

Decentralizing Traffic Congestion in Tirana's Urban Centre

Re-interpreting spontaneous commuting as a tool for sustainable growth in Kashar

DOI: 10.37199/o41011119

Morika KAKINUMA DEANGELIS

PhD IDAUP / University of Ferrara

Abstract - *The socio-political and historical evolution of Tirana, Albania has left a complex interweaving of overlapping patterns, functions and narratives upon the urban landscape, resulting in a rapidly urbanizing and growing city that is responding to concurrent phases of top-down, bottom-up, planned and organic urban development. These dynamic and conflicting development narratives are a broader reflection of post-socialist urbanization phenomena in the Balkans, where rapid growth often outpaces or occurs outside of infrastructural and governance capacities. These contradictory planning processes rely upon a transport infrastructure that inadequately meets commuter needs, resulting in intense traffic congestion at major entry or exit points. This research hypothesizes that the challenges of traffic congestion, concentrated financial investment in the city centre, and preference towards privately-owned vehicles can be addressed through an alternative methodological approach focused on examining the effects of small-scale commuting decisions on road infrastructure and its relationship to urban services. The methodology is explored through a project-based approach in the peripheral neighbourhood of Kashar, a strategic area along the Tirana - Durrës corridor that connects to the airport and major highway and railway infrastructure projects. Application of this methodology in Kashar uncovers a network of secondary and tertiary roads functioning as alternative primary roads for commuters to bypass traffic, in addition to isolated urban areas that are void of necessary services. The resulting analysis and findings enable an interpretation of a closed-system geometric framework that addresses the realities of commuting choices, urban functions and integration of major development. This sustainable framework for urban growth mitigates traffic congestion by decentralizing existing hotspots and identifying sites for new urban centres that pierce the landscape to weave together present and future connections. By leveraging commuters' spontaneous use of infrastructure, this approach addresses Tirana's organic development logic while providing solutions for its future growth.*

Keywords - Traffic congestion, Multi-modal transportation, Spontaneous growth, Infrastructure, Urban centres

Introduction

Research Hypothesis and Objectives

In Tirana, the concentration of economic functions and administrative service within the city centre further exacerbates already strained mobility systems taken up primarily by private means of transportation, creating uneven patterns of accessibility and reinforcing socio-spatial polarization of services. This research hypothesizes that the challenges of traffic congestion, concentrated financial investment in the city centre, and preference towards privately-owned vehicles can be addressed through an alternative methodological approach that reads Tirana's urban form via the effect of small-scale commuting decisions on the role of road infrastructure and its

relationship to urban services. More specifically, the research considers the overlap of existing underused tertiary roads together with spatial analysis of ten-minute service areas, to reveal latent infrastructural hierarchies and informal patterns of connectivity inscribed on Tirana's urban landscape that are not given space in contemporary formal planning approaches.

The guiding research question asks how everyday commuting choices can reveal and reshape the infrastructural and spatial logics that guide Tirana's urban growth? This methodological approach repositions citizens simultaneously as the subject,

reader, and active interpreter of urban processes and transformations, following a participatory form of knowledge generation and challenging traditional or top-down views of planning processes. The data analysis includes observational analysis of private vehicular traffic patterns, spatial mapping, census data where available, and field-based validation of commuting flows. This approach references existing empirical and theoretical literature in urban studies and planning that call for bottom-up data creation and interpretation, co-production of knowledge and everyday urbanism (Chase et al., 1999; Friedmann, 1987, 1989; Healey, 1997; Schon, 2017).

Altogether, the intentional choice to reframe citizen commuting decisions and activity as the primary mechanism for reading and interpreting Tirana's urban landscape contributes to a sustainable framework for urban growth that decentralizes existing hotspots of traffic congestion and urban development and envisions an alternative system of future urban centres. This approach contributes to the rich urban and transport planning discourse surrounding Tirana and its surrounding regions, by reconciling the spontaneity of citizen activity with strategic infrastructural planning, offering a reconceptualization of how cities can effectively address mobility and growth challenges.

The study objectives are to (1) identify and map the informal commuting routes using private vehicles that shape Tirana's mobility structure; (2) evaluate the relationship between these commuting routes and existing service accessibility; and (3) develop a framework to inform sustainable future urban growth that both decentralizes and redefines new multimodal systems.

Literature Review

Overview of Tirana's Historic Urban Development

Tirana's historical urban development has seen diverging phases of planning approaches and methodologies in line with the corresponding socio-political context at the time. Drawing from Rossi's conceptualization of analyzing the city and its architecture, this research considers the analysis of Tirana as not only the visible urban elements, but also the dynamic processes of constructing

and demolishing elements that continually redefine the city over time (Rossi, 1982). The following overview of Tirana's historical urban development outlines the phases of organic building activities, planned construction interventions, destruction and demolition of historic symbolic artefacts, expropriation of land for private use, and rapid land use changes that characterize Tirana's urban dynamics (Rossi, 1982).

Transportation is positioned at the centre of Tirana's urban origins, as early settlements began to take form in the beginning of the 17th century influenced by the presence of Ottoman Empire trade routes (Dhamo, 2021a). At this time, Tirana's urban development was primarily organic, structured around social and cultural norms, including familial ties and the concept of külliye, where certain building functions are organized around mosques (Dhamo, 2021a). In 1920, Tirana's role changed definitively when it was named as the capital, a moment that would significantly shape its future urban evolution. With this change, Tirana was now available for top-down planned interventions to organize and formalize the urban landscape. During this time, Armando Brasini's masterplan for expanding Tirana included the centralization of government functions in the city centre around Skanderbeg Square and defined the north-south boulevard. The latter would dominate subsequent planning interventions, by symbolically and spatially overwriting the east-west organic development logic that had developed out of Tirana's transportation connection to Durrës and imposing a new direction of movement through the city. During the Fascist period, Brasini's plan was expanded upon by Gherardo Bosio, whose interventions underscored the importance of the north-south Grand Boulevard and continued constructing buildings in the style of Italian Fascism. After World War II and with the introduction of the Communist government, historic buildings were demolished and replaced with four to five-storey block style apartment buildings. Importantly, private car ownership was not permitted, and citizens took to moving around Tirana via bus or bicycle. This period echoed top-down planning mentalities, in an effort to contain and shape social behaviours and urban mobility. After the fall

of the Communist government, citizens reacted to the newfound freedom of urban mobility and development through spontaneous urban infill and informal, unregulated construction that occurred irrespective of urban morphologies outlined by previous historical development periods. "A private sector emerged" and "free movement of people seeking employment and better living conditions is now considered a fundamental human right" (Potsiou, 2010, p. 10). This reactionary organic development phase is reflected in the urban sprawl of the city, as the city grew outwards and increased in population density. The responses from the Albanian government to the questions of informal development has primarily occurred in four ways: demolition of illegal structures, ignoring or refusal to address the situation, comprehensive spatial planning, or legalization (Potsiou, 2010). Currently, Tirana's road infrastructure suffers from poor management of urban traffic, poor conditions of rural and urban roads, lack of opportunity for mixed-modal transportation journeys, and extremely high levels of environmental pollution related to transportation congestion (Josifi, 2021). The limited expansion of public transport networks contrasts sharply with citizen dependency on

private vehicle use. We can consider the top-down, formal attempts to organize and plan Tirana's urban landscape as adhering to Alexander's discussion of the systems composing a city in terms of an artificial tree, wherein "no piece of any unit is ever connected to other units, except through the medium of that unit as a whole" (Alexander, 2013, p. 9). Similarly, "informal practices are rhizomic in contrast to the tree-like strictures of urban regulation and planning" that has been outlined by Tirana's governance systems over time, responding with informal network connectivity to oppose hierarchical control of urban space (Dovey, 2012, p. 354). In this sense, Tirana's neighbourhoods and peripheral areas are only understood in relation to their connectivity as facilitated by the primary and secondary ring roads. The road infrastructure is therefore the ultimate structure that inherently defines how neighbourhoods (and by virtue, residents within the neighbourhoods) can interact and connect with each other. However, the road infrastructure does not align with the actual usage by residents. "The main outer orbital link which should distribute the flows across the city, is not yet completed," and "the structure of the Tirana road network is currently implicitly forcing the private traffic to use the inner

city primary and secondary network" for small and large-range travel, resulting in extremely heavy traffic conditions towards the centre (Bosetti et al., 2020, p. 29). This misalignment between planned and practiced mobility underlines the research hypothesis: the spontaneous mobility decisions of citizens and commuters constitute an implicit urban logic that is overlooked by contemporary formal planning approaches in Tirana.

Altogether, these major phases of planning development in Tirana occurred without commensurate investments in transportation infrastructure that accurately reflected the mobility needs and mobility patterns of citizens. Simultaneously, major shifts in transportation occurred as citizens were able to move around with private vehicles, drastically changing the possibilities and limits of urban mobility. In fact, from 2018 to 2022, the number of road vehicles per 1,000 inhabitants in Albania increased by 44% (Rembeci, 2024). The oscillation from large-scale top-down urban development to reactionary informal urban infill, along with the insufficient road system infrastructure has resulted in contradictory urban development processes that do not adequately meet the existing and future mobility needs of Tirana's citizens. To this end, it is possible to consider Tirana's contemporary growth as a kind of hybrid between formal planning intentions and informal adaptations, where transport systems are both the structure and symptom of transformation.

sprawl or infill. Over time, these processes have resulted in consolidation of government services, retail, healthcare and services in the city centre and increased fragmentation between service-rich central zones and service-poor peripheral zones. This unequal distribution of and access to essential services has resulted in significant spatial and social inequalities for residents in underserved peripheral neighbourhoods (Pereira et al., 2017, 2019). As a result, residents in peripheral areas who wish to use centrally-located services are forced to use heavily-trafficked primary and secondary roads that unnecessarily lengthen travel times. In this context, Fainstein's discussion of spatial justice provides a useful framework to understand how Tirana's spatial arrangements are a primary determinant of social inequalities for marginalized neighbourhoods (Fainstein, 2017). Spatial accessibility analyses such as service area mapping and gravity models provide an analytical foundation for quantifying this unevenness in Tirana's spatial arrangements.

From the overview of Tirana's historic masterplans, it is evident that attempts to "produce a city organized along rational lines [i.e. the north-south Boulevard]" have attempted to impose particular visions of land use and mobility (Fainstein, 2017, p. 132). Furthermore, the municipality of Tirana's contemporary urban development and solutions to high traffic congestion (and in Albania as a whole) continues to adhere to a general strategy of creating more and wider highways. In reality, this approach does not address the underlying issues causing traffic congestion in Tirana, whether due to limited road capacities or road incidents, and "increased provision of interstate highways and major urban roads" highly unlikely to resolve the existing challenges (Downs, 2005; Duranton & Turner, 2011, p. 2616). However, the reality is that these masterplans are wholly discordant with the transportation modes and choices used by residents in Tirana, and these approaches to organizing urban space "disregard local knowledge and fail to develop understanding among the public" (Fainstein, 2017, p. 134). These transportation choices can reveal patterns of spatial inequality and infrastructural need, that can inform opportunities for service redistribution and effectively address spatial justice for peripheral areas. The amalgamation of these seemingly small-scale, instinctual driving decisions over time has resulted in a spatial reorganization of Tirana's road infrastructure, wherein tertiary and local roads take precedence over the primary and secondary roads. Recalling Lynch's discussion of how citizens experience their urban surroundings through identifying landmarks, pathways and districts, the spontaneous use of Tirana's primary, secondary and tertiary road networks reflect how citizens experience and navigate the urban landscape, in comparison to the prescribed use as designated by formal road hierarchy. The commuter choices to bypass traffic congestion redefine informal routes and through consistent rewritings of the urban landscape, the city and its infrastructures become "product[s] of many builders who are constantly modifying the structure for reasons of their own" (Lynch, 1960, p. 2). In this way, Tirana's urban environment is composed of people who are creating a means of ordering the city through mobility patterns, to create an alternative reading of Tirana that better aligns with their own use, meanings and memories (Rossi, 1982). Recalling Alexander's criticism of urban systems (trees) whose physical layouts fail to correspond to social realities or real living systems, this research proposes a methodological turn to draw out and highlight the organic use of

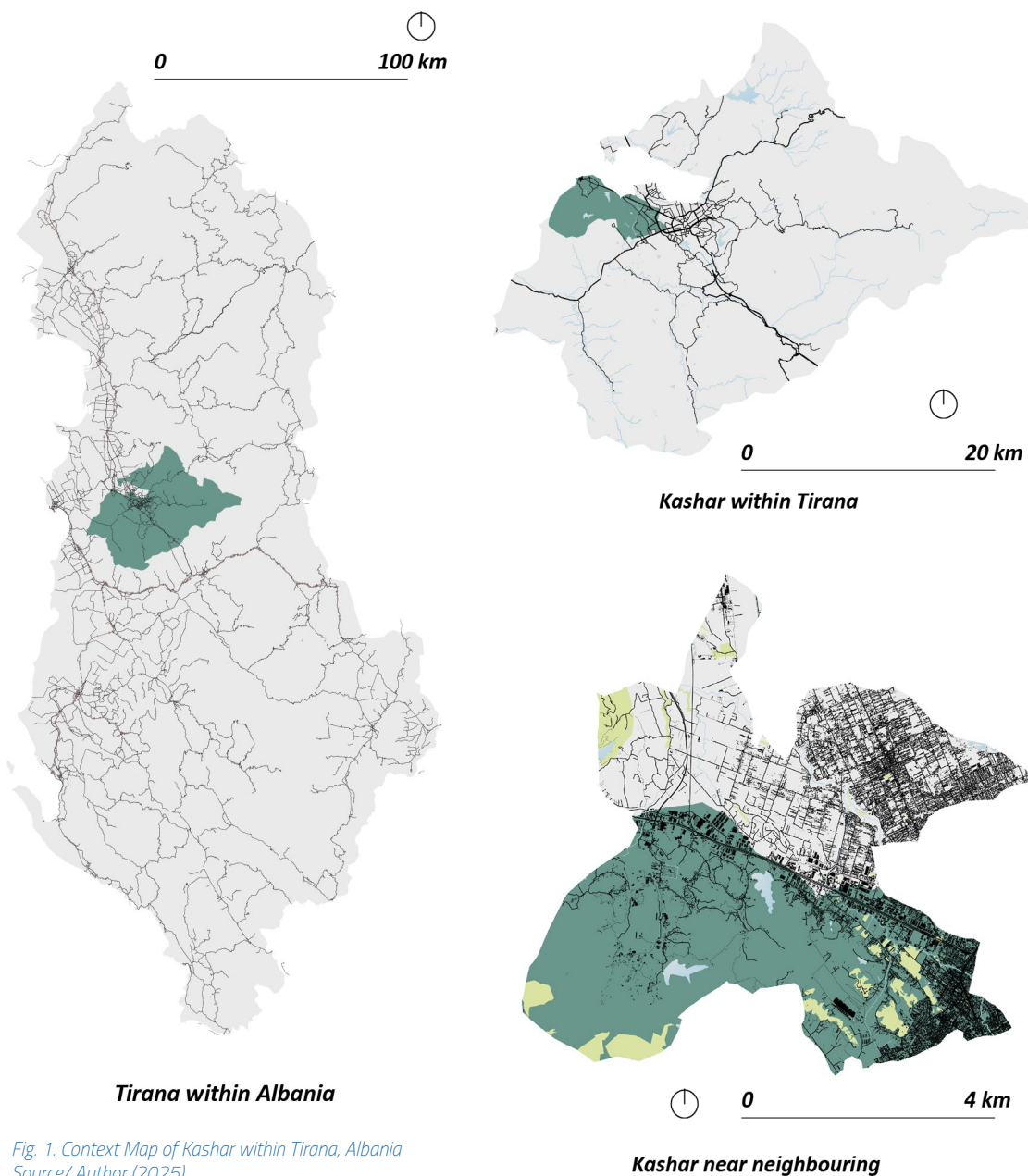


Fig. 1. Context Map of Kashar within Tirana, Albania
Source/ Author (2025)

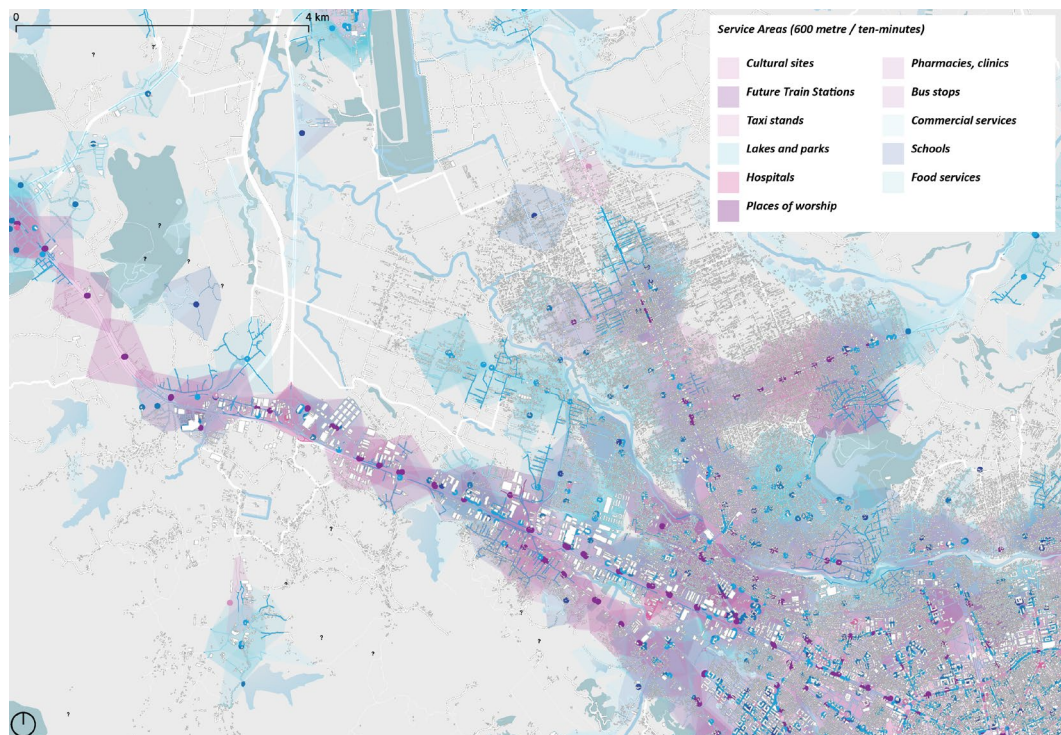


Fig. 2. Network Analysis of Services in Kashar, Tirana
Source/ Author (2025)

road infrastructure as opposed to the prescribed use (Alexander, 2013). Drawing from Hilberseimer's discussion of urban change and urban systems, this research proposes moving away from the archaic conceptualizations of Tirana's urban form as defined by the north-south boulevard, and towards a "new city element, a new settlement unit" that would "permit a general solution of all the different parts of the city and their relation to each other," and "provide a framework for healthy community life" (Hilberseimer, 1955, p. 193). Borrowing from Dovey's reference to Shatkin's discussion of Manila's informal settlements, "the informal is often rendered invisible to the gaze of the formal city" and "the streets of informal settlements do not appear on maps" (Dovey, 2012, p. 351). In this context, "the morphologies and spatialities of informality" can be defined as "the ways in which informal urbanism flourishes in the spatial interstices of the city and produces urban phenomena with a potent impact on the streetscape and urban image" (Dovey, 2012, p. 352). As such, the methodological choice to leverage citizen behaviour and the subsequent informal networks, reframes the negative aspects generally associated with informality and instead validates or legitimizes spontaneous actions as a planning mechanism (Dhamo, 2021a, 2021b).

Tools and Methodology

The methodological approach employed to develop an alternative planning perspective towards transportation planning in Tirana utilizes academic references on action-based research, emergent urbanism and radical planning as theoretical frameworks, grey literature describing the historical development of Tirana, and explores these themes through a project-based study of the neighbourhood of Kashar, Tirana. The research utilizes primary and secondary data to describe Tirana's existing urban context in terms of geomorphology, road infrastructure, and major urban projects, as well as traffic conditions and the presence of and access to services. Primary data were collected during fieldwork observations in December 2024 during peak traffic hours from 6AM – 9AM and from 5PM

Service Type	Total Service Area in Kashar (sq km)	Share of Kashar's Land Area (%)
Cultural Sites	1.09	2.77
Future Train Stations	1.03	2.62
Taxi stands	1.12	2.85
Lakes & parks	2.68	6.83
Hospitals	0.88	2.24
Places of worship	0.00	0.00
Pharmacies and clinics	6.02	15.34
Bus stops	10.1	25.75
Commercial Services	10.2	26.00
Schools	32.6	83.12
Food services	8.28	21.11
ALL SERVICES	13.5	34.3

Tab. 1. Service Areas by Type in Kashar
Source/ Author (2025)

to 8PM. Secondary data included spatial data files from OpenStreetMap and Tirana Municipality's Open Data Portal, urban plans and strategies from Tirana Municipality including Tirana's Sustainable Urban Mobility Plan (SUMP), demographic data from the Institute of Statistics (INSTAT) and traffic data from Google Maps (Drejtoria e Përgjithshme e Qeverisjes Elektronike dhe Inovacionit, 2024; Google Maps, 2024; Institute of Statistics, 2024; OpenStreetMap, 2024; Republika e Shqipërisë Instituti i Statistikave, 2024; Simone Bosetti et al.,

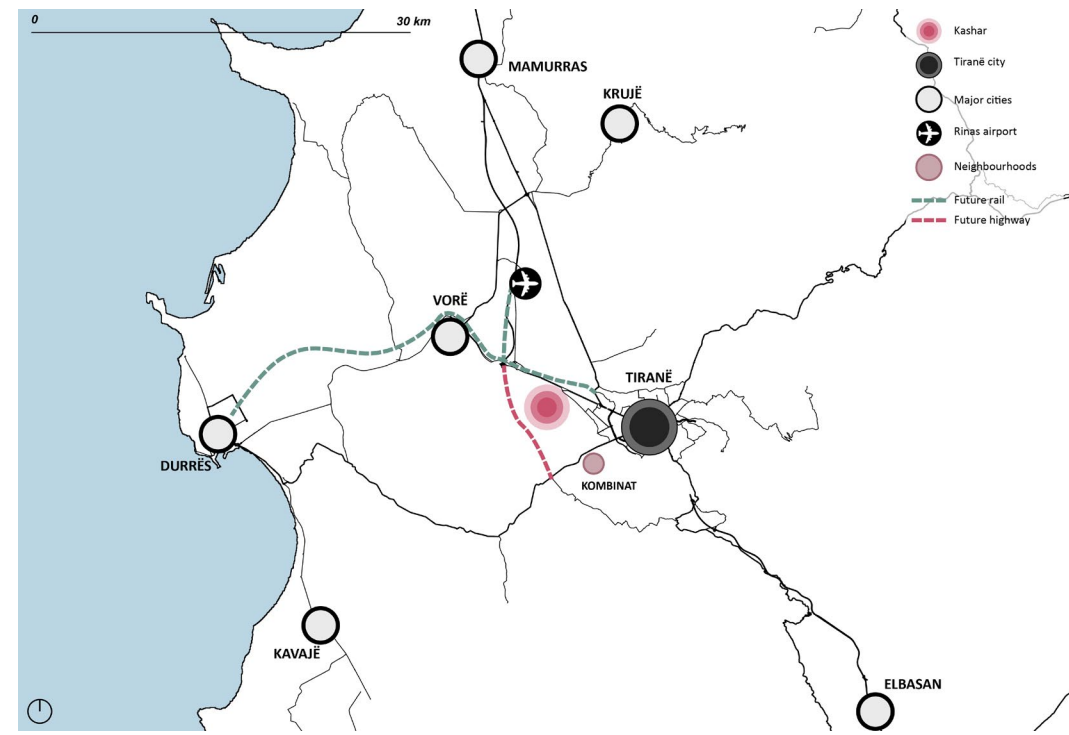


Fig. 3. Strategic location of Kashar within Tirana-Durrës corridor
Source/ Author (2025)

2020). All geographic information systems (GIS) files were projected in EPSG 6870 (ETRS89 / Albania TM 2010) with neighbourhood-level analysis at 1:79,439 resolution.

The analysis began with by mapping Tirana's road infrastructure, according to the official road hierarchy and connections to key areas. The latter includes transportation nodes, such as Rinas airport, major urban zones including Tirana's city centre, Durrës, and Vorë. The road infrastructure was further analyzed using ethnographic observations of the traffic conditions, usage and traffic commuters. The research team observed vehicular traffic in terms of directions on primary, secondary and tertiary roads during weekday peak periods.

In addition to this work, we considered the locations of major infrastructural projects including upgrading the highway connecting Kashar to another major peripheral neighbourhood (Kombinat), and the construction of the Tirana-Rinas-Durrës railway, with three train stations planned in Kashar (Western Balkans Investment Framework (WBIF), 2025). The overlay of the existing and future context of Kashar enables a closer understanding of how the neighbourhood is expected to evolve and where new hubs may emerge. We then identified road connections with considerably high traffic congestion, to locate areas with existing missing road connections or future high-traffic zones. We then mapped where existing urban services are located, including healthcare facilities, places of worship, commercial services, cultural centres, food and grocery stores, bus stops, schools, and major retail centres. From this mapping work, we analyzed network walking distance from the services based the actual pedestrian infrastructure, to identify areas with a high number of services and islands that are lacking services. Service access areas were calculated using network-based walking distances of ten minutes, assuming an average walking speed of approximately 3.6 kilometres per hour, resulting in 600 metre service areas. Finally, these analyses were considered altogether, to fully describe where services are located in relation to the existing road hierarchy and future urban projects, and the existing

accessibility to these services for peripheral areas.

Case Study

The contrast between planned and actual use of urban space is particularly notable in the peripheral neighbourhood of Kashar (as seen in Figure 1). Kashar is located to the west of Tirana, along the Tirana - Durrës corridor that connects to the airport and major highway and railway infrastructure projects. Kashar is a primarily industrial zone that was one of the most recent additions to Tirana's municipal expansion in 2015. The neighbourhood is relatively young, with a little over 12% of the population aged 65 years and older, compared to the city average of 16% (Rembeci, 2024). Kashar is densely populated and is in fact the second most populous community in Tirana. Despite this, Kashar experiences a lack of resources and connectivity to the larger urban scale. Kacani describes how Kashar is "missing a larger scale of management," thereby impacting the ability to benefit from an integrated system of services and infrastructure with the rest of Tirana (Kacani, 2023, p. 31). Kashar's strategic location along the highway and between the service-rich city centre and a primarily residential neighbourhood also provides a useful site to visualize how commuters attempt to avoid the congested highway and primary roads and turn to tertiary and local roads to move through trafficked areas faster, despite potentially driving longer distances. For these reasons, Kashar was selected as the case study site to implement the project-based methodological approach of emergent and spontaneous urbanism as a framework for formal urban planning design. From the analysis of Kashar's road infrastructure, we found that the primary and secondary motorways were heavily trafficked for most of the day and therefore avoided by commuters in favour of tertiary or residential roads. As a result, although commuters travelled further geographic distance with possibly negligible time-saving efforts, commuters chose to exercise the ability to select different routes and continue driving as opposed to remaining still in dead-lock traffic. This was a key observation in that the

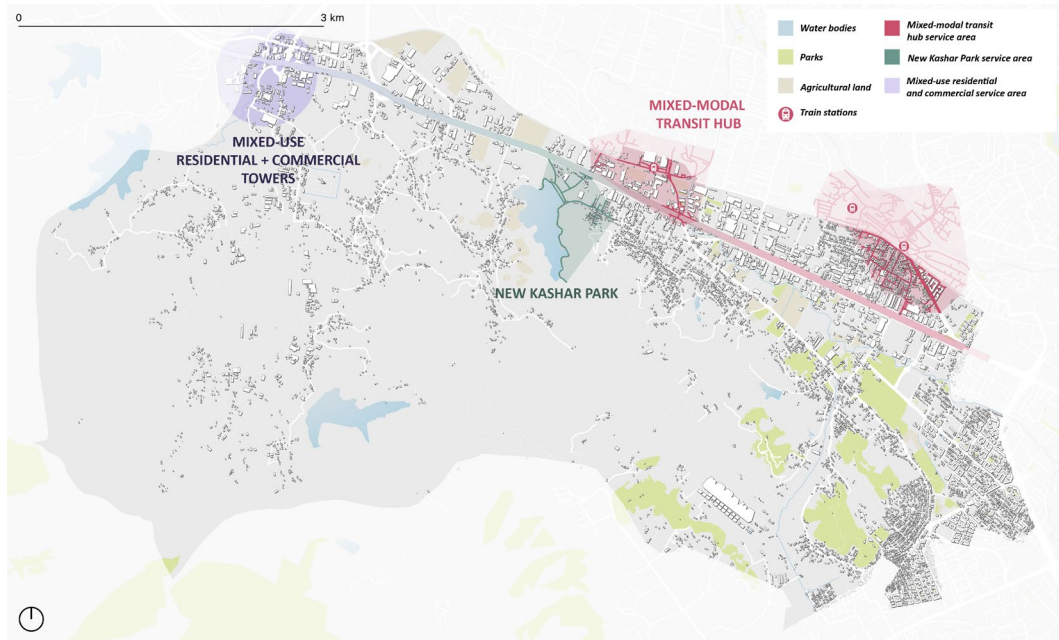


Fig. 4. Masterplan of interventions in Kashar
Source/ Author (2025)

choices of commuters were gradually changing the functionality of roads and pushing urban activity in new directions or patterns from those prescribed by formal municipal and regional planning. From the network analysis of services in Kashar (shown in Figure 2), we found that the vast majority of services and activities are concentrated along the primary highway connecting Durrës to Tirana, with a few located north on the highway towards Kamëz. In fact, about two-thirds of Kashar's land area is void of services within a 600 metre or ten-minute walking area, with only 34% (13.5 sq km) of Kashar within a ten-minute walking service area (see Table 1). Only a quarter of Kashar's land area is within a ten-minute service area of bus stops, and a little over a quarter is within a ten-minute service area of commercial services. Furthermore, less than 3% of Kashar's land area is within a ten-minute service area of existing and future train stations, highlighting the significant need to identify opportunities for locating new multi-modal transport hubs that relieve pressure from already high-trafficked roads and the constrained areas of train stations in existing development plans. Altogether, the scattered distribution of services in Kashar and the concentration of services towards the city centre of Tirana gives credence to the existing directional flow of people and traffic moving to reach functions located laterally along the highway and primary roads. In contrast, the existing service deserts significantly impact the daily lives of residents both within and around Kashar, as there is little reason stay within Kashar apart from utilizing the neighbourhood to circumvent traffic. With this in mind, the location of major future infrastructure projects (shown in Figure 3) will create more incentive for commuters to reach Kashar and stay, while at the same time offering potential to alleviate existing traffic congestion from main roads. These major projects include the development of the railway connecting Tirana to Durrës that will see three train stations located in or near Kashar, the extension of the Blue Corridor highway linking Kashar to the neighbourhood of Kombinat in the south, and the recently completed Univers City residential complex. Altogether, the commuter choices away from primary roads,

the development of new urban functions and infrastructural connections, and the reclassification of tertiary and residential roads can be integrated to reconfigure new urban centres and consolidate the sporadic distribution of inhabitants in Kashar. From the case study findings, it is possible to propose a series of interventions at different scales and functions, that punctuate the urban landscape and consolidate the existing disparate context (as shown in Figure 4). Firstly, the introduction of a new multi-modal station near the Tirana – Durrës highway, between the communities of Laknas and Katundi I Ri, will give identity to the current liminal area and act as a starting point for alternative modes of circulation. The multi-modal station will redirect traffic flow and orient new mobility strategies, linked to the future Rinas-Tirana-Durrës railway and Univers City residential complex currently under development. Secondly, the existing Kashar lake will be made newly accessible via an overpass for light mobility (pedestrian, cyclists) connecting to the new multi-modal station. This intervention will overcome the pedestrian boundary created by the existing road and become a link for new connections. Furthermore, the promotion of the existing natural amenity will gradually change the industrial character of the neighbourhood and become the focal point for a local sub-system of mobility. The third punctuation comes in the form of a mixed-use residential and commercial tower located along the highway connecting Kashar to Kombinat and the airport. This new tower will serve as a pole of attraction for people to live and stay in Kashar long-term. Finally, the overlapping analyses that informed the siting of new punctuations are interwoven to consolidate new neighbourhoods that stitch together the currently disconnected or unspecified land parcels in an organic manner that encourages linkages between different land use and mobility patterns. Interestingly, it is possible to draw parallels between the theoretical rationality underpinning the case study of Kashar and Tirana as a whole, with that of Cerdá's Plan for Barcelona. While Cerdá's Plan was undoubtedly very much a top-down effort that sought to open the city through introduction of structured geometric urban forms, there are echoes

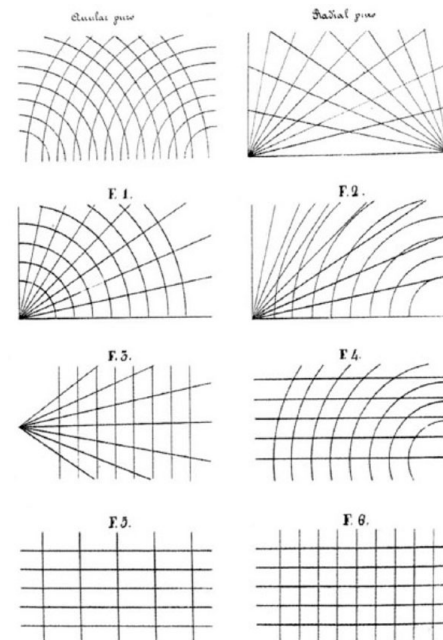


Fig. 5. Composite diagrams of various configurations of networks of ways by Cerdá
Source/ Cerdá (1991)

of the same logic in both case studies. Cerdá's Plan for Barcelona attempted to "create a new form of existence based on an organized system of human cohabitation and circulation," exploring this through different forms of networks as seen in Figure 5 (Adams, 2020, p. 4). In Tirana, Brasini's plan for the north-south Boulevard cutting the city from Skanderbeg Square to Mother Theresa Square (later realized by Bosio) was used as an ideology tool to impose political ideals. Similarly, Cerdá knew that the 'city' was too tied to political meanings, and there was a need for new theories and language that would recall the humanity within cities: the 'urban'. With this, Cerdá redirected the focus of spatial organization towards the people and their activities, very much like how this research project's methodological approach for Kashar is centred on citizen behaviour and movement. Furthermore, this project problematizes Tirana's existing urban context that privileges the concentration of economic functions and activities in the city centre, by finding new urban poles and centres of activity in Kashar. In the same vein, Cerdá's plan for Barcelona found that plazas in their strictest functional definition had no "logical reason to exist" and therefore, the function of the plaza should be distributed throughout the city via the design of street systems (Adams, 2020, p. 11). In the same manner, the implementation of this research methodology found potential new urban poles in Kashar via the introduction of multi-modal transportation hubs that would ease existing congestion, reconfigure new centres, and change the direction of traffic flows in Tirana. As such, the functional urban plaza role of Tirana's historic city centre is taken up and disseminated across the peripheral neighbourhoods, so that multi-modal stations become both the nodal centre and transport balance for the area. The processes of outlining the overlaps between routes of spontaneous mobility, service deserts, and future infrastructure projects, gradually reveals the contours of potential neighbourhoods centred around multi-modal stations that themselves are now agents of change. In short, the overlaps have become the multi-modal station to anchor the neighbourhood.

Conclusion and Recommendations

The project-based exploration of the research methodology confirms that Tirana's traffic congestion, concentrated activities in the city centre, and reliance on private vehicles can be mitigated through implementing a planning framework that elevates citizen-driven mobility choices as primary planning data. These processes can be characterized as a form of emerging urbanity, that offers the opportunity to leverage the informal networks defined and redefined by citizens over time. This form emerges from daily citizen activities occurring "within the framework of pre-existing physical determinants, or other prior geometries and social arrangements" (Dhamo, 2021a, p. 87). The methodological approach exercised in this research characterize Tirana's future development as truly self-organized in the sense that residents are themselves the users, readers and planners of urban space and form. This approach addresses the dichotomous view of urban informality as problematic, and leverages this spontaneous, unplanned activity into the framework from which Tirana's existing and future urban development can be reevaluated (Dhamo, 2021b). By interrogating how residents redefine their urban environments through everyday decisions, Tirana's urban composition is constantly renegotiated through bottom-up, inductive activities that completely contradict the top-down planning regulations that historically attempted to organize and control urban form. The investigation of Kashar's urban form and transportation trends thereby unveils a hidden, evolving infrastructure with the capacity to consolidate liminal urban forms, give specificity to peripheral zones, and decentralize existing axes or poles of traffic congestion. Drawing from Friedmann's discussion of radical planning that promotes "self-empowerment of households, local communities and regions" and "thinking without frontiers," and Alexander's discussion of overlapping urban systems, the case study in Kashar showed how citizen behaviour can be mobilized as the pivotal tool to fully understand what elements can constitute Tirana's urban form (Alexander, 2013; Friedmann, 1987, p. 14, 1989). Just as Rossi describes how "a city may change its face even in the course of one man's life, its original references ceasing to exist," the urban elements and references composing Tirana's road infrastructure are erased and written over countless times by the government and users (Rossi, 1982, p. 61). The findings thereby confirm that Tirana's existing transportation and urban planning context can and should be addressed through a methodological approach that maximizes the complexities of self-organized citizen behaviour, as a strength in and of itself. The tendency to fall back on bifurcated or opposing perspectives of unplanned urban activity as being inherently informal, irregular or chaotic will always result in a methodology that considers spontaneous urban form as a challenge to be overcome. Instead, Tirana's history of reactionary and imaginative citizen activities that push back against top-down planning decisions is precisely the theoretical logic that can redefine how existing and future urban growth unfold.

Bibliography

Adams, R. E. (2020). *Circulation and Urbanization*. In *Circulation and Urbanization*. <https://doi.org/10.4135/9781529714425>

Alexander, C. (2013). "A city is not a tree": From architectural forum (1965). In *The Urban Design Reader*. <https://doi.org/10.4324/9780203094235-25>

Bosetti, S., Chiffi, C., Pechin, S., & Uccelli, I. (2020). *Sustainable Urban Mobility Plan for the City of TIRANA*.

Cerdà, I. (1991). *Teoría de la viabilidad urbana y reforma de la de Madrid*. Instituto Nacional de la Administración Pública and Ayuntamiento de Madrid.

Cervero, R., Suzuki, H., & Luchi, K. (2013). *Transforming cities with transit: transit and land-use integration for sustainable urban development*. *Choice Reviews Online*, 51(03). <https://doi.org/10.5860/choice.51-1607>

Chase, John., Crawford, Margaret., & Kaliski, John. (1999). *Everyday urbanism: featuring John Chase ...* Monacelli Press.

Dhamo, S. (2021a). *The urbanism of individual arrangements. Understanding specific realities - the case of Tirana*. In A. Di Raimo, S. Lehmann, & A. Melis (Eds.), *Informality through Sustainability. Urban informality now*. (pp. 82–94). Routledge.

Dhamo, S. (2021b). *Understanding Emergent Urbanism. The Case of Tirana, Albania*. Springer Cham.

Dobbs, L. (2005). *Wedded to the car: Women, employment and the importance of private transport*. *Transport Policy*, 12(3), 266–278. <https://doi.org/10.1016/j.tranpol.2005.02.004>

Dovey, K. (2012). *Informal urbanism and complex adaptive assemblage*. *International Development Planning Review*, 34(4). <https://doi.org/10.3828/idpr.2012.23>

Downs, A. (2005). *Still stuck in traffic: Coping with peak-hour traffic congestion*. In *Still Stuck in Traffic: Coping with Peak-Hour Traffic Congestion*.

Drejtoria e Përgjithshme e Qeverisjes Elektronike dhe Inovacionit. (2024). *Bashkia Tiranë - Open Data*. Drejtoria e Përgjithshme e Qeverisjes Elektronike dhe Inovacionit.

Duranton, G., & Turner, M. A. (2011). *The fundamental law of road congestion: Evidence from US cities*. *American Economic Review*, 101(6). <https://doi.org/10.1257/aer.101.6.2616>

Fainstein, S. S. (2017). *URBAN PLANNING AND SOCIAL JUSTICE*. In *The Routledge Handbook of Planning Theory*. <https://doi.org/10.4324/9781315696072-11>
Friedmann, J. (1987). *Planning in the Public Domain. From Knowledge to Action*. Princeton University Press.

Friedmann, J. (1989). *Planning in the Public Domain: Discourse and Praxis*. *Journal of Planning Education and Research*, 8(2), 128–130. <https://doi.org/10.1177/0739456X8900800214>

Geurs, K. T., & van Wee, B. (2004). *Accessibility evaluation of land-use and transport strategies: Review and research directions*. *Journal of Transport Geography*, 12(2). <https://doi.org/10.1016/j.jtrangeo.2003.10.005>

Google Maps. (2024, December). *Google Maps*. <https://www.google.com/maps>

Healey, P. (1997). *Collaborative planning: shaping places in fragmented societies*. Red Globe Press London.

Hilberseimer, L. (1955). *The Nature of Cities: Origin, Growth, and Decline Pattern and Form Planning Problems*. Paul Theobald & Co.

Institute of Statistics. (2024). *Statistics on characteristics of road vehicles*. <https://www.instat.gov.al/media/13690/publication-characteristics-of-road-vehicles-2023.pdf>

Josifi, I. (2021). *Development of Tirana's road infrastructure after the 1990s*. *Ingenious*, 1(2), 56–77.

Kacani, A. (2023). *Dealing with the future of the emergent settlements in the absence of full property recognition. The case of Kashar and Astiri in Tirana, Albania*. *Issues of Housing, Planning, and Resilient Development of the Territory. Towards Euro-Mediterranean Perspectives*.

Kenyon, S., & Lyons, G. (2003). *The value of integrated multimodal traveller information and its potential contribution to modal change*. *Transportation Research Part F: Traffic Psychology and Behaviour*, 6(1), 1–21. [https://doi.org/10.1016/S1369-8478\(02\)00035-9](https://doi.org/10.1016/S1369-8478(02)00035-9)

Lanken, B., Aarts, H., van Knippenberg, A., & van Knippenberg, C. (1994). *Attitude Versus General Habit: Antecedents of Travel Mode Choice*. *Journal of Applied Social Psychology*, 24(4), 285–300. <https://doi.org/10.1111/j.1559-1816.1994.tb00583.x>
Le Corbusier. (1987). *The City of Tomorrow and Its Planning*. Dover Publications.

Lucas, K. (2012). *Transport and social exclusion: Where are we now?* *Transport Policy*, 20, 105–113. <https://doi.org/10.1016/j.tranpol.2012.01.013>

Lynch, K. (1960). *The Image of the City*. The MIT Press.

Lyons, G. (2004). *Transport and society*. *Transport Reviews*, 24(4), 485–509. <https://doi.org/10.1080/0144164042000206079>

OpenStreetMap. (2024). *OpenStreetMap*. <https://www.openstreetmap.org/copyright>

Pereira, R. H. M., Banister, D., Schwanen, T., & Wessel, N. (2019). *Distributional effects of transport policies on inequalities in access to opportunities in Rio de Janeiro*. *Journal of Transport and Land Use*, 12(1). <https://doi.org/10.5198/jtlu.2019.1523>

Pereira, R. H. M., Schwanen, T., & Banister, D. (2017). *Distributive justice and equity in transportation*. *Transport Reviews*, 37(2). <https://doi.org/10.1080/01441647.2016.1257660>

Potsiou, C. A. (2010). *Informal Urban Development in Europe - Experiences from Albania and Greece*.

Rembeci, G. (2024). *Demographic changes and its impacts to local economy. Case Study: Tirana Region*. In *International PhD Workshop-Project*.

Republika e Shqipërisë Instituti i Statistikave. (2024). *Censi I Popullsisë dhe Banesave Në Shqipëri 2023*. INSTAT. <https://www.instat.gov.al/media/14303/cens-2023.pdf>

Rossi, A. (1982). *The Architecture of the City*. The MIT Press.

Schon, D. A. (2017). *The reflective practitioner: how professionals think in action*. Ashgate.
Simone Bosetti, Cosimo Chiffi, Sofia Pechin, & Ivan Uccelli. (2020). *Plani i lëvizshmërisë së qëndrueshme urbane për qytetin e TIRANËS [Vëllimi II - PLANI]*. https://tirana.al/uploads/2020/12/20201203130147_sump_tirana-volume-ii_the-plan_200806_al.pdf

Verplanken, B., Aarts, H., & Van Knippenberg, A. (1997). *Habit, information acquisition, and the process of making travel mode choices*. *European Journal of Social Psychology*, 27(5), 539–560. [https://doi.org/10.1002/\(sici\)1099-0992\(199709/10\)27:5<539::aid-ejsp831>3.0.co;2-a](https://doi.org/10.1002/(sici)1099-0992(199709/10)27:5<539::aid-ejsp831>3.0.co;2-a)

Western Balkans Investment Framework (WBIF). (2025). *Mediterranean Corridor: Rehabilitation of Tirana - Durrës Railway Line and Construction of New Line to Rinas Branch*. Western Balkans Investment Framework (WBIF). <https://www.wbifeu/project-detail/PRJ-ALB-TRA-002>