

Research on the Potential for Future Development of Labin and Raša in Istria

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Abstract

Small and medium-sized towns and cities represent the very important elements of the polycentric urban structure and have a crucial role in regional economic development and social well-being. The aim of this work is to emphasize the importance of the scenario method in planning the future development of small and medium-sized towns and cities that is used in the education of future spatial planners. Within the Spatial Planning Workshop, the integral vision for the development of Labin and Raša were proposed as the result of the elaboration of five different possible scenarios - Karbona, Kulturizam, Koza Nostra, Dystopia and Dispersion, and their valorisation. For vision realisation, necessary activities in the form of different development projects for a period of 25 years were proposed.

Keywords: development vision; former industrial towns; scenarios; tourism

1. Introduction

Spatial planning involves different professionals and actors in complex processes. Primary it focuses on the interests of society, the settlement or the region as an entity, and the longer-term future.

In the "Torremolinos Charter" (1983) it is pointed out that "Regional/spatial planning gives geographical expression to the economic, social, cultural and ecological policies of society. It is at the same time scientific discipline, an administrative technique and a policy developed as an interdisciplinary and comprehensive approach directed towards balanced regional development and the physical organization of space according to an overall strategy." (CEMAT, 1983: 3)

Spatial planners are serving and protecting the general interest and local democracy. Their key role is to be leaders of change in society towards a more sustainable future. According to the ECTP-CEU (2013) the planner's role responds to developments in society, planning laws and policies. Depending on different political and social frameworks, the planners are engaged as visionaries, technocrats, managers, advisors, mentors or instructors. So spatial planners deal with different scales and specific challenges that characterise different entities in space and their interconnection. Those entities are interlinked and linked with their surrounding environment. A systemic approach is needed to understand their specificities, interconnections, and above all processes that happen.

Small and medium-sized towns and cities represent the very important elements of the polycentric urban structure of the European Union. They have a crucial role in regional economic development and social well-being while providing jobs and sustaining local and regional services. Those entities have the possibility to offer good living and working conditions, helping the local community to attain a good quality of life. They demonstrate in-

intrinsic value for European environmental and cultural heritage. Research on small and medium-sized towns provides insight into unexplored potential for shaping sustainable urban-rural relations. Based on comprehensive spatial planning different integrated and place-based policy measures should be suggested to make the most of their development assets. (ESPON, 2024)

In order to choose the most suitable development direction for small and medium-sized towns, it is necessary to consider, besides regional development plans, the possibilities and potential of the area at the local level considering the long-term needs of the inhabitants.

The aim of this work is to emphasize the importance of the scenario method in planning the future development of small and medium-sized towns and cities that is used in the education of future spatial planners in order to be able to choose the best possible scenario for long-term development of the selected area.

2. Planning of small and medium sized towns based on the scenario method

2.1 Small and medium sized towns and cities in the EU context

At the European level, the ESPON project TOWN (ESPON, 2014) has set a framework for considering the topic of small and medium-sized towns (SMSTC) by providing their definition based on the work of the OECD and DG Regio on the degree of urbanization. Small and medium-sized towns are defined as urban settlements of 5,000 to 50,000 inhabitants with a population density of 300–1,500 inhabitants/km². For studying small and medium-sized towns three approaches have been identified: morphological, administrative and functional. Since they represent an unexplored potential for achieving sustainable urban-rural relations, this requires policy intervention in the form of integrated and place-based territorial support measures. The strategic potential of small and medium-sized towns for achieving further development is the role of their cooperation with the environment, their regional position and their ability to mobilize civil society and establish PPPs.

Territorial agenda 2030 points out that SMSTC have different development potential and challenges, as well as demographic and societal imbalances, which particularly applies to remote areas but also inner peripheries lacking access to public services, and adequate economic and social opportunities.

Over the years, the processes of metropolisation led to different directions of development of small and medium-sized cities, which largely depended on the proximity of large cities. Some gained importance when they were integrated into functional urban areas profiting from common transport systems, some thanks to their location on a high-speed transport corridor benefited from providing travel opportunities, and some due to their peripherality failed because they could not provide resources to maintain services for the surrounding areas or to be poles of growth.

In rural and peripheral regions, SMSTCs are often assigned the role of territorial anchor centres, thanks to their service and labour market functions, but they face various constraints such as limited capacities, smaller public budgets and more difficult access to private financing. Therefore, strengthening such SMSTCs becomes a key policy objective at all levels of planning, from local to European.

The processes of depopulation of small towns and the aging of their populations are widespread in most European countries. The negative ecological consequences of urbanisation and the gradual changes in rural-urban relations over time have led to an increase in awareness of the importance of small towns (Nesticò et al., 2019), as indicated by the research of numerous authors dealing with the topic of small towns, emphasizing their importance in the urban system. As early as Christaller's central place theory (1933), great emphasis was placed on small towns as centres of goods and services for the rural hinterland. Although there have been significant socio-economic changes in the area (Courtney et al., 2007), small towns continue to provide the surrounding area with various services such as education, healthcare, trade, banking, etc. (Vaishar and Zapletalová, 2009).

De Rossi (2018) points out that small towns are recently seen as an opportunity, rather than a spatial problem, and that their reactivation opens an opportunity for sustainable territorial development, the renewal of local

and regional identity, and the reduction of further land occupation. Zawadzka (2017; 2021) points out that despite the lower accessibility and service provision of small towns, it is precisely their “smallness”, their human scale of development, and their unique urban-architectural structure that represent their particular value. In addition, unlike large cities, residents in small towns have valuable social capital characterized by a deep sense of belonging to the place of residence with strong social ties and the ability to cooperate. This results in a synergistic effect, influencing and strengthening the mutual relations of residents and contributing to the improvement of the quality of life of communities in small towns.

The negative consequences of socio-economic processes in the space of small towns, especially in peripheral areas, have led to the need to consider their recovery and possible further development. D'Andria et al. (2021) address the issue of recovery and valorisation of small towns through multi-criteria analysis schemes that encompass the relationships of small municipalities with the territory and with neighbouring medium/large cities or other surrounding small towns, forming a city-village network or a network of small municipalities. The results of their research represent an important tool for determining the priorities for the implementation of interventions based on public and private investments according to the principles of sustainable development with an emphasis on economic policy.

In their work, Somoza Medina and Relea Fernández (2024) deal with the evolution of five cases of small towns in the interior of Spain that a few decades ago invested in culture as a strategy to maintain the population and increase the quality of life of their residents. The results of the conducted research indicate the possibilities of developing cultural policies for small towns in Europe and the world.

Rural peripheral development strategies can be based on traditional activities (Saxena, 2007). In such strategies, tourism has a dual role as a means of strengthening local development processes (Lopez and Ivona, 2018) and as a means of diversifying and regenerating traditional lifestyles (Jackson and Murphy, 2006). In their work, García-Delgado et al. (2020) explore the possibilities of revitalising areas based on tourism and promoting heritage as an opportunity for local development. The research resulted in an analysis of the process of heritage and increasing its tourist value and its impact on local development in rural areas of Portugal, indicating a significant correlation between heritage, rural tourism and local development.

2.2 Importance of small and medium sized towns and cities in Croatia

The Report on the Spatial Situation in the Republic of Croatia for the Period 2013 – 2019 (2021) highlights that the Republic of Croatia is characterized by numerous small settlements. Although four largest cities in the Republic of Croatia (Zagreb, Split, Rijeka and Osijek) are relatively evenly distributed spatially and represent a good foundation for the country's polycentric development, the rest of the settlement system in Croatia has asymmetrical hierarchical and spatial characteristics. According to data from the Register of Spatial Units from 2019, there were 6,755 settlements in the Republic of Croatia. There were 150 settlements without inhabitants, and small settlements stand out in number: as many as 80.2% of them had fewer than 500 inhabitants, and 14.3% had 501 to 2,000 inhabitants, or 38.9% of the population lived in settlements of up to 2,000 inhabitants. Furthermore, 2.7% of settlements had between 2,001 and 10,000 inhabitants, and only 0.5% had between 10,001 and 35,000 inhabitants. There were 10 settlements with more than 35,000 inhabitants. Almost half of the population (48.9%) live in settlements with less than 5,000 inhabitants.

Marinović Uzelac (1999) points out that a small town is an urban agglomeration that meets the minimum population requirements (in the Republic of Croatia in 2000), with the absence of a primary sector of activity within the urban corpus, and which has at least a minimal gravitational influence on its immediate rural surroundings in terms of commercial and financial services, entertainment and culture, and local government and health care.

The polycentric concept of development of the Republic of Croatia, set out in the *Physical Planning Strategy of the Republic of Croatia* from 1997, was based on the then existing structure and system of settlements. In the polycentric concept of development, the focus is on advocating for a careful distribution of residents, activities,

central and other functions and infrastructure systems. Although the planned polycentric concept of development did not fully succeed, due to the too short time foreseen for its implementation, partly due to the sectoral inconsistency of development plans, and partly due to the lack of a system for monitoring implementation, in the Spatial Development Strategy of the Republic of Croatia it still has the leading role.

The spatial distribution of central settlements of all degrees of centrality in the Republic of Croatia shows unevenness, and is the rarest in areas with numerous development constraints and poor availability of higher-level services (hilly-mountainous and border parts of the Republic of Croatia and on some islands), while it is the most developed in the northern and northwestern parts of central Croatia and in the far eastern part of Croatia.



Fig.1: Settlement system, development and problem areas of the Republic of Croatia. Source: Ministry of the Construction and Physical Planning, 2017.

The distant planning of the network of central settlements complicates the trend of reducing (the number of) public facilities. Municipalities and cities located near macro-regional and regional centres are becoming new trade and business zones, while less densely populated areas do not attract investments.

The Spatial Development Strategy of the Republic of Croatia (2017) states that the sustainability of spatial organization should continue to be based on the polycentric model of development, since it has been accepted as the optimal model of spatial development in the EU and has been determined as a key element for achieving territorial cohesion.

By promoting such territorial development, polarisation between the capital, metropolitan areas and medium-sized cities at the national level is avoided. The document emphasizes that medium-sized and small cities should play a key role at the regional level, and represent a link between larger urban areas and rural areas.

The following elements are listed as possible approaches to revitalising the economic role of medium-sized and small towns:

- business based on the use of information technologies
- processing industry related to locally grown agricultural products
- tourism based on the attractiveness of cultural heritage (including industrial heritage), on landscape features, traditional religious sanctuaries, health and spa tradition (untapped or underutilized geothermal water potential), regionally designed tourist routes, traditional local festivals and innovative cultural products, and on gastronomy.

Furthermore, the preservation of historical fabric and the restoration of identity elements are important for increasing tourist attractiveness, economic development and investment, as well as preserving the number of the existing population and attracting new ones.

2.3. Scenario method and education of future spatial planners

Spatial planning is a profession that has its own areas of expertise in territorial development processes. According to the Charter of European Planning (ECTP-CEU, 2013) the planners' key commitments include research and analysis, advocacy and mediation, the ability to envision, evaluate and promote potential future options for urban, spatial, and territorial development. Therefore, future spatial planners should learn how to combine scientific and creative conceptual thinking with practical approaches to be able to define future vision of the city or region.

During the education process and in practical application, students as future spatial planners are directed to think strategically and to use the scenario method as a par excellence tool to articulate future development vision of study area. Scenario methods are research subjects of many authors, especially related to the field of spatial planning that encourages strategic thinking and comprehensive planning. In the education process besides the application of theoretical knowledge, the intention is to encourage the students' creativity. The scenario planning, based on the Intuitive logics school (Stanford Research Institute International) stimulates students' creativity and intuition. As Huss and Horton (1987) pointed out, the advantage of the SRI approach is the development of flexible, internally consistent scenarios from an intuition and logical perspective. In defining the preferred model and creating a common development vision it is important to be able to have an open discussion regarding different actors' interests, so Vogelij (2010) pointed out that there is a need to conceive at least four development scenarios for the study area.

During the spatial planners' education at the Faculty of Architecture of the University of Zagreb students have the possibility to gather theoretical and practical knowledge about the scenario method in spatial planning. On the third semester of the Master Study in Architecture and Urbanism students choose between fourteen workshops led by professors from the Faculty of Architecture. The Workshop 3 - Spatial planning is one of three workshops led by professors of the Department of Urban Planning, Spatial Planning and Landscape Architecture. The main goal of the course is to propose a vision for the spatial development of the chosen area (region or city) based on the principles of sustainability using the scenario method. The work on the course is adapted to the student and takes place in three main stages. The first stage of students' work includes a consideration of theoretical starting points and a detailed analysis of the existing situation and spatial planning documentation, which ends with a SWOT analysis. Students are guided to perceive spatial strengths, weaknesses, opportunities, and threats from different perspectives, that is, to immerse themselves in the different roles played by various actors in space. In addition, they are encouraged to use questionnaires to determine the key issues and needs of residents and users of the study area. In the second phase, based on the previous conclusions, students conceive different development scenarios for the chosen area, considering complex systems and numerous processes in space. In this phase they conceive their assessment tool based on the set criteria in order to choose the most appropriate development scenario and propose a development vision and conceptual solution. In the third phase, a more detailed elaboration of the program for the selected location and the proposal for strategic and development projects are made. Finally, for their designed strategic projects to be realised, they review and propose, if neces-

sary, changes to the actual spatial planning documentation on the local level.

3. Case studies: City of Labin and Municipality of Raša in Istria

Cities Labin and Raša in Istrian Peninsula were chosen as case studies for this research because of their historical significance in the economy of the region and rich potential for future development. The project was made within the Workshop 3 – Spatial Planning in the Academic year 2024 / 2025 (student: Teodora Jelić, mentor: Associate Professor Lea Petrović Krajnik, PhD). The goal of the project was to set up an optimal shared vision for two administrative entities, that once were treated as one unit due to their regional economic role and their spatial characteristics.

3.1 Spatial specificities and urban development

The city of Labin and the municipality of Raša are located in the eastern part of Istria between Plomin and Raša bays covering the area of 152,7 km² with a population of 13 233 inhabitants (2021). The administrative area of the city of Labin (72,3 km² with a population of 10 424 inhabitants) today includes the central settlement of Labin and 16 other settlements, and the municipality of Raša (80,4 km² with a population of 2 809 inhabitants), along with the central settlement of Raša includes another 22 settlements. The settlements are characterised by a variety of spatial, cultural and socio-economic specificities.

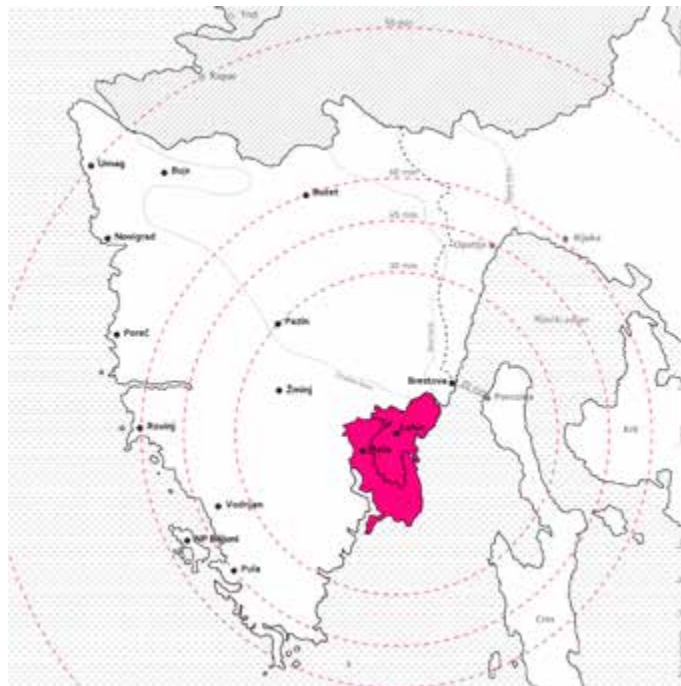


Fig.2: Position of City of Labin and Municipality of Raša in Istria. Source: Jelić, 2025.

In the 19th and 20th century the area was known for its mining activities as a basis for its economy. In the 1930s the greatest economic and infrastructural development of the Labin mining basin took place. As part of the then policy of the Italian government of the time to establish the so-called »città di fondazione« on new premises of urbanism and architecture in the area, planned mining settlements were built: Arsia - Liburnia (today Raša) in 1936/1937, designed by the Trieste architect Gustavo Pulitzer Finali, and Pozzo Littorio (today Podlabin) as a suburb of the historic core of Labin, built in 1940-1942, designed by the Roman architect Eugenio Montuori. (Karač 2010)

Thanks to the melioration works on the former marshland and the undeveloped mouth of the Raša River and its tributary the Krapan Creek, favourable conditions for the development of the settlement along the Rijeka-Pula road and the undeveloped green hills have been ensured.

In order to ensure optimal living conditions for the mine workers, the Italian architect Gustavo Pulitzer Finali prepared the basis for the urban unit of Raša (Arsia, designed under the name Liburnia) in 1935 and the architectural projects (1935-1937). The settlement, designed according to the principles of a garden city, was planned for 3,000 inhabitants. The longitudinal settlement is characterized by a clear functional and social division. Two-thirds of the settlement consists of workers' houses, which are separated from the apartments of the managers and the villas of the managers by an urban centre. South of the creek is an industrial zone with the mine administration building, power plant and other buildings.

Particular attention was paid to the design of the central area around which buildings with public facilities were placed (the church of St. Barbara - the patron saint of miners, the municipal headquarters, a hotel with a café on the ground floor, a complex multi-purpose building with shops, leisure halls and rooms for various associations, a post office, etc.). The central area was designed as a connection between the large *Piazza dell'Impero* and the small *Piazzetta del Mercato*, which are connected by "triumphal" doors from the building set to the very edge and open porticos with deep shadows. (Radović Mahečić, 2000)

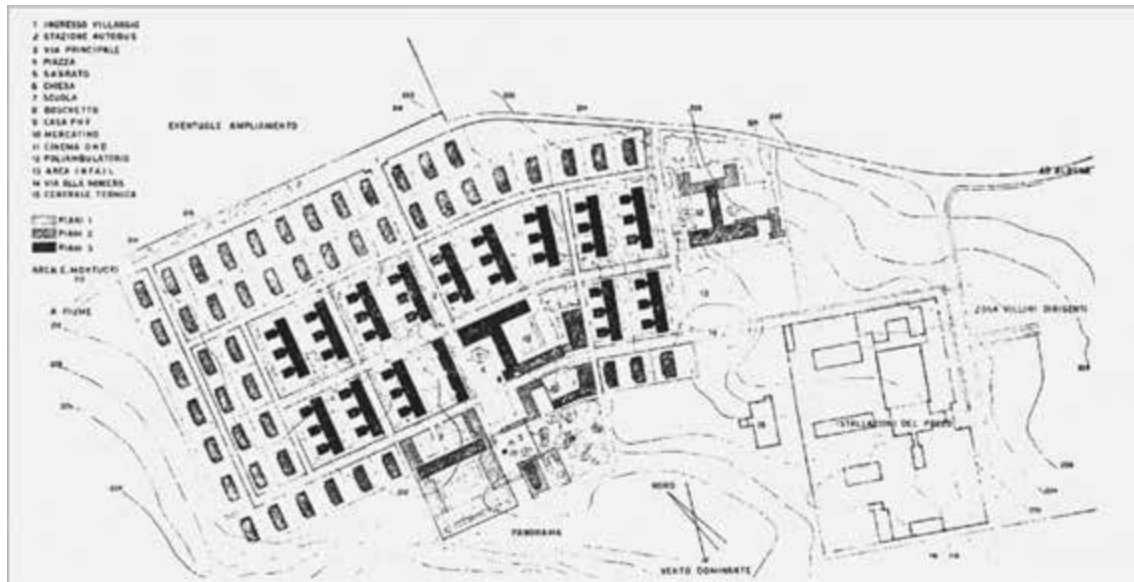


Fig.3: Regulatory basis Pozzo Albona, Eugenio Montuori, 1938. Source: Braun et al., 2019.

The mining and industrial complex of Pozzo Littorio, located north of the old town of Labin, was the reason for the construction of the urban unit of Podlabin (*Pozzo Littorio, Pozzo Littorio d'Arsia or Pozzo Albona*). In 1938, the Italian architect Eugenio Montuori designed the regulatory basis for a new settlement with 3,000 inhabitants, as well as the projects of all residential and public buildings. The construction of the settlement took place in the period from 1939 to 1942. The main town square of the settlement was designed on a Roman forum model and was divided into a sacral and profane part (with the administration, cinema, sports hall, post office and other buildings of social standard). The spatial accents of the square are the bell tower of the church of St. Francis of Assisi in the axis of the central street and the massive *Torre Littorio* on the Ceva house. The residential part of the settlement is divided into parts intended for the residence of workers, civil servants, engineers and managers, the division of which can be read both by the different typology of construction and the size of the plots. (Braun et al., 2019)

When planning Podlabin, a holistic approach was applied, taking into account the climate, sunlight, dominant winds, views, pedestrian paths, and the author incorporated the existing greenery into the urban design of the settlement. (Laginja, 2024)

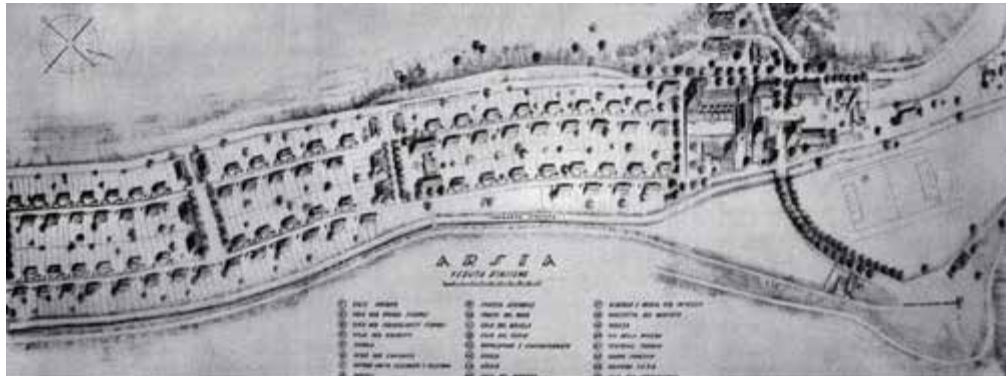


Fig.4: Axonometry of Arsia, 1937. Source: Arsia, il villaggio per il minatori della S.A. Carbonifera Arsa, Trieste: Editrice Libraria, 1937.

At the end of the 20th century, all coal mines were closed, which led to the need for economic orientation shift. The city of Labin has focused on small and medium-sized enterprises, the opening of economic zones and tourism, while the municipality of Raša sees its potential, besides the cement factory in Koromačno, in agriculture especially in the Raša valley, in fishing, and in tourism thanks to two camps and large number of private accommodations.

3.2 Strategic and Spatial planning documentation

In 2017, the Government of the Republic of Croatia initiated a reform of strategic planning and development management in order to implement improved public policies and projects at all levels for achieving synergistic links between Croatian and European development policies. Strategic planning and development management on the national level and the adoption of legislative and institutional framework for its optimal arrangement have the aim to ensure social progress, enhanced and more focused territorial development. The strategic planning system is regulated by the *Law on the System of Strategic Planning and Development Management of the Republic of Croatia* (Official Gazette, 123/17, 151/22). The strategic framework of strategic planning system and development management of the Republic of Croatia is based on defined principles and includes acts of strategic planning of national significance, acts of strategic planning on local and regional level, strategic planning acts related to the EU economic management framework.

The spatial planning system, which ensures the conditions for the use, protection and management of space in the Republic of Croatia as a particularly valuable national asset, is the result of long-standing practice and tradition of spatial planning. It is based on the Constitution and the territorial organization of the state determined by a special law, the authority and jurisdiction of the Croatian Parliament, regional units and other public law bodies. The spatial planning system is regulated by the *Physical Planning Act* (Official Gazette 153/13, 65/17, 114/18, 39/19, 98/19, 67/23) and the basic principles are harmonized with EU regulations.

Below is a brief overview of the valid Spatial Planning documentation, i.e. the spatial planning plan of the city and municipality, the basic spatial planning documents of the local self-government unit, and the implementation programs of the local self-government units as short-term strategic planning acts.

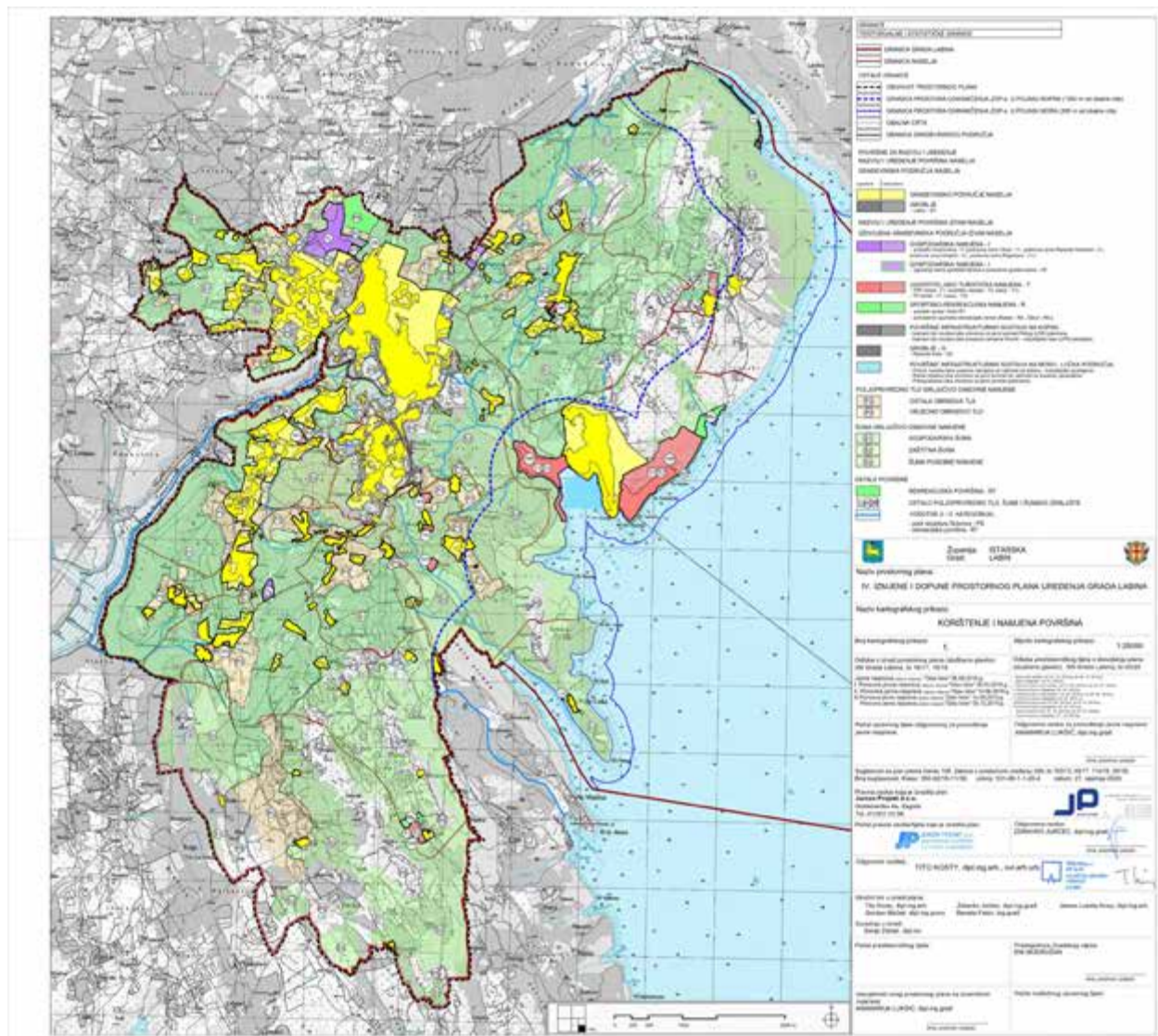


Fig.5: Spatial Development Plan of the City of Labin. Source: City of Labin, 2025.

The Spatial Plan of the City of *Labin* stipulates that the City's space will be developed and renovated in parallel and in interdependence with the balanced and even development of both the Istrian County and the Republic of Croatia.

The law envisages the rational use and preservation of spatial resources along with the development of the City of Labin as a recognizable smaller regional centre and the development of the Istrian County's space, creating prerequisites for the renewal of the economy and strengthening tertiary and quaternary functions. The development of urban and rural settlements is planned through the spatial development structure and space use, while preserving the traditional and ambient values. The infrastructure network is planned in accordance with the transport connections of the Istrian County, and settlements are connected within the City, establishing a rational transport structure. The distribution of economic activities in the existing partially built economic zone and the planned economic zone is planned, as well as the arrangement of tourist development areas and tourist areas in accordance with the Spatial Plan of the Istrian County.

A specific goal set by this development plan is the functional addition of central, public and social facilities, as well as the expansion and development of sports and recreational zones. (City of Labin, 2025)

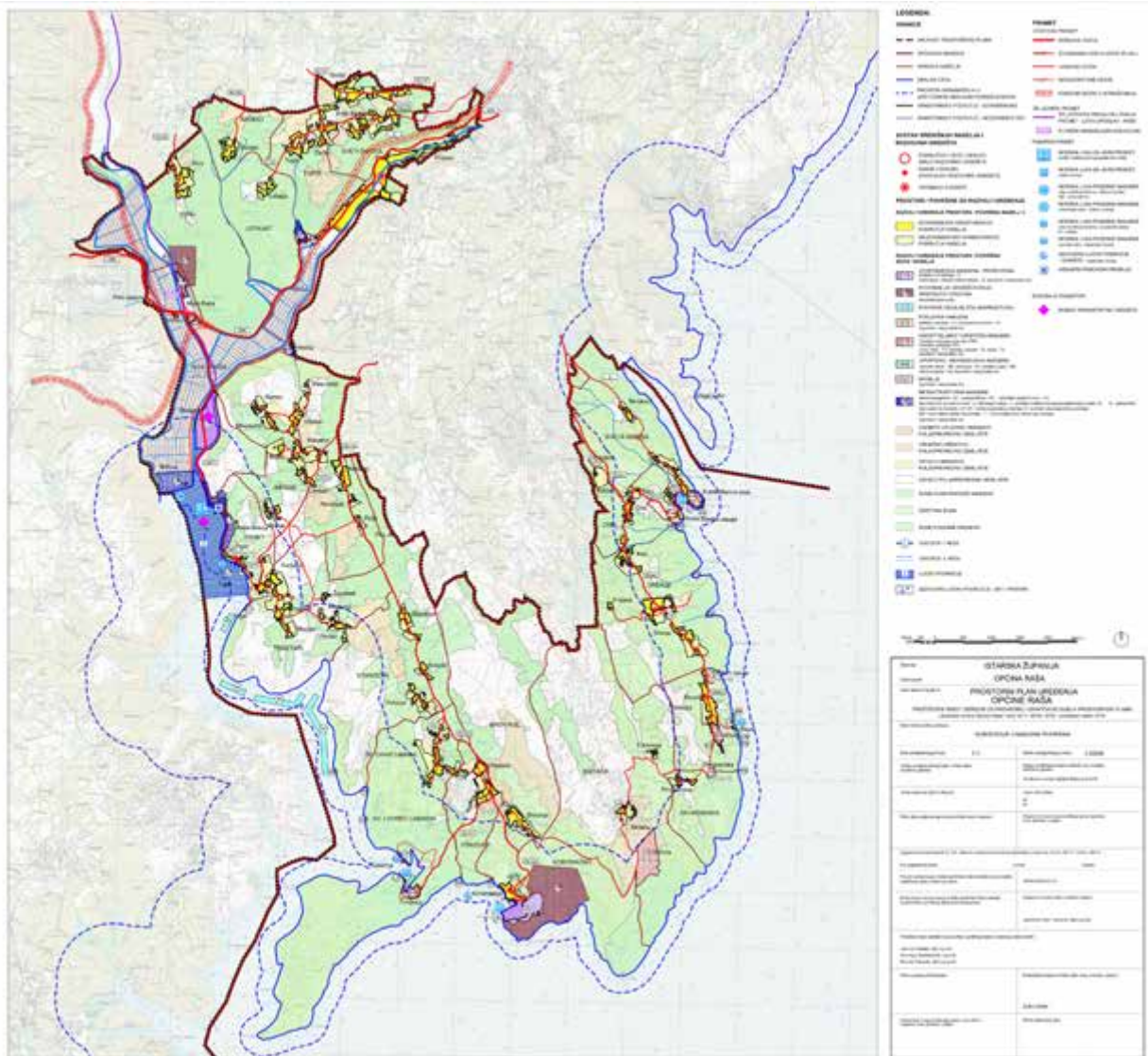


Fig.6: Spatial Development Plan of the Municipality of Raša. Source: Municipality of Raša, 2025.

The Spatial Development Plan of the Municipality of Raša, as a long-term and coordinating planning document, establishes the conditions for development, determines the purposeful use, design, renovation and rehabilitation of building stock, environmental protection and protection of cultural monuments and particularly valuable parts of nature.

The plan provides measures to direct development with the aim of better use of natural and anthropogenic values (especially coastline and cultural heritage) of individual spatial units, determining the size, structure, quality and capacity of the tourist offer in accordance with the permissible load limit of the coast, and in accordance with the provisions of the Act relating to the development and protection of the protected coastal sea area (ZOP), rationalization of the construction area, determination of the water protection regime, forests, other particularly valuable parts of nature, agricultural soils, architectural heritage, and all natural and cultural values.

One of the basic starting points is to subordinate development to improve the quality of life. In further economic development and use of space, natural and other fundamentals of life must not be compromised, nor must the already partially achieved standard and quality of life be compromised.

The plan determines the system of central settlements related to the planned central functions and expected development of residential and economic activities. (Municipality of Raša, 2025)

In accordance with the development directions of the *National Development Strategy of the Republic of Croatia* until 2030, the *Implementation Program*¹ of the City of Labin for the period 2021-2025 has set the following priorities:

1. "Digital transformation and transparency" which is based on the digitalization of processes at the city administration level
2. "Development and diversification of the economy" through which measures are defined with the ultimate goal of economic progress (in line with national development direction 1 - "Sustainable economy and society")
3. "Progress in the quality of life of citizens" which refers to increasing the quality of life in the City through several aspects (in line with national development directions 1 "Sustainable economy and society" and 2 "Strengthening resilience to crises")
4. "Strengthening infrastructure and environmental protection" - which focuses on green and sustainability (in line with national development directions 3 "Green and digital transition" and 4 "Balanced regional development").

The Implementation Program of the Municipality of Raša for the period 2021-2025 sets the direction for economic and social development of settlements in the municipality, taking into account all development needs and potentials, as well as limitations.

Thus, the Program establishes priorities for future development contained in the following priority areas:

1. "Development of a competitive and sustainable economy",
2. "Improvement of infrastructure, environmental protection and improvement of the quality of life of citizens", and
3. "Protection and sustainable valorisation of mining, industrial, cultural and natural heritage". (Municipality of Raša, 2025)

3.3 Considering future development of Labin and Raša: Beneath - Beyond Labin & Raša

Project made within the Spatial Planning Workshop at the master's Study of Architecture and Urbanism proposed the vision for the future development of Labin and Raša. The development vision is the result of the elaboration of five different possible scenarios - *Koza Nostra*, *Karbona*, *Kulturizam*, *Dispersion and Dystopia* and their valorisation according to the set development goals and related criteria. For the purposes of vision realisation, necessary activities in the form of different development project for a period of 25 years were proposed.

Based on the analysis of the existing situation, spatial planning documentation, strategic documents, and SWOT analysis, general goals for the further development of Labin and Raša were set, covering four specific topics: society and community, nature and environment, economy and tourism, and transport.

Using the scenario method, five possible scenarios for the further development of the Labina and Raša area with reference to the 4 main themes were proposed.

The first scenario, *Koza nostra*, is aimed at creating a community that cherishes the tradition, history and cultural identity of Labin and Raša. The development of agritourism is encouraged as a sustainable alternative to mass tourism, which allows the preservation of local customs, gastronomy and authentic lifestyles. The scenario plans to establish a college for education in agriculture, livestock farming and renewable energy sources, as well as

¹ The implementation program is a short-term act of strategic planning. The implementation program of a local government describes and ensures the implementation of specific objectives set out in the local government development plan (if one has been drawn up), or the implementation of specific objectives set out in the development plan of a public utility, as well as the link between measures and the corresponding items in the local government budget (activities and projects) for which funds for implementation need to be planned.

an innovation incubator, providing opportunities for young entrepreneurs. The planned collection of rainwater for irrigation and the use of renewable energy sources contributes to the preservation of the natural environment. In order to protect the landscape and natural resources, the expansion of construction area is limited. The scenario plans to revitalize the primary sector through the cultivation of indigenous crops, sustainable fisheries and local processing of products. The construction of modern markets and the development of agritourism creates a sustainable local economy, while educational programs and innovation centres enable the application of modern techniques and employment. The scenario envisages the reactivation of the railway for the transport of local products, reducing pressure on road infrastructure. The construction of new ports in Rabac and Trget settlements enable wider distribution of products and development of fisheries.

The second scenario, called *Karbona*, proposes revitalisation of Labin and Raša industrial heritage by converting mining buildings into sport, education and cultural facilities. The plan is to rebuild Raša according to the original concept, restoring facilities of cinema and the city pool, while industrial buildings are transformed into museums and educational institutions. Industrial heritage becomes a driver of development through new tourist and educational facilities. The scenario's focus on cultural and historical tourism reduces pressure on coastal areas, which contributes to nature conservation. This focus encourages the influx of visitors throughout the year. Revitalization encourages the creation of new jobs, which also strengthens the local economy. The renovated mining tunnels serve as a high-speed railway connecting Raša, Labin and Rabac, while the mining shaft is reactivated as an elevator.

The third scenario, *Kulturizam*, emphasizes cultural sites connected by cable cars, tunnels, and bike paths, allowing locals and visitors to experience the area in a unique and comprehensive way. The preservation of natural resources is achieved through a sustainable approach to tourism, using cable cars and bike paths that allow visitors to explore natural beauty without harming the environment. The preservation of cultural heritage creates new economic opportunities through ecotourism and cultural tourism. Developed infrastructure of cable cars, public transport and bike paths will attract visitors throughout the year, extending the season creating new jobs in tourism, and as sustainable transport solutions relieve road traffic.

The fourth scenario, called *Disperzija*, focuses on the decentralization of the city and the strengthening of smaller, rural settlements. The focus is on creating a network of settlements that interconnect social, cultural and educational facilities, thereby enabling more balanced development and a better quality of life in rural areas. Strengthening rural settlements reduces the need for further urban expansion while protecting natural areas. Rural areas become key for food production, reducing the need for imports. The scenario enables more balanced economic development by strengthening rural settlements that become centres of agricultural production, thereby contributing to self-sufficiency and sustainability. Decentralization contributes to the creation of new jobs and entrepreneurial opportunities. The main element of the scenario is the improvement of transport infrastructure, including roads, railways and sea connections, and the establishment of efficient public transport. These links enable better connectivity of smaller settlements with urban areas, facilitating the distribution of resources.

The fifth scenario, titled *Distopija*, is based on organizing shelters in underground tunnels under Labin and Raša, so that the local population, in the event of natural disasters or other crisis situations, could find haven. These shelters would include sleeping areas, medical stations, survival and training education centres. It is planned to establish environmentally friendly systems for food production and water filtration. The area would be self-sufficient. Underground laboratories and food production systems would provide a basic food supply for the population. The underground tunnels would also house transport infrastructure, such as underground trains or transportation systems which would enable the rapid and safe movement of people and resources within the "survival system".

In order to choose the optimal scenario for the further development of the Labin and Raša area, the valorisation of the scenario was carried out based on the set criteria. 4 main themes and 20 sub-themes were selected for the valorisation and subsequent comparison of the scenarios. The evaluation of the elements is graded as a strong

positive effect, as a positive effect, and elements that have neither a positive nor a negative effect. All scenarios are designed to have a positive impact on the subject area, with some scenarios being rated better than others. By comparing the evaluations of the elements of the scenario, it follows that the scenarios complement each other, and for the vision of further development, it is proposed to combine the three scenarios Cosa Nostra, Carbon and Culture into a single scenario called 3K_Beneath & Beyond.



Fig.7: Valorisation of five scenarios and merging three scenarios into a development vision 3K_Beneath & Beyond. Source: Jelić, 2025.

The selected scenario, or vision for the further development of 3K_Beneath & Beyond, achieves a positive rating in all topics and subtopics, which means that it has fulfilled the condition in each of the listed fields, or has a significant impact on the development of the selected area. The vision is planned for a period of 25 years with 22 development projects.

In order to reduce the demographic challenges of depopulation, the vision is focused on creating conditions that would encourage young people to stay in their hometowns and thus stimulate population growth. In the centre of the city of Labin, the construction of new cohousing communities and residential buildings according to the POS model is planned, which would ensure affordable and sustainable forms of housing, as well as transformation of industrial heritage buildings into social facilities. The large bathroom on the Piazzale is being revitalized and converted into a cinema. In Raša, the renovation of the former city swimming pool is proposed. The building of the former Mine Directorate becomes part of the Open University and Innovation Centre.

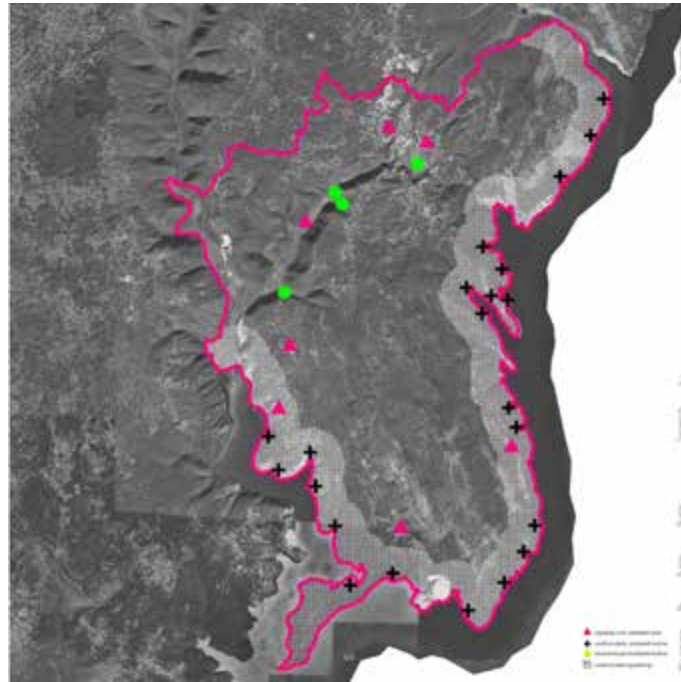


Fig.8: K1_ nature and society in the development vision 3K_Beneath & Beyond. Source: Jelić, 2025.

Particular attention is paid to the coastal area. Development of new public beaches in the Raša Bay (Škvaranska, Crna Punta, Koromačno, Šebešnica and Prtlog), through minimal interventions, ensuring accessibility, is planned to relieve overcrowded coastal area.

The construction of bicycle paths and lanes through the centre of the city of Labin as well as setting up points for electric bicycles and scooters rental is planned to encourage the use of sustainable means of transport and reduce traffic congestion during the tourist season. The introduction of new public transport lines would improve the mobility of residents and visitors, which would also result in reduction of private car traffic the need for parking spaces. The vision proposes the activation of former underground mining tunnels that would serve for occasional traffic and as a part of tourist tours and attractions. Panoramic cable cars on the stretch between Raša, Labin and Rabac, and Skitača and Škvaranska are planned for public transport and as a tourist attraction. In order to increase traffic flow and reduce congestion, the construction of a city bypass from the settlement of Vozilići to the tourist settlement of Rabac is planned, while the reactivation of the railway infrastructure will have a dual role - supporting the industrial sector and the function of public transport. In order to strengthen maritime transport, interventions that enable the distribution of locally produced food by sea and increase the tourist connections of the region with the islands of Kvarner, Dalmatia and the eastern coast of neighbouring Italy are planned.

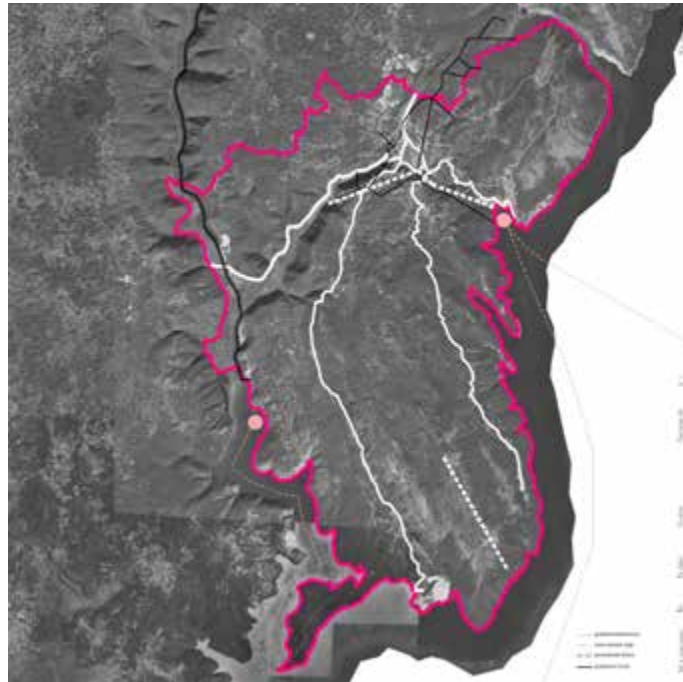


Fig.9: K2_ traffic in the vision development 3K_Beneath & Beyond. Source: Jelić, 2025.

The planned interventions should encourage the creation of new jobs, the development of primary and service activities, with a controlled expansion of tourist settlements to preserve the natural and cultural heritage. One of the goals of the vision is the preservation of industrial heritage and the expansion of the tourist offer. The opening of new public facilities (museums, social and cultural centres) would contribute to the quality of life of the local population and the overall attractiveness of the area. Agriculture production encouragement with a focus on growing crops characteristic of eastern Istria (olives, vines, root vegetables, fruits and lavender). Fishing, shellfish farming and livestock farming - breeding of indigenous animals (goats, sheep, Boškarini, donkeys and horses) is also planned. One of the main goals is to encourage the development of agritourism and marine tourism in order to valorise natural resources and enrich the tourist offer. In order to strengthen local production and sustainable development, the establishment of family farms, markets with locally produced food, new incubators and educational centres that will serve as areas for retraining and professional training of the population for work in sectors such as agriculture, livestock, fishing and tourism are planned.

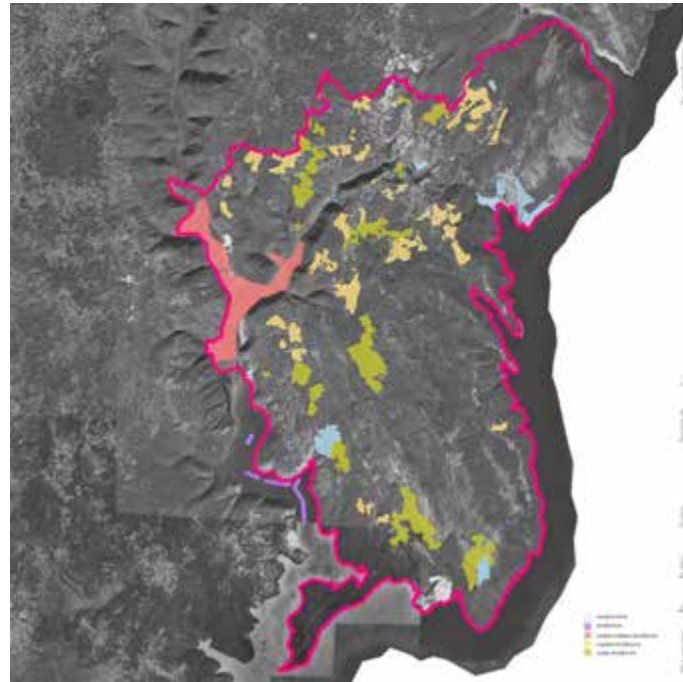


Fig.10: K3_ economy and tourism in the development vision 3K_ Beneath & Beyond. Source: Jelić, 2025.

4. Discussion

European organizations conduct various research and develop projects related to the development of urban systems. One of the current topics is the development of small and medium-sized cities, which represent a still insufficiently explored potential, especially in the context of European urban systems and the achievement of sustainable urban-rural relations.

European documents emphasize that such entities of the urban system are characterized by various demographic and social inequalities, especially those located in remote areas or inner peripheries, since they lack access to public facilities and appropriate economic and social opportunities.

Over the years, the processes of metropolitanisation have led to different directions of growth and development of small and medium-sized cities depending on their position in relation to large cities, profiting from integration into functional urban areas or development along fast transport corridors, while some have stagnated or even declined due to their peripherality and insufficient services.

At the national level, the *Spatial Development Strategy of the Republic of Croatia* from 2017, modelled on European documents on spatial development, states that the sustainability of the spatial organization of the state should be based on a polycentric model of development, which is a key element for achieving territorial cohesion. The document states that medium-sized and small cities should play a key role at the regional level and represent a link between larger urban areas and rural areas. The revitalization of the economic role of medium-sized and small cities should be based on business, processing industry and various forms of tourism.

Conceiving the further development of cities and regions is a very important process that Architecture and Urbanism students have the opportunity to learn at Workshop 3 - Spatial planning. The education of future planners is based on a combination of the collection of additional theoretical knowledge, such as the method of scenario planning and the process of valorisation, and the practical application of knowledge related to research, analysis, design, valorisation, and the selection and elaboration of a development vision. The practical application of the scenario planning method in the education process is particularly important for encouraging the use of planning intuition and strategic thinking.

The analysis of the existing situation, spatial planning documentation and strategic plans for further development at the local level enables the collection of information about the area and its possibilities and represents the basis for designing development goals and applying the scenario planning method. Determining the criteria and implementing the valorisation of the proposed scenarios gives future planners the opportunity to practice making decisions as objectively as possible. In addition to graphic representations that follow the planning steps, models are also created in the planning process so that future planners can better present and communicate their ideas with the public.



Fig.11: Model of the development vision of Labin and Raša - 3K_ Beneath & Beyond. Source: Jelić, 2025.

In this case study, five possible scenarios for future development of Labin and Raša were proposed. In this project, two local self-government units, the city of Labin and the municipality of Raša, were considered together as a whole due to their spatial, economic and social specificities and historical economic significance.

The realization of 22 designed development projects (8 related to the topic of nature and society, 8 related to the topic of transport and 6 related to the topic of economy and tourism) in accordance with the proposed vision of *3K_ Beneath & Beyond* in a period of 25 years would lead to the revitalization and improvement of the quality of life at the local level, the revitalization of economic activities in the region, contributing at the same time to the objectives of the Spatial Development Strategy of the Republic of Croatia, i.e. strengthening the polycentric model of development and territorial cohesion.

Conceiving development scenarios and development projects based on the sustainability goals indicates an awareness of the importance of global trends, which by planning at the local level contribute to the achievement of global goals.

5. Conclusion

Research on the possibilities of further development of an area and the prediction of possible development scenarios is a very important topic in professional circles. In addition to the theoretical knowledge in the field of spatial planning and urbanism, which is collected during the studies, the practical application of the collected knowledge and skills on different scales is possible towards the end of the master's study within the framework of Workshop 3 - Spatial planning.

On different scales, future planners can practice research, analysis, synthesis, strategic and critical thinking, forecasting, modelling evaluation tools and decision-making process while planning the future development of selected area. The ability to choose the area further encourages future planners to go through the comprehensive process themselves in just 15 weeks with joy and a special interest in the space.

During the education process, considering the space in a broader context and considering its significance at the regional level can provide additional impetus for planning in a broader context, i.e. crossing the administrative boundaries of local self-government, which was agreed upon by the city of Labin and the municipality of Raša in this case. We can say that this work has set a new model of approach, i.e. that a new entity has been formed, formally composed of two local self-government units, and through comprehensive consideration, a proposal for a vision of future joint development has been given based on historical elements, recognized potentials and possibilities of space in the context of sustainable development, while maintaining the specificities of individual elements in the space.

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