

Tirana Traffic: The Mitigation of Traffic in Tirana through Regional Perspective

DOI: 10.37199/o41011127

Prof. Dr. Besnik ALIAJ

Assoc Prof. Sotir DHAMO, PhD

Polis University, Tirana, Albania

Introduction

This article serves as a background information for the contribution given in addition by other colleagues. – The region of Tirana-Durrës (to some extend also Kruja and Elbasan) is the fastest and most dense booming region in Albania, and wider in the Balkan region. It has been since before the fall of Berlin wall the most important urban (metropolitan) region in Albania, involving 50% of economic output of the country, and 60% if the mechanic industry of the time of Albania. After the transition of 90-s, situation changed dramatically. The move towards market economy was dramatic and often conflictual. But despite that people took initiative in hands while authorities were caught surprised, by lack of public investments and services and other pressing political priorities of social economic transformation. Since then the region at least doubled its own building surface, and tripled its population accumulating at present time almost 50% of national population. If continuing like this it might go up to 2/3 of national population if no measures are taken. While Tirana remains the main political and social-economic-cultural center, Durrës represents the main port and touristic city of Albania with a regional strategic positioning as the gate of 8th Pan-European corridors. The northern part of the region up to Fushë-Kruja is distinguished for the biggest concentration of informal settlements and extralegal economies, while city centers are transforming, densifying and verticalizing every day. At the heart of such agglomeration stays a rich agricultural area and the national airport of Albania. This is more or less the context.

Our students and researchers were divided in several groups of combined Albanian and Italian/international participants. The themes they chose mainly were focused on: i) the new regions and administrative reorganization of Albania; ii) the polycentrism in the capital region; iii) regional mobility via rail transport; iv) real estate development and public interest v) pollution and ecological consciousness. All of them are actually pressing issues for Tirana and Albania, especially under the conditions that central authorities are “empowered” thanks to a “centralization/consolidation” process of the local authorities (previously with a strong decentralized power)

implemented by 2015, while regional authorities are pressed and forgotten in the political battle for competencies and money, between the central and local authorities. The regional authorities are often considered as the arm of central government. You can explore below some of the main findings of the work and ideas of students/researchers related to mobility and transportation. Let's hope this exchange and reflection will continue with other professional and scientific similar initiatives.

Tirana-Durres Region – Tirana and its wider metropolitan region already constitute one of the most dynamic territories in Albania. As the country's principal economic engine, this region plays a decisive role in sustaining national growth, attracting investment, concentrating services, and shaping Albania's long-term stability and development trajectory. Yet, alongside this dynamism, the region is facing one of its most pressing and visible challenges: the rapid growth of chaotic traffic and mobility pressures. These conditions are deeply rooted in a period of uncontrolled urban expansion, institutional fragility, and spatial disorder, which have left a lasting impact on the territorial structure of the capital and its surrounding region. Today, the challenge is not only to address the current traffic crisis, but also to prepare the region for the next phase of transformation, particularly in light of Albania's path toward full European Union integration. The existing mobility and traffic conditions are mainly the result of extreme demographic, economic, and spatial growth, which has placed enormous pressure on Tirana as the primary urban center. The concentration of population, services, employment opportunities, and commercial functions within and around the capital has intensified daily commuting patterns, increased dependence on private cars, and overloaded infrastructure systems that were never designed to accommodate such scale and intensity of use. In this context, the central question becomes how to sustain further economic and territorial growth while preventing traffic congestion and mobility inefficiencies from undermining the region's functionality, environmental quality, and quality of life.

Addressing this challenge requires more than isolated technical interventions. It demands a stakeholder-based and territorially integrated approach, capable of responding to the complexity and dynamism of the region. Mobility cannot be treated as a purely transport-related issue; rather, it must be understood as part of a broader spatial, economic, and governance system. For this reason, the logic of sustainability must guide both strategic thinking and structural interventions for the future. Sustainable development in this context means coordinating land use, infrastructure, services, and economic functions in a way that reduces unnecessary concentration, promotes accessibility, and creates more balanced territorial development. Apolycentric vision therefore emerges as a necessary framework for the future of the region. Such a vision should be grounded in the actual structure of existing settlements and living urban realities, rather than reinforcing the dominance of a single center. In practical terms, this means strengthening sub-centers across the region, not only through the provision of basic infrastructure, but also by allocating to them important urban functions, public services, economic activities, and institutional roles that are currently overcrowded in Tirana's city center. The goal is to move beyond a monocentric model of development and toward a regional network of centers, where responsibilities, opportunities, and specialized roles are more evenly distributed. This network-based approach would enable the region to channel growth more effectively and sustainably. By improving physical and functional connections between centers, the region can reduce the excessive burden placed on Tirana, create stronger local identities, and stimulate new poles of development. At the same time, such an approach improves accessibility, enhances the quality of life of local communities, protects environmental resources, and supports a more resilient and diversified economic structure. Polycentric development is therefore not simply a spatial planning concept, but a practical strategy for balancing growth, mobility, and territorial cohesion. To make this vision operational, sub-centers must first be carefully analyzed in terms of their spatial qualities, development potential, geographic

position, accessibility, and existing socio-economic assets. This analysis is essential in order to identify the most appropriate form of specialization for each center. Specialization, however, should not be understood in a narrow or isolated sense. The recommended functions and roles of each sub-center should be conceived not only for the benefit of its immediate community, but also as contributions to the wider development of the whole region. In this way, complementarity between centers can be achieved, allowing each location to serve a broader strategic purpose while reinforcing regional interdependence. Reaching such a degree of complementarity and specialization requires strong cooperation between local authorities, institutions, and relevant stakeholders. A shared development vision must first be agreed upon collectively, and then translated into coordinated actions, where each actor assumes responsibility for implementing their respective part. Without such cooperation, the risk remains that development will continue in a fragmented and competitive way, reinforcing imbalance and urban sprawl instead of creating an integrated territorial system. Another important mechanism for encouraging polycentric development is the strategic provision of high-rank infrastructure in desired growth locations. Infrastructure has the power not only to connect places, but also to shape development patterns and direct investment. If properly planned, transport corridors, multimodal hubs, utilities, and public facilities can encourage growth in targeted sub-centers and discourage irregular expansion elsewhere. In this sense, infrastructure becomes an instrument for guiding planned development rather than simply responding to unregulated sprawl after it has already occurred. For polycentrism to function effectively, however, key catalytic projects must also be promoted. These projects should operate at a scale capable of enhancing the role of the region within the national and even Balkan context. For example, one strategic question is how Tirana can strengthen its position as a national or regional hub while at the same time redistributing development benefits across the wider metropolitan territory. In this regard, Durrës

represents a particularly significant case. As the second city of the region, and strategically located at the gateway of several Trans-European Network axes and international corridors, Durrës is not only an important urban center in its own right, but also an example of how a major project can generate benefits for the region as a whole. Its port, logistics services, and related economic activities already function as critical regional assets and can play an even stronger role in supporting a polycentric and internationally connected regional structure. At the same time, regional competition remains intense and increasingly widespread. The Balkans are undergoing rapid transformation, marked by economic shifts, infrastructural investments, geopolitical repositioning, and growing inter-urban competition. In such a context, regions that are able to act strategically and implement coherent development visions are more likely to succeed than those that remain trapped in fragmented planning and reactive decision-making. This is why the future of the Tirana-Durrës region depends not only on diagnosing its problems accurately, but also on building the institutional capacity and political will to act in a coordinated, forward-looking, and regionally integrated manner.

A synopsis for capital region – The capital region of Albania is characterized by rapid and often unregulated growth, which has become the principal challenge shaping its spatial, infrastructural, and mobility conditions today. Over the last two to three decades, the region has experienced an extraordinary pace of urban expansion, demographic concentration, and economic transformation. However, this growth has largely occurred in an uncontrolled manner, producing fragmented development patterns and placing enormous strain on regional authorities. As the population has multiplied and settlement areas have expanded, public institutions have faced increasing difficulty in balancing the demands of demographic growth with the urgent need for infrastructure, services, and territorial organization. This mismatch between growth and planning has generated significant pressure on existing settlements and has directly contributed to severe traffic congestion across the region. The growing number of daily movements, intensified by residential concentration, economic activity, and service dependency, has overloaded mobility systems that were not designed to accommodate such high levels of demand. At the same time,

Albania's economic structure has further reinforced these pressures. The country imports significantly more than it exports, with import flows estimated to be three to four times higher, generating additional freight movement and transport demand, particularly within the capital region, where the largest concentration of consumption, logistics, and commercial exchange takes place. The lack of adequate access infrastructure has further aggravated this situation. Rather than guiding development in a structured and sustainable way, infrastructural deficiencies have encouraged dispersed urbanization, irregular expansion, and inefficient mobility patterns. This has led not only to worsening traffic conditions, but also to broader challenges related to accessibility, environmental quality, and territorial imbalance. For this reason, the present moment calls for anticipatory and strategic action. The region must now develop the structural and regional prerequisites necessary for a more balanced future, ensuring that the mistakes of the past are not repeated. Although Tirana is unquestionably the primary city of both the region and the country, the capital region cannot be understood as a purely monocentric territory. In practice, several other

urban centers, including Durrës, Vorë, Kamza, and Fushë-Kruja, already function as emerging sub-centers within the wider regional system. However, these cities remain insufficiently equipped in terms of infrastructure, services, and independent urban functions. As a result, they continue to depend heavily on Tirana for employment, administration, advanced services, and economic opportunities. This dependency places further pressure on the infrastructure that connects them to the capital, increasing commuter flows, traffic volumes, and spatial imbalance across the region. In this context, strengthening the role of sub-centers becomes essential. These urban nodes should not only be provided with basic infrastructure, but should also be equipped with central functions, economic activities, and institutional capacities that enable them to play a stronger and more autonomous role within the regional system. By doing so, development pressures can be more evenly distributed, mobility demand can be better managed, and the region can move toward a more balanced and resilient territorial model. This is precisely where the concept of polycentrism becomes highly relevant. Polycentrism promotes an organized urban system that does not rely exclusively on a single dominant center, but instead is structured around a network of interrelated and mutually supportive sub-centers. In such a system, growth is distributed more strategically, responsibilities are shared across locations, and specialized functions are allocated according to the comparative strengths and suitability of each center. A flourishing network of centers, in which each urban node contributes to the wider regional whole, represents a rational and sustainable response to the current challenges of the capital region. Such an approach would not only reduce the excessive burden currently placed on Tirana, but would also improve regional connectivity, support local economic development, enhance quality of life, and create a more coherent territorial structure. Ultimately, a polycentric model offers a realistic pathway for transforming the capital region from a space marked by uncontrolled growth and traffic pressures into a more coordinated, accessible, and sustainable regional system.

A Polycentric Concept for Tirana Region – As mentioned previously, polycentrism in the case of the Tirana-Durrës region implies the development of a complex urban system composed of several interconnected, yet non-equal, centers that share responsibilities and functions according to their capacities and territorial advantages. In such a system, balance can be more effectively achieved when central functions, services, and economic specializations are allocated to the most suitable locations, creating a series of differentiated and complementary sub-centers rather than relying excessively on a single dominant core. In this way, each center contributes to the wider regional structure through its own strategic role, while simultaneously reducing pressure on Tirana as the principal metropolitan center. At the same time, any planning concept, including polycentrism, must be critically assessed before being adopted as a strategic recommendation. Theoretical planning approaches always contain both strengths and weaknesses, and their practical value depends on how well they respond to the real conditions of the territory. In the case of the Tirana-Durrës region, one important strength is that the regional system already exists in practice, at least in certain functional aspects, even if it is not yet fully structured or coordinated. Another

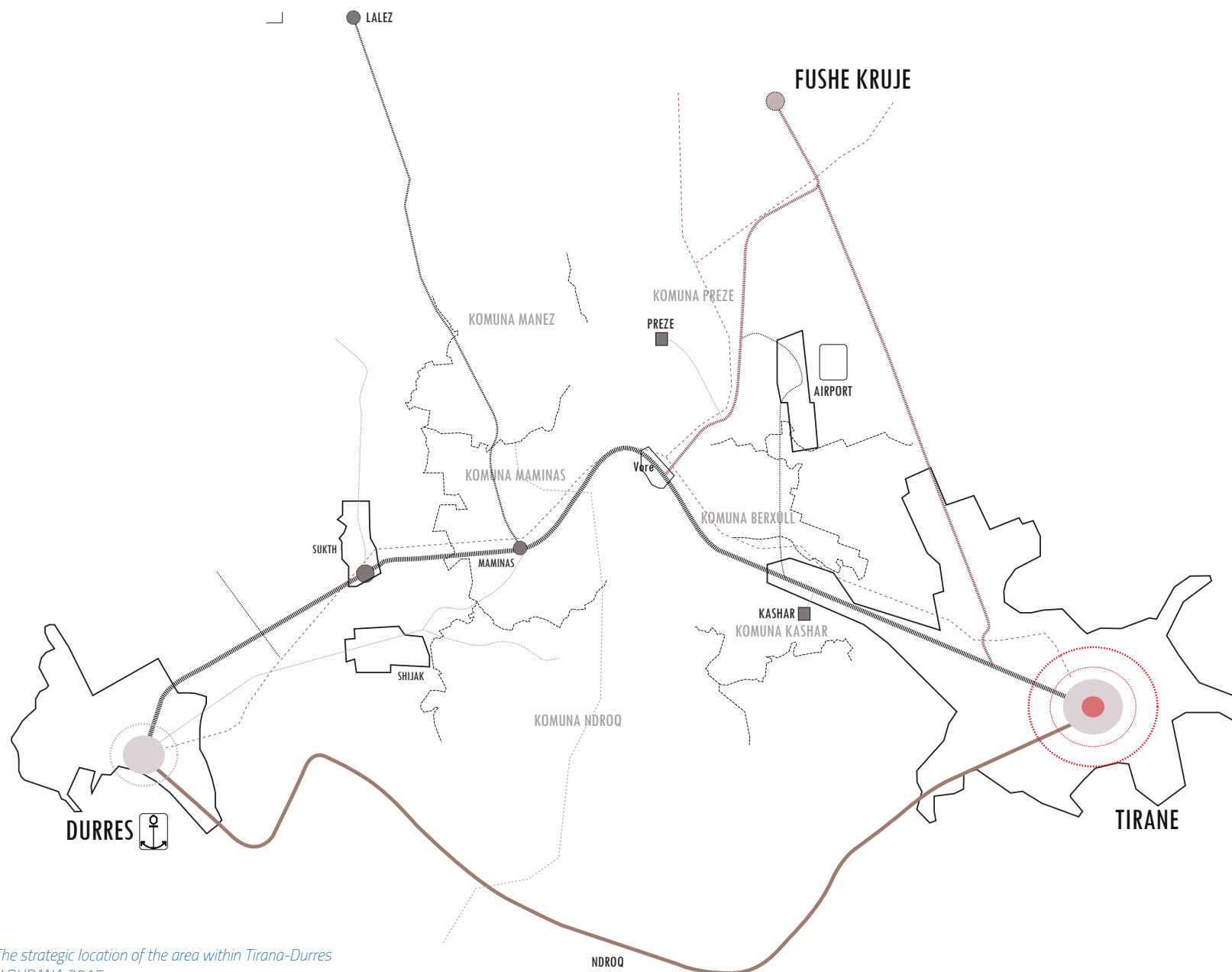


Fig. 1. The strategic location of the area within Tirana-Durrës
Source/ DURANA 2015

important advantage is that polycentrism is strongly promoted within European spatial planning approaches, particularly as a way to support territorial cohesion, reduce regional disparities, and guide more sustainable forms of development. For this reason, the proposed vision is not to create an entirely new territorial model, but rather to organize and direct growth toward the most appropriate and strategically suitable locations.

Within this vision, Tirana requires a highly specific and carefully controlled planning approach due to the extreme demographic, functional, and infrastructural pressures it currently faces. In the capital, urban planning and urban design must focus particularly on the form, shape, and density of development in order to discourage further traffic generation and uncontrolled expansion. This means promoting a more compact, efficient, and strategically managed urban structure, where land use and mobility are better integrated. Existing traffic pressures should then be addressed through improved traffic management measures, including the logic of one-way or uniquely directed mobility systems for private cars, while clearly prioritizing more sustainable and efficient modes of movement such as public transport, taxis, cycling, and walking. A central component of this strategy is the introduction of new forms of public transport that are faster, cleaner, more affordable, and more reliable. In particular, the future mobility structure of the region should increasingly be based on rail-oriented systems, including new railway infrastructure, tram lines, and, in the longer term, an underground metro line capable of connecting at least Tirana city center, the International Airport, and the Port of Durrës. Such systems would not only reduce dependence on private vehicles, but would also strengthen the strategic integration of the region by linking its key economic, logistical, and metropolitan nodes through high-capacity and sustainable transport corridors.

In the sub-centers, by contrast, the principal objective is to allocate stronger central functions and specialized economic branches. These centers should gradually become more autonomous and better equipped to serve their own communities and surrounding territories. However, for polycentrism to function effectively, this process cannot occur in isolation. It requires good coordination across all territorial and institutional levels, including local authorities in the sub-centers, regional governance structures, the connecting transport and service networks, and the national and international infrastructures that position the region within wider economic and geopolitical systems.

This is particularly relevant when considering the strategic role of the Port of Durrës and its surrounding logistics area. The port should not be viewed only as an asset for the local city or even for Albania alone, but as an infrastructure node of broader regional importance. Its services have the potential to support traffic and exchange flows moving not only within the Tirana–Durrës region, but also along east–west and north–south corridors extending beyond Albania. Given its position between Europe and wider connections toward the Middle East and Asia through land, air, and sea, Durrës can serve as a major gateway in a broader regional and international network. In this context, the intention is to avoid the current pattern of parasitic traffic, in which excessive movement is funneled through Tirana because so many functions remain concentrated there.

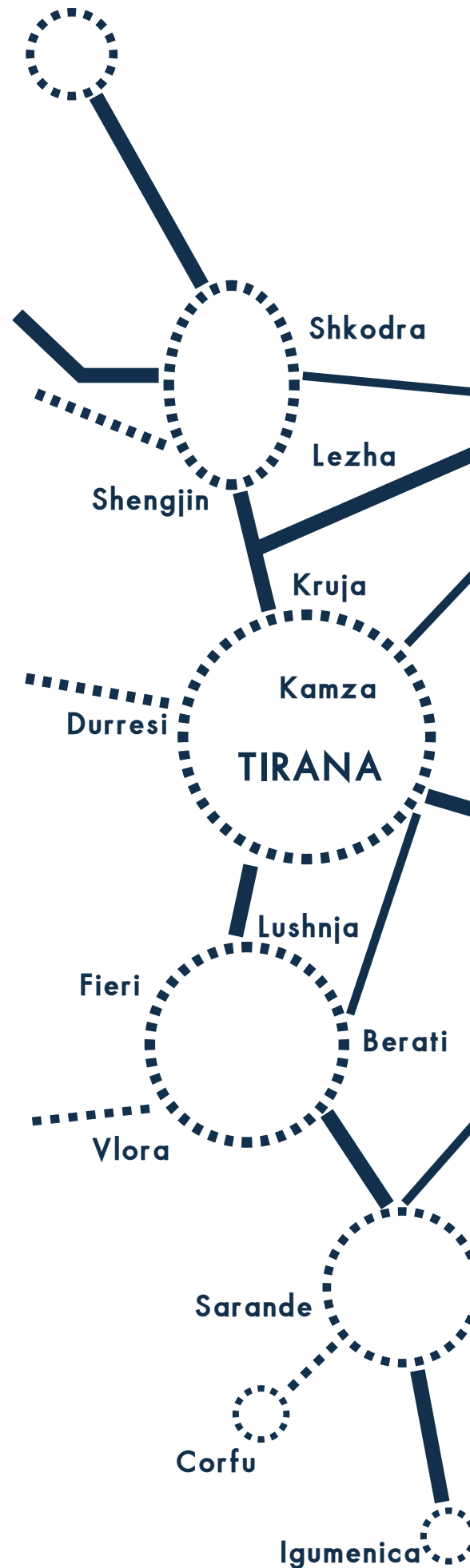


Fig. 2. Durana Development Concept
Source/ DURANA 2015

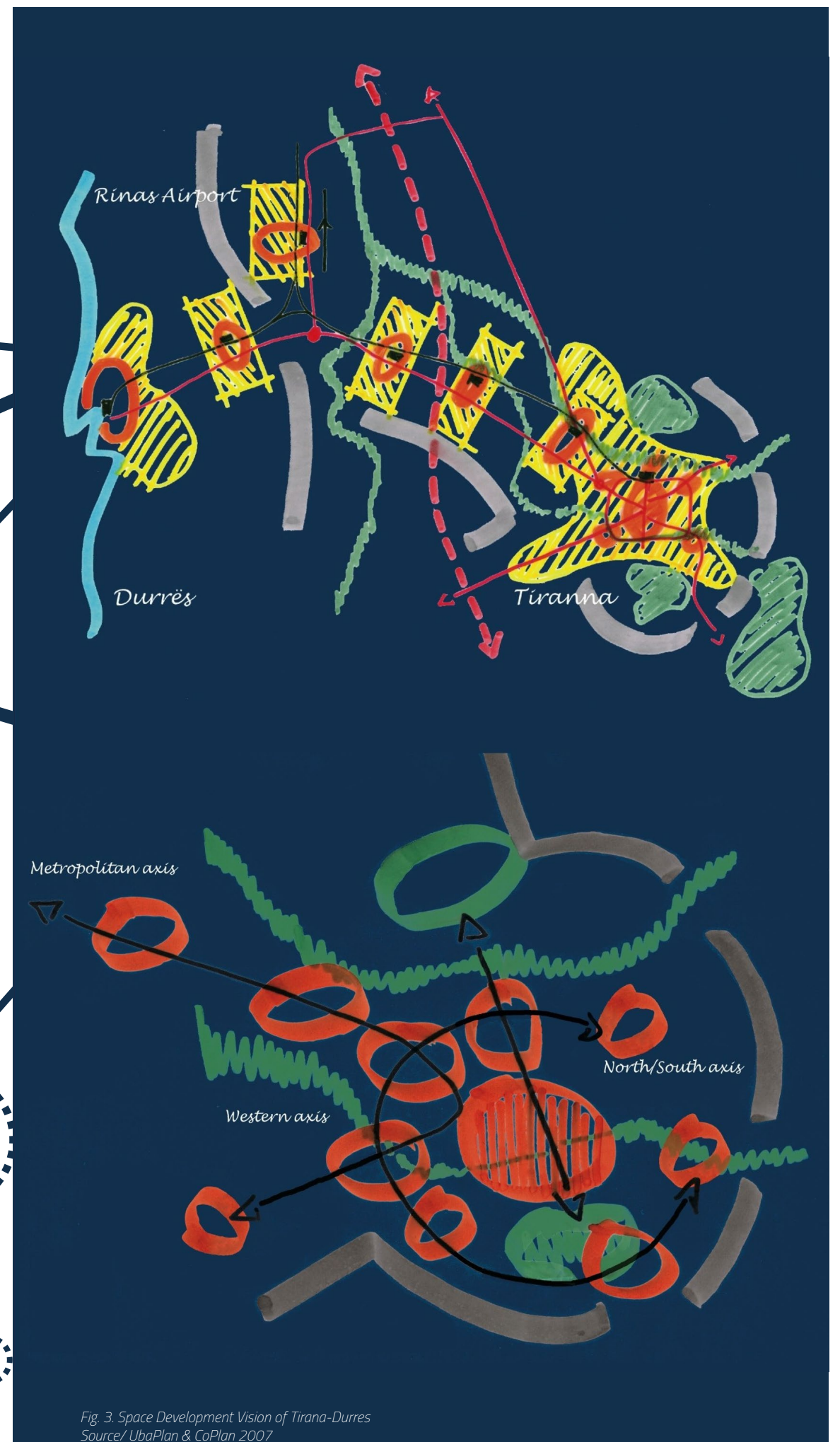


Fig. 3. Space Development Vision of Tirana-Durrës
Source/ UbaPlan & CoPlan 2007

The overarching goal of this strategy is therefore to provide basic infrastructure to all communities and municipalities and to connect them in a sustainable and efficient way, while identifying the most suitable locations for central functions and specialized economic branches. In doing so, the region can strengthen complementarity between its centers and move toward a more balanced and functional territorial structure. Rather than reinforcing dependency on a single metropolitan core, the aim is to establish a region in which different centers work together through interconnected yet differentiated roles. More specifically, several sub-goals can support this broader objective. First, infrastructure should be developed in all major centers so that communities and municipalities are increasingly able to manage

themselves without excessive dependence on the largest regional center. Second, special urban and economic “magnets” should be developed within the framework of a balanced polycentric network, allowing selected centers to attract investment, services, and activities according to their comparative strengths. Third, cooperation must be actively supported in favor of a more functional region, requiring all levels of stakeholders local, regional, and national to communicate, coordinate, and cooperate more effectively. Fourth, adequate traffic connections and sustainable public transport systems must be established to serve the selected centers and support their integration into the wider regional system. Finally, the region must strengthen its links with other European and Balkan centers in order to promote especially the

financial, productive, and logistical sectors through more direct access to international markets. Taken together, this polycentric vision offers a realistic and strategic framework for reducing current territorial imbalances, managing growth more effectively, and transforming the Tirana–Durrës region into a more integrated, sustainable, and competitive regional system. Rather than seeing mobility, infrastructure, and development as separate issues, this approach recognizes them as mutually dependent components of a larger spatial strategy aimed at strengthening both regional functionality and long-term resilience.

Developing specialized regional centers – Specialization should be assigned to all sub-centers on the basis of their existing local potentials,

distinctive territorial features, and the specific qualities and opportunities of each municipality. In order to promote any form of specialization at the community level, it is first essential to undertake a careful analysis of the spatial qualities of the selected sub-centers. This includes understanding their geographical position, accessibility, urban structure, land availability, socio-economic profile, and development capacity. Only through such an assessment can specializations be allocated in a way that is both realistic and sustainable. At the same time, it is equally important to guide and concentrate development around these identified centers in order to discourage informal sprawl and uncontrolled peripheral expansion. The form, density, and spatial structure of residential blocks and economic zones play a decisive role in this regard. If these areas are planned in a compact, organized, and functionally integrated way, they can significantly reduce so-called parasite traffic at both the local and regional scale. In other words, better urban form can directly support more efficient mobility patterns and reduce unnecessary dependence on the main metropolitan core. This type of more market-oriented and strategically guided urban development, when combined with high-ranking infrastructure, can actively stimulate the formation of a polycentric regional system. One of the clearest examples is the design and implementation of a new public transport network for the entire region, developed in close cooperation with public transport interest groups and service providers. Their inclusion in the planning and implementation process is essential, as a well-considered and balanced partnership can strengthen the overall performance, reliability, and long-term viability of the regional mobility system. Another key dimension of this approach is the establishment of a comprehensive database system, both for the region as a whole and for the disaggregated realities of each community, municipality, and sub-center. Such a system facilitates the identification of the most suitable locations for specific functions and investments on the basis of data analysis. When quantitative data is combined with qualitative knowledge, local observations, and regional expertise, it provides a more solid basis for sustainable decision-making. In this sense, location analysis becomes a fundamental methodological tool for assessing the existing potential of urban centers and for determining their future role within the wider regional system. Accordingly, data from INSTAT, previous studies on Tirana’s traffic and transportation systems, as well as best practices and case studies from Italy, Austria, and South Korea, have contributed to the formulation of conclusions regarding the Tirana–Durrës regional development network. The final analytical scheme illustrates the potential of each center in relation to several important factors, including accessibility by road and rail, land availability, population size, workforce capacity, urban image, and economic potential. This type of representation is especially useful because it helps visualize how the different centers could work together in a complementary way rather than in competition or dependency. For example, Tirana and Durrës possess considerable economic and strategic potential, yet both face severe limitations in terms of available land for future expansion. This constraint can be partially balanced by other centers, such as Vorë and similar urban nodes, which may offer more space and opportunities for accommodating specific functions, services, or economic activities. Such findings reinforce the original argument that a polycentric system composed of complementary

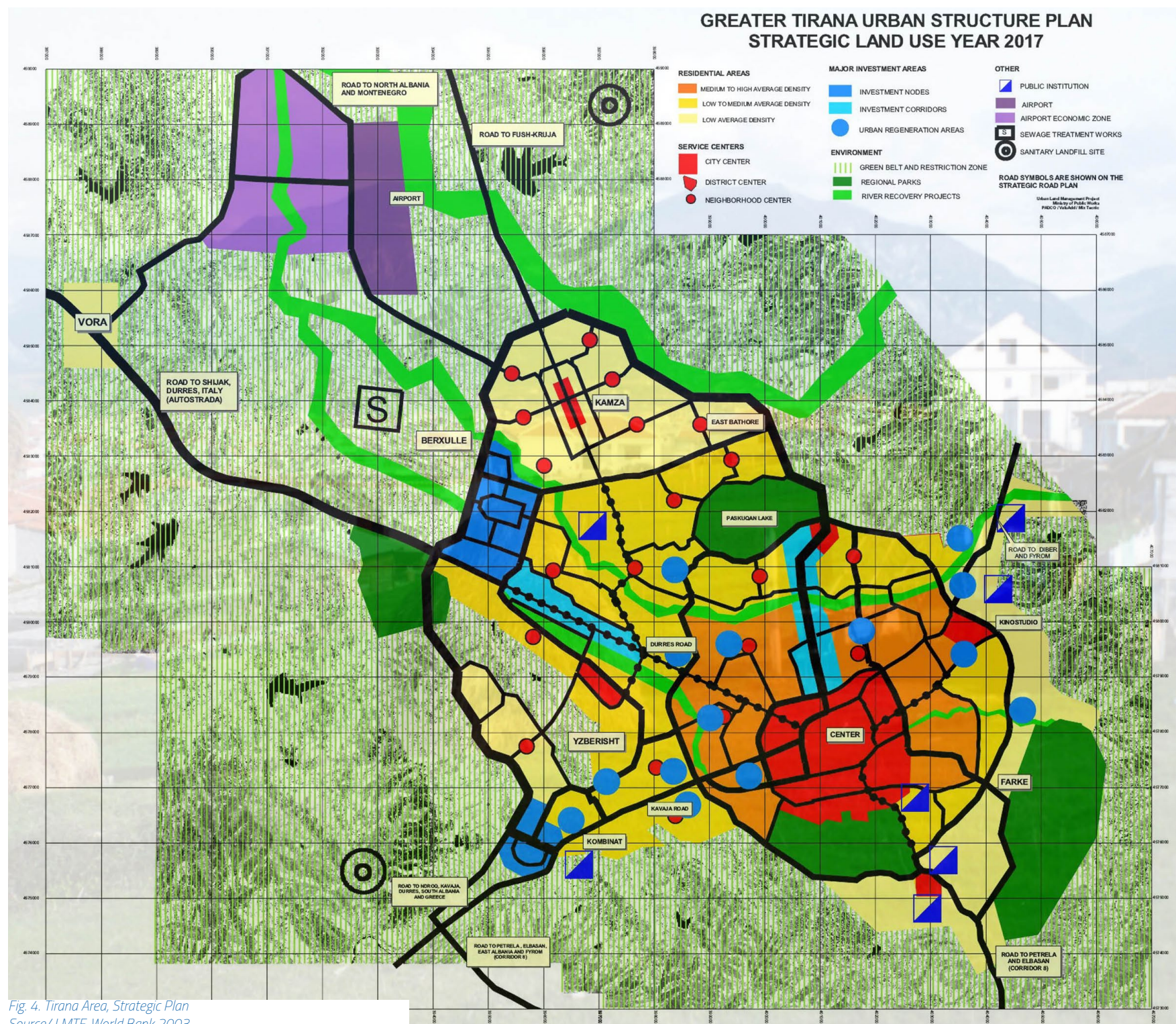


Fig. 4. Tirana Area, Strategic Plan
Source/ LMTF, World Bank 2003

and specialized centers would be beneficial for the entire region. By distributing functions more rationally and strengthening the role of multiple urban nodes, the region can reduce traffic pressures on Tirana, improve territorial balance, and create a more resilient and efficient regional structure.

Defining the regional “magnets” – This can be considered a basic precondition, since identifying the most appropriate function for a specific location should emerge through a negotiation process among stakeholders. Decisions regarding economic branches, health services, or the provision of basic infrastructure cannot be made in isolation; they require coordination in order to ensure that the selected functions not only strengthen individual centers as local “magnets” of development, but also enable them to contribute as economic drivers for the wider region. A possible decision-making framework may include several key steps: first, gaining an overview of demographic conditions and natural resources; second, conducting on-site research to assess the use or underuse of local potentials; third, evaluating opportunities for further development and their sustainable implementation; fourth, verifying

whether any risks are associated with the proposed uses; fifth, assessing the spatial effects of key projects; and finally, evaluating the broader impacts in order to formulate appropriate recommendations. Such a process is essential for ensuring that specialization is not assigned arbitrarily, but is instead grounded in evidence, territorial realities, and long-term regional interests. By following a structured and participatory approach, local authorities and stakeholders can make more informed decisions, reduce potential conflicts, and increase the likelihood that each intervention will support both local development and wider regional complementarity. In this way, planning becomes not only more strategic, but also more responsive to the actual needs and capacities of the region.

Cooperation and coordination in Spatial Planning aspects – It must be clear that Tirana-Durres region, it is not an administrative region, which often complicates the process with formal procedures and structures. In this case we can talk for example on so called “greater Tirana area”, or “capital metropolitan region” which so far are not yet recognized by law, rather than used in practical terms. This can be considered an advantage for

the implementation of many good and creative ideas, as far as there exists an informal platform of information, brainstorming and communication among all stakeholders. Ideally they must agree on a self-binding document that specifies location for central functions and special branches. So each municipality can promote its own development accordingly. However the cooperation needs to be nurtured, via financial incentives (for projects in line with regional vision) or administrative advantages. Here are to be included: development of land-use plans; fixing minimal values of buildings and settlements densities; development of fiscal incentives for businesses and institutions when settled, etc., in accordance with the recommended special functions.

Controlling spatial development via Public Transport nodes – The best way to steer developments in certain urban centers is allocation of high rank infrastructure. So, introducing a metro or a tram-train system that will connect Tirana with all important centers of the region will promote sustainable developments, offering not only better public transport, but also denser developments near their stations, in accordance with a polycentric

vision. This can further stimulate creation of a potential “Balkan Hub”, especially because of the potential of Durres port that handles almost 80% of the total cargos in the country, and makes a good link between Italy/EU and Bulgaria-Turkey (towards Middle-East and Russia). This is also in line with TEN policies; where port, logistics and transport can facilitate benefits for the Balkan region, and easy circulation in the region of Tirana, too. The strategic geopolitical positioning of Albania, the 8-th Pan-European corridor, and the highway to Kosovo and Nish (Serbia), increases chances for success between the interests of EU and Asia. The increase of performance by Tirana International Airport performance, makes Tirana-Durres region, a center for the whole Western Balkans and its full integration towards EU. Such picture can be completed, if also hinterland connections with the region, both at the national and Balkan levels are balanced with Durres Port developments, and its international importance. Thus railway connections with Montenegro, Macedonia and Greece must be improved; as well as highway connection with the “Blue Corridor” and Kosovo must complete. This will serve tourism growth and mineral cargos from hinterlands to international destinations. Thus Albania and Tirana Region can benefit considerably economically from transportation, and not face only its secondary effects like traffic, noise and pollution. Durres Port can also benefit more in this way from the financial and logistics services. Considering Vloora and Shengjini Ports as alternative logistics hubs, it can further reduce to Tirana-Durres region, the stress of goods depositing/handling and traffic circulation, at least by 20-35%.

Reference:

Note: This article is developed on basis of several national and international workshops/studios at Master and PhD developed in the framework of the joint international PhD program of Polis University and Ferrara University, coordinated in the framework of the project financed by AKKSHI/NASSRI Tirana Albania, and managed by Assoc. Prof. Luarasi. S., & Kumaraku. LI. It also involves the outcomes of urban planning and design studios lead by Prof. Alij. B. and Dhama. S. and a broader team of Polis University academic staff.

ADA Austrian Development Agency & Traffico Consultancy (1995): Tirana Municipality Transportation Plan.

World Bank / PADCO Consultancies (2001): The Strategic Plan for Great Tirana Area.

World Bank / Government of Albania (1996): Urban Project Appraisal Document.

USAID / DPU Harvard Graduate School of Design (1996): Socio-Economic Report on Urban Project Sites of Tirana.

Co-PLAN Institute, Alij. B. at al, 2003: Tirana the Challenge of Urban Development.

Co-PLAN Institute & ENHR European Network of Housing Research, Alij. B. (2003): Making Cities Work Conference.

Dhama. S., Alij. B, Thomai. Gj.: (2015): Tirana The missed City. Berlage Institute & Tirana Municipality: Tirana Metropolis.

Polis University & Ferrara University, International PhD Workshop, Alij. B, at al (2012): Durana.

Polis University & Ferrara University 2024: International PhD Workshop, AKKSHI/NASSRI Project: Luarasi. S, Kumaraku. LI, at al

Alij. B, & Dhama. S, at al.: Studio Planifikimi dhe Dizjani Urban 2024-2025.

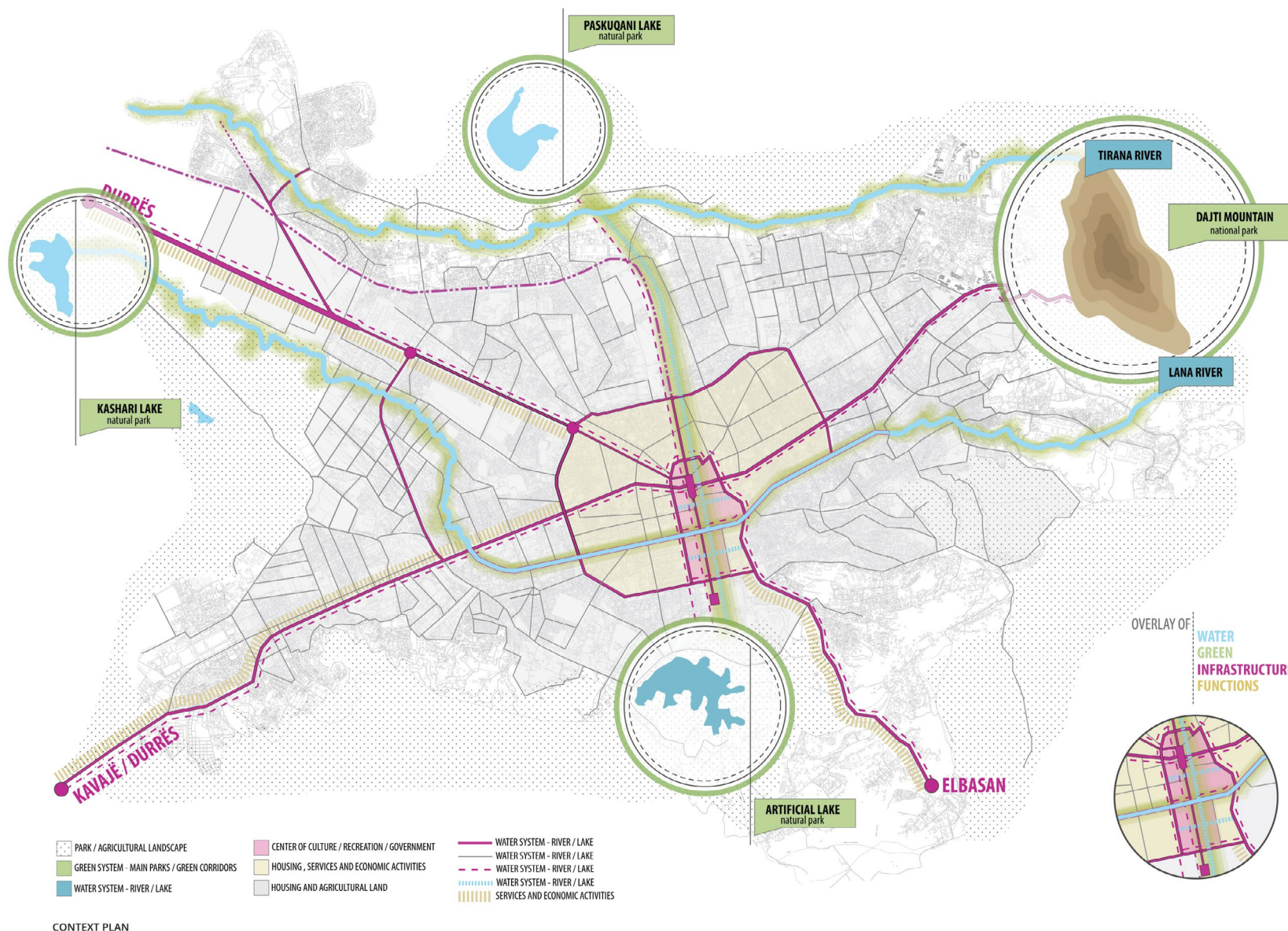


Fig 5 Tirana Infrastructure
Source/ Polis & Felix Studio 2015



Fig. 6. Tirana Metropolis
Source/ Berlage Institute (2024)