



4th Conference on Sustainable Urban Mobility – CSUM2018

24-25 May, 2018, Skiathos Island, Greece

Analysis of Mobility patterns in selected University Campus Areas

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Introduction

- **Sustainable Urban Mobility Plans (SUMPs)** define a set of interrelated measures designed to satisfy the mobility needs of people
- Each University Campus is similar to an urban model and in most cases could be used as a test area for mobility policies and tools
- Several **plans** and **practices** in universities have been conducted aiming at enhancing the general quality of urban areas in terms of mobility





Objective

The **objective** of the present research is to retrieve quantitative data for mobility across a number of university campus areas

Acknowledgment

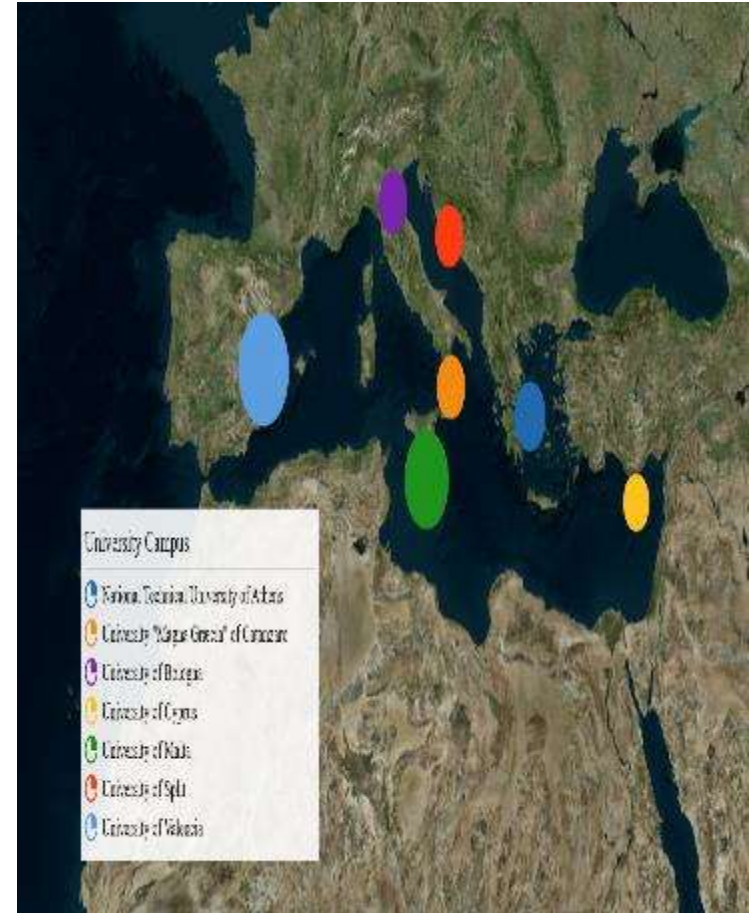
The research is based on "CAMPus sustainable University mobility plans in MED areas" research project under the Interreg Med program, co-funded by the European Regional Development Fund





Selected campuses

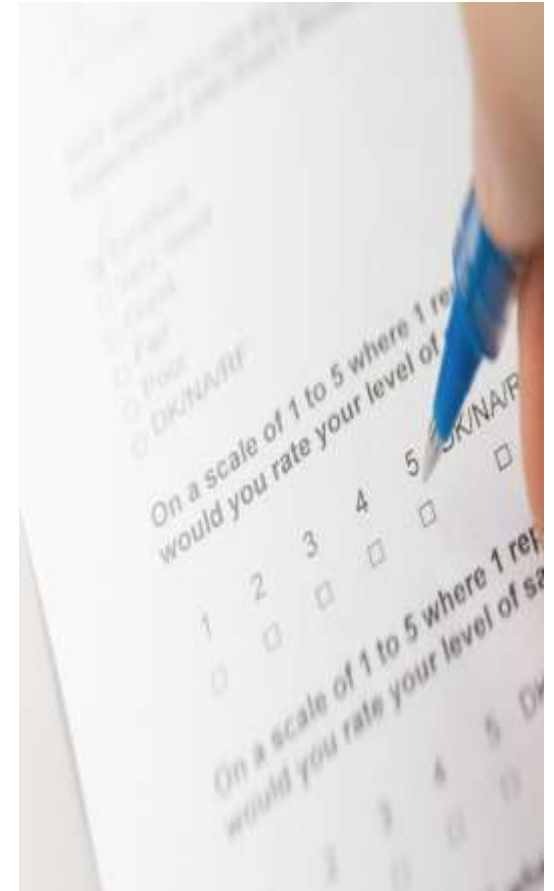
- National Technical University of Athens
- Magna Graecia Foundation
Catanzaro University
- University of Malta
- University of Valencia
- University of Split
- University of Cyprus
- University of Bologna





Questionnaire structure

- **Current mobility** - to present current mobility of the campus regarding mobility from/to and inside the Campus
- **Desired Mobility** - to present the desired mobility of the campus regarding mobility from/to and inside the Campus
- **Mobility problems** - to identify the mobility problems regarding mobility from/to and inside the Campus.
- **Proposed measures/policies/tools** - to evaluate specific measures
- **Participant information** including age, gender, affiliation etc.





Sample characteristics

At least 100 participants per Campus based on the following characteristics:

- 10% Academic/Faculty
- 20% Administrative staff
- 50% Undergraduate students
- 20% Postgraduate students

In total, **1.090 questionnaires** were collected and further analysed

The questionnaire's **data collection** took place approximately 1 month



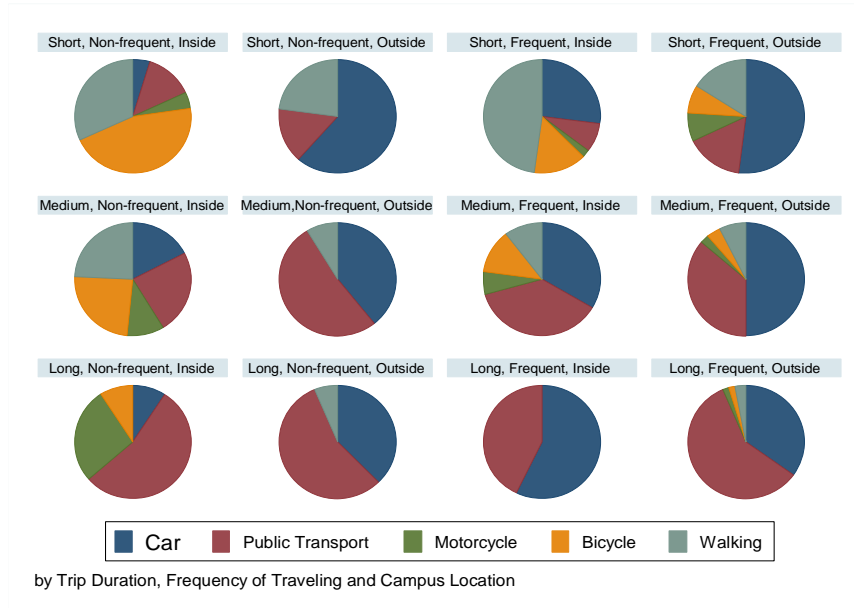


Campuses characteristics

	University	Location	Area (m ²)	Students	Personnel	Interviews
1	University of Catanzaro	Outside	260.000	11.000	500	104
2	National Technical University of Athens	Outside	1.000.000	13.500	3.400	124
3	University of Malta	Inside	194.452	11.500	600	250
4	University of Valencia (1 campus)	Outside	1.000.000	10.000	2.000	227
5	University of Valencia (2 campuses)	Inside	400.000	35.000	5.000	100
6	University of Split	Inside	245.000	24.000	1.500	100
7	University of Cyprus	Outside	1.200.000	7.000	1.100	85
8	University of Bologna	Outside	6.570.023	85.000	3.000	100



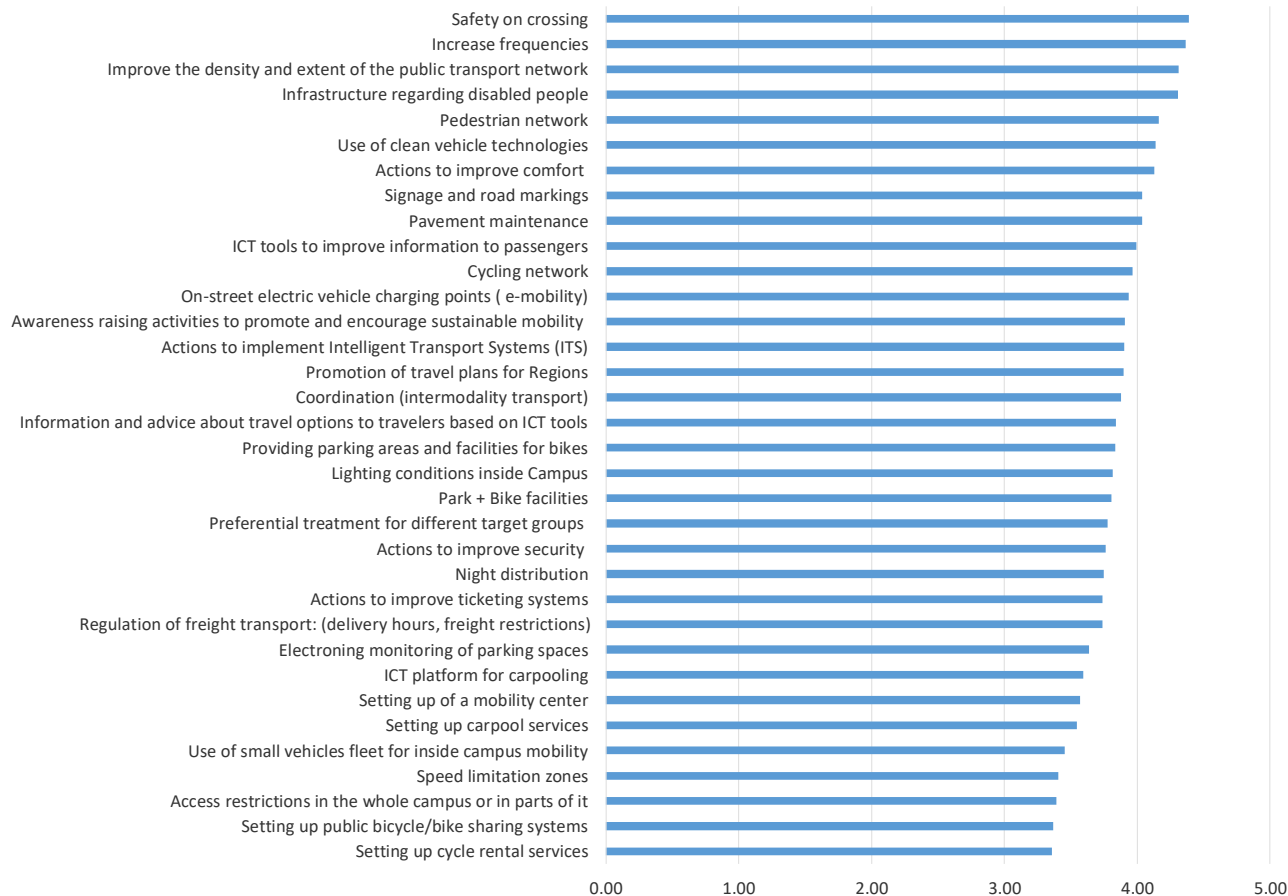
Mode of transport selection



- **Passenger car** is the preferable mode of transport in campuses located outside urban areas regardless of trip duration
- In campuses located inside the city the percentage of **walking** and **cycling** is significantly higher
- **Public transport** is more often reported on long trip durations in campuses located outside urban areas



Evaluation of measures for the mobility in campuses located inside urban areas





Evaluation of measures for the mobility in campuses located inside urban areas

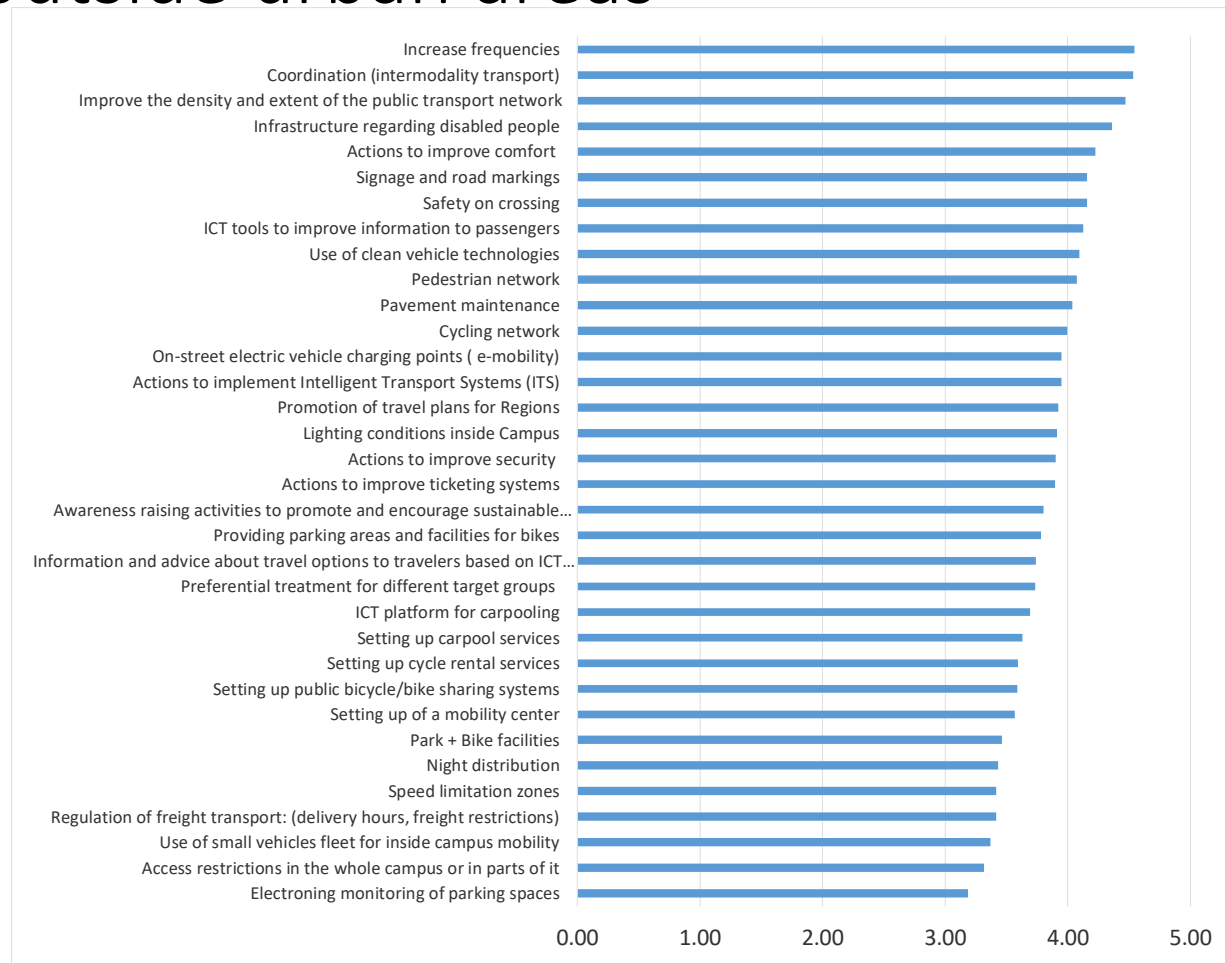
The most important measures include 4 thematic areas as follows:

- Walking - **Safety on crossing**
- Walking - **Pedestrian network**
- Public transport - **Increase frequencies**
- Public transport - **Improve the density** and extent of the network
- Public transport - Actions to improve **comfort**
- Road Infrastructure - Infrastructure for **disabled**
- Road Infrastructure - Signage and **road markings**
- Road Infrastructure - **Pavement** maintenance
- Environment and Energy - Use of **clean vehicle** technologies





Evaluation of measures for the mobility in campuses located outside urban areas





Evaluation of measures for the mobility in campuses located outside urban areas

The most critical measures/tools include:

- Public transport - **Increase frequencies**
- Public transport - **Coordination** (intermodality transport)
- Public transport - Improve **density** and extent of network
- Road Infrastructure - Infrastructure for **disabled people**
- Public transport - Actions to improve **comfort**
- Road Infrastructure - Signage and **road markings**
- Walking - Safety on **crossing**
- Public transport - **ICT tools** to improve information
- Environment and Energy - Use of **clean vehicles**
- Walking - **Pedestrian** network
- Road Infrastructure - **Pavement** maintenance





Conclusions

- Regarding campuses located inside urban areas, the most important measures concern **walking, public transport, road infrastructure** and **environment**
- In campuses located outside urban areas, the most important measures focus on **public transport and road infrastructure**
- Results are in line with the **mobility problems** that have been identified from the participants





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