

Traffic Management

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This course provides students with foundational knowledge in traffic management, emphasizing the interconnections between urban planning and traffic systems. Students will learn the basic requirements of various traffic types and gain essential skills in designing and redesigning traffic spaces. They will apply this knowledge to simple planning examples, developing operational and design concepts for traffic routes and presenting these graphically, utilizing appropriate measures and software tools. Furthermore, students will acquire advanced knowledge in traffic planning, expanding their expertise in the operation and design of diverse traffic systems and nodes. They will apply this advanced knowledge to complex planning scenarios, creating comprehensive concepts for the operation and design of main roads within and around urban areas. Additionally, they will develop traffic processing solutions and package measures for effective traffic management.

OBJECTIVES

The objectives were for the urban planning students to understand and learn about how to create a more efficient, safe, and sustainable traffic system in Tirana, improving the quality of life for its residents and visitors.

Reducing Traffic Congestion (optimizing traffic flow)

Enhancing Road Safety (increasing the enforcement of traffic laws)

Promoting Sustainable Transportation (biking and walking, using public transport)

Environmental Protection (green urban planning practice to create more eco-friendly transportation networks)

Improving Public Transport

Integrating Technology (smart traffic lights and real time traffic monitoring systems)

Urban Planning and Development (coordinating urban development project with traffic planning; developing multi modal traffic hubs)

Community Engagement and Education (raising public awareness about traffic safety and involving the community in traffic management planning processes)

METHODOLOGY

Two of Tirana's quite busy road sections have been selected, to observe traffic flow and behavior, and notice anomalies that possibly occur repeatedly.

The Participants have been sensitized to observe all modes of transit, meaning pedestrians, cyclists, scooters, public transport, motorized traffic, and, also on different age groups and abilities (children, elderly people, wheelchair user). Participants have been split in two groups, and allocated to the focus sections, for a first session from 2 to 4 pm., and for a second session the next day from 8 to 10 am, while the groups changed the focus section. While surveying the traffic, each participant had

to capture at least five anomalies/typical situations in a photo, to categorize and evaluate afterwards. After sharing this experience with students, they understood the importance of taking a moment to observe their surroundings to effectively frame the traffic management problems we face in our cities. On the third day, after students had placed all their preliminary categorized pictures, they engaged in a debate. Through this discussion, they began to comprehend the significance of the issues they identified and evaluated them on a scale from 1 to 10 points, from the least to the most urgent problems needing resolution.

This process led to the conclusion that in both street segments studied, most of the traffic congestion was caused by drivers' behaviors. These behaviors included not respecting traffic signals, stopping or parking in the middle of the road, and driving in the wrong direction. Additionally, the students identified various problems related to the street geometry, such as narrow lanes, poorly designed intersections, and inadequate signage. The combination of these factors contributes to a chaotic traffic situation, particularly during peak hours, such as 14:00 to 16:00. The students noted that these problems are not isolated incidents but are systemic issues that require comprehensive planning and enforcement to address. By categorizing and prioritizing the problems, the students recognized the need for a multi-faceted approach to traffic management, which includes improving driver behavior through education and enforcement, redesigning street spaces for better flow and safety, and implementing more effective traffic control measures. Moreover, the exercise highlighted the importance of involving the community in identifying and solving traffic issues. Students realized that by actively participating in such analyses, they could contribute valuable insights and solutions. This hands-on experience emphasized the critical role of observation, analysis, and debate in understanding and addressing urban traffic challenges.

The project concluded with students proposing several practical solutions, such as increased traffic enforcement, better signage, and reconfiguration of problematic intersections. They also suggested community awareness campaigns to educate drivers about the importance of following traffic rules. This comprehensive approach not only aims to alleviate current traffic problems but also promotes a safer and more efficient urban environment for the future.



Photo During the Focus section 1: Elbasan Road (see Graphic Material below)



Photo During the Wor Focus section 2, 'Shqiponja' Crossing – Casa Italia roundabout kshop