

CALL FOR MASTER THESIS

The Fifteen-Minute City (FMC), daily mobility and pandemic adaptation strategies:

A case study of Barcelona during the COVID19 crisis

Project framework:

This MSc thesis is offered within the [GEMOTT](#) (Grup d'Estudis en Mobilitat Transport i Territori) research group, within the UAB's Geography Department.

Research Background:

Fifteen-Minute City (FMC) is a new holistic model for urban planning based on the idea that residents in urban settings should have access to most of their basic needs (work, commerce, health, education, and entertainment) within less than 15 minutes, on foot or by bicycle (Moreno, 2016. Duany & Steuteville, 2021). This concept, although based on previous ideas of crono-urbanism, was firstly introduced by the mayor of Paris but has raised interest among both academics and urban planners from cities around the world for its potential, among others, as valuable strategy to achieve the Sustainable Development Goals in the New Urban Agenda of the United Nations. However, given the fact that is a new idea, many questions are still being raised. For instance, the few available scientific evidence has not proved yet whether the provision of services and activities within 15 minutes from residences translates into an actual active mobility behavior such as walking and cycling patterns. Moreover, within the context of the COVID-19 pandemic in which urban mobility patterns have been altered worldwide, more research is needed on the role that Fifteen-Minute cities play in the adaptation of mobility patterns during this pandemic.

Objectives:

- a) This study will assess the main active mobility patterns in areas meeting the 15min-City requirements and areas not meeting them in Barcelona.***
- b) This research will also explore the mobility adaptation strategies that occurred in this city during the COVID19 pandemic.***

Methods:

To do so, the student will use an already-built pioneering spatial index at 100x100m resolution and the BMR's Everyday Mobility Survey (EMEF) 2021 editions to estimate the main mobility changes while stratifying by age, gender, and income level. Among the studied indicators will be the number of trips, distance traveled, time invested in travel, and modal choice, among others.

Technical details:

The thesis will be directed by Dr. Oriol Marquet with the collaboration of the rest of the GEMOTT members. We expect that a revised version of the MSc Thesis will be submitted to a peer-reviewed journal for publication. The final document can be presented in Catalan, Spanish or English.

If you are interested on writing your MSc thesis on this topic, please contact oriol.marquet@uab.cat