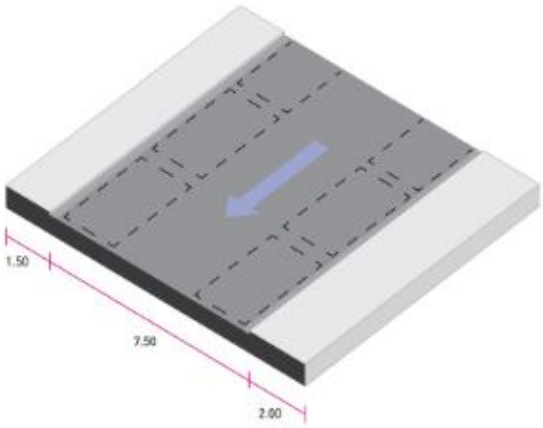
- Restoration of the shore to its original state, without landfill
- Water treatment and overall aesthetic improvement of the shore
- Large & comfortable pedestrian walkways & cycle paths
- A linear route with interesting landscaping variations
- Connection to the urban fabric and the area's uses

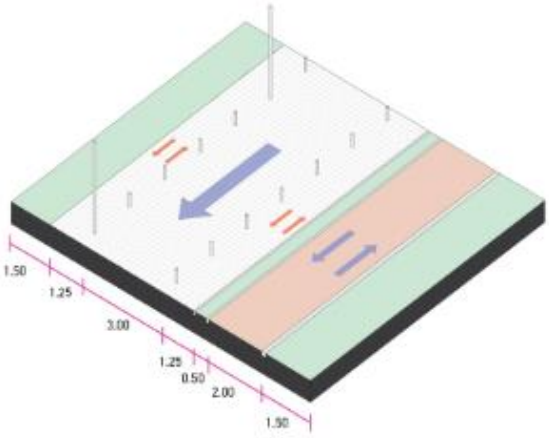


## 7.3 Proposed Interventions on the Transportation Network

Main challenges and design principles in this area involve:

- Minimisation of parked vehicles on the streets' sides
- Attribution of the lakefront area to pedestrians and cyclists
- Reorganisation of existing car park areas
- Creation of new car park areas
- Potential routing of a small electric  bus



7.3.1 Proposed transportation interventions by area


Alternative 1

- Street removal
- Relocation of vehicular movement at Str. Papagou St.
- New car park area

Alternative 2

- Shaping of a new street at the lakefont level
- Use of concrete blocks


- Two-way street
- Width at 5,50m
- Use of concrete blocks, at the same level with the wider intervention


- One-way street
- Width at 3,20m
- Car parking strictly prohibited
- Use of concrete blocks, at the same level with the wider intervention


Maintained as-is


- Creation of a one-way service street
- Car parking strictly prohibited
- Use of concrete blocks, at the same level with the wider intervention

## 7.3 PROPOSED LANDSCAPE DESIGN INTERVENTIONS: A GREEN MOSAIC

General strategy of the proposed landscape interventions

- Protection of the natural settings and biodiversity
- Enhancement of the natural, historical and cultural elements of the lakefront area.
- Resilience of the lakefront area towards future change.
- Servicing of public, open-air activities with a simultaneous protection of the environment.
- Co-integration and merging of urban and natural elements.
- Naturalshading with the use of self-seeded vegetation and new compatible species.
- Creation of median vegetation belts between land and water surfaces (water gardens).

**Landscape Intervention Goals**

**Area-by-area management**

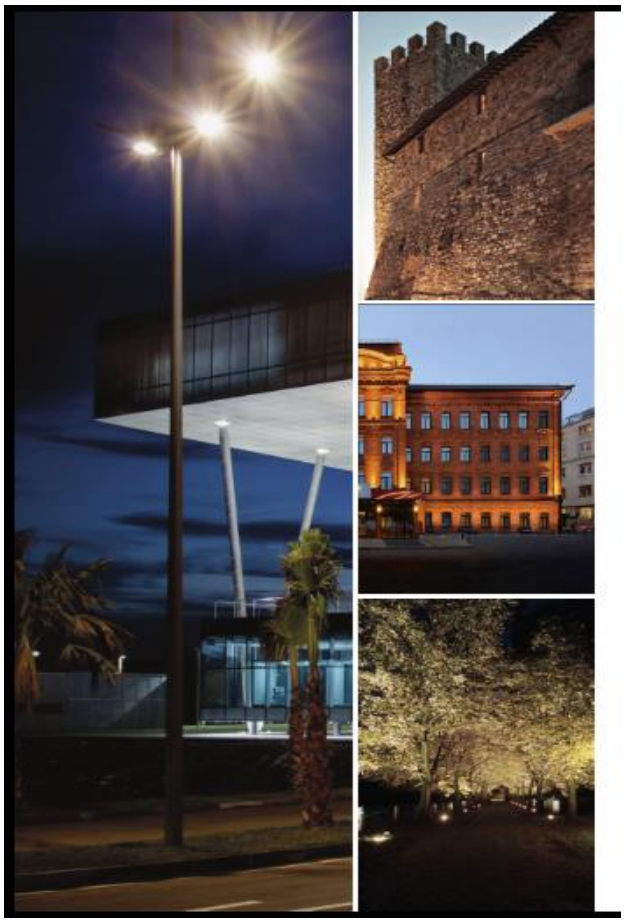
- Enhancement of the natural, historical and cultural special characteristics of the area
- Improvement of the urban microclimate and the city's relationship with the lake

**Green Mosaic**

- Tall trees
  Willow, Populus, Sycamore tree, Sweetgum, Tulip tree
- Indicative shrubbery
  Reed beds, papyrus, fern
- Herbaceous & groundcover
  Spearmint, Agapanthos, Maiden Hair Fern, Vinca
- Aquatic & floating plants
  Lemna minor, Potamogeton, Water Lily, Iris, Water Fern, Adiantum

## 7.3 Proposed lightening strategy

Proper lighting enhances our perception for the surrounding natural and manmade environmental while at the same time makes us feel safe. The proposed lighting intervention is also based on an interactive experience:



- Pleasant, friendly lighting atmosphere, for all visitor groups
- A sense of safety
- Achievement of visual comfort
- Highlighting and enhancement of monumental areas

## 7.4 Proposed material

Cast materials

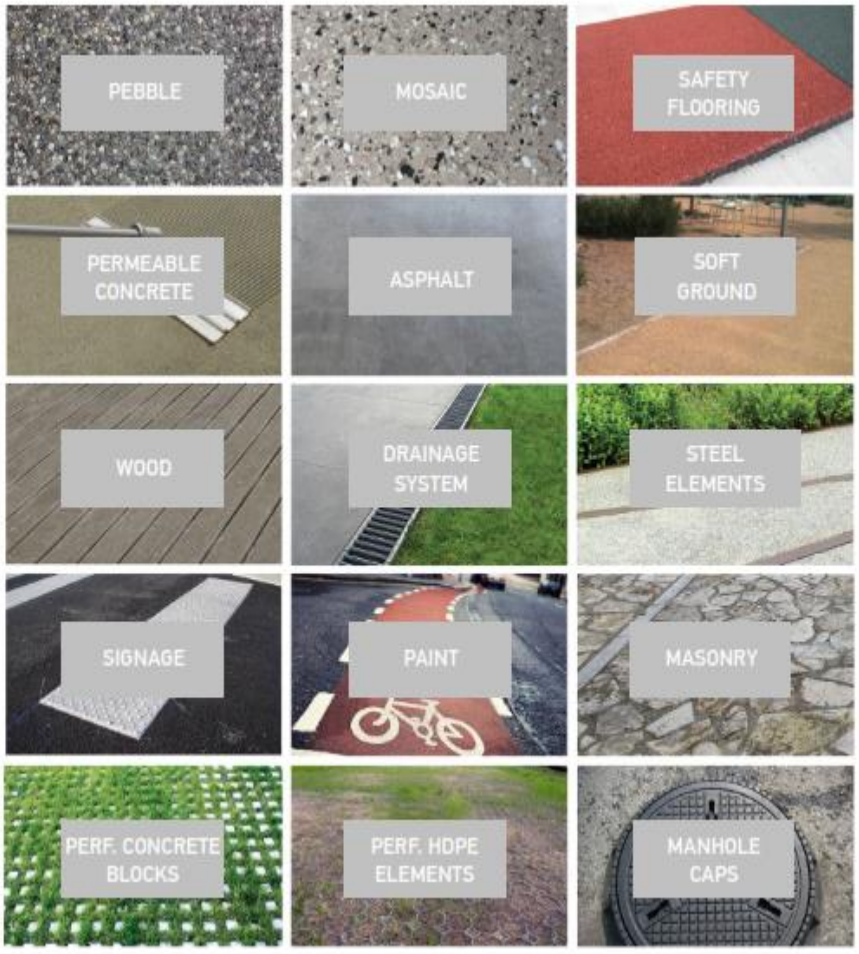
- Pebble / Mosaic
- Concrete Safety flooring
- Permeable concrete Asphalt
- Soft ground

Embedded materials

- Wood
- Drainage system Steel elements Signage
- Manhole caps
- Paint
- Masonry

Water permeable materials

- Perforated concrete blocks w. embedded greenery
- Perforated HDPE elements w. embedded greenery




## 7.5 Indicative vies of the proposed intervention

**View 1**

**View 2**

**View 3**

**View 4**

# 8. Conclusion (relation of IAP with other strategies in the city)

## 8.1 How the Urban Resilience Integrated Action Plan relates to other strategies in the city

The Urban Resilience Plan is directly linked to the following strategic documents prepared by the city of Ioannina:

- The Operational Plan of the Municipality for 2014-2020.
- The Sustainable Urban Development Strategy for 2020.

Moreover, currently, the Municipality is developing the:

- Sustainable Urban Energy Strategy
- Sustainable Urban Mobility Strategy

Some of the projects that are predicted and described in the strategy are presented in this map:


| | | |
|---|---|---|
| 01. | Αποκατάσταση Οθωμανικών Λουτρών | 800.000€ |
| 02. | Ανάδειξη Δημοτικού Μουσείου Ιωαννίνων («Τζαμί Ασλάν Πασά») | 1.200.000€ |
| 03. | Ανάδειξη Οθωμανικής Βιβλιοθήκης | 500.000€ |
| 04. | Ανάπλαση Πάρκου Πολιτισμού - (Κάστρο) | 2.000.000€ |
| 05. | Ανάπλαση Πλατείας Πύρρου | 1.200.000€ |
| 06. | Ανάπλαση ιστορικής περιοχής Σιαρόβα | 2.200.000€ |
| 07. | Ανάδειξη παραλίμνιας περιοχής | 1.800.000€ |
| 08. | Αποκατάσταση και ανάδειξη αστικού παραλίμνιου μετώπου | 4.000.000€ |
| 09. | Ενσωμάτωση στρατιωτικών φυλακών | 2.500.000€ |
| 10. | Ανάδειξη Πάρκου Λιθαρίτσια | 3.100.000€ |
| 11. | Πλατφόρμα Τοπικής Αυτοδιοίκησης | 500.000€ |
| 12. | Ενεργειακή αναβάθμιση ΚΕΠΑΒ | 5.000.000€ |
| 13. | Οδικός άξονας Πανηπειρωτικό Στάδιο - κόμβος Βογιάνου | 25.000.000€ |
| 14. | Οδός Νιάρχου | 25.000.000€ |
| 15. | Δημιουργία «Κέντρου για το Παιδί» | 2.000.000€ |
| 16. | Απασχόληση ανέργων με υψηλά προσόντα | 400.000€ |
| 17. | Απασχόληση ευπαθών ομάδων | 1.500.000€ |
| 18. | Ανάπτυξη κοινωνικής οικονομίας | 500.000€ |
| 19. | Τοπικά προγράμματα απασχόλησης | 1.000.000€ |

The following information about the time schedule of the proposed interventions and the funding schemes are presented in the framework of the Sustainable Urban Development Strategy for 2020. The regeneration project of the urban lakefront constitutes a part of the strategy.

## 8.2 Time planning for realizing the Integrated Action Plan (in the framework of the SUDS 2020)

| Actions – Regeneration projects | Time | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2017 | | | | 2018 | | | | 2019 | | | | 2020 | | | | 2021 | | | | 2022 | | | | 2023 | | | |
| TRIMESTERS | Α' | Β' | Γ' | Δ' | Α' | Β' | Γ' | Δ' | Α' | Β' | Γ' | Δ' | Α' | Β' | Γ' | Δ' | Α' | Β' | Γ' | Δ' | Α' | Β' | Γ' | Δ' | Α' | Β' | Γ' | Δ' |
| Actions for the restoration of Ottoman Baths and their upgrading for visiting and functional use (located in the Castle area next to the lake) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Promotion and protection of the Municipal Museum of Ioannina ("Aslan Pasha Mosque") of the North-East Acropolis (located in the Castle area next to the lake) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Promoting the Ottoman Library as a cultural heritage center with the creation of a multimedia exhibition (located in the Castle area next to the lake) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Interconnection, redevelopment, upgrading and promotion of communal areas, an existing network of pedestrian streets, communal streets and squares (located in the Castle area next to the lake) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Restoration of the historic area of "Siarava"– Connection of the city to the lakefront via a network of pedestrian routes | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Regeneration of the lakefront area with the creation of an pedestrian and cycling route** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Energy upgrading of the KEPAVI complex to turn it into an "intelligent building". Unification of administrative and functional unification of municipal services and creation of a new own-hall by the lake** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## 8.3 Potential funding schemes for realizing the Integrated Action Plan.

| Actions – Regeneration projects | Proposed budget f the intervention | Proposed Funding Scheme |
|---|---|---|
| Actions for the restoration of Ottoman Baths and their upgrading for visiting and functional use (located in the Castle area next to the lake) | 800.000,00 | Regional Operational Program "Epirus" (ΘΣ6 / ΕΠ 6c)/ ERDF |
| Promotion and protection of the Municipal Museum of Ioannina ("Aslan Pasha Mosque") of the North-East Acropolis (located in the Castle area next to the lake) | 1.200.000,00 | Regional Operational Program "Epirus" (ΘΣ6 / ΕΠ 6c)/ ERDF |
| Promoting the Ottoman Library as a cultural heritage center with the creation of a multimedia exhibition (located in the Castle area next to the lake) | 500.000,00 | Regional Operational Program "Epirus" (ΘΣ6 / ΕΠ 6c)/ ERDF |
| Interconnection, redevelopment, upgrading and promotion of communal areas, an existing network of pedestrian streets, communal streets and squares (located in the Castle area next to the lake) | 2.000.000,00 | Regional Operational Program "Epirus" (ΘΣ6/ ΕΠ 6e)/ ERDF |
| Restoration of the historic area of "Siarava"– Connection of the city to the lakefront via a network of pedestrian routes | 2.200.000,00 | Regional Operational Program "Epirus" (ΘΣ6/ ΕΠ 6e)/ ERDF |
| **Regeneration of the lakefront area with the creation of an pedestrian and cycling route** | 1.800.000,00 | Regional Operational Program "Epirus" (ΘΣ6/ ΕΠ 6e)/ ERDF |
| 1) Environmental rehabilitation and regeneration of the urban lakefront | | ΕΠ ΑΝΕΚ/ ERDF |
| 2) Integration of the area of the old military prison space into the urban fabric as a service center | | ΕΠ-ΥΜΕΠΕΡΑΑ/ ERDF |
| 3) Rehabilitation and regeneration of the Litharitsia park | | Regional Operational Program "Epirus" (ΘΣ6/ ΕΠ 6e)/ ERDF |
| **Energy upgrading of the KEPAVI complex to turn it into an "intelligent building". Unification of administrative and functional unification of municipal services and creation of a new own-hall by the lake** | 5.000.000,00 | • Regional Operational Program "Epirus" (ΘΣ4 / ΕΠ 4c)/ ERDF<br>• Loan |
| ***ΣΥΝΟΛΟ*** | 70.600.000,00 | |