World Academy of Science, Engineering and Technology International Journal of Law and Political Sciences Vol:14, No:04, 2020

## Mapping the Relationship between Elements of Urban Morphology Density of Crime

Authors: Fabio Salvador Aparecido Santos, Spencer Chainey, Richard Wortley

**Abstract :** Urban morphology can be understood as the study of the physical form of cities through its elements. Crime, at this turn, can be oversimplified as an action that breaks the rules established in a certain society. This study involves these two subjects through the relationship between elements of urban morphology and density of crime occurrences. We consider that there is a research gap about the influence of urban features on crime occurrences using statistic methods and mapping techniques on Geographic Information Systems. The investigation will comprehend three main phases. The first phase involves examining how theoretical principles associated with urban morphology can be viewed in terms of their influence on crime patterns. The second phase involves the development of tools to be used to model elements of urban morphology, and measure the relationship between these urban morphological elements and patterns of crime. The third phase involves determining the extent to which elements of the urban environment can contribute to crime reduction. Understanding the relationship between urban morphology and crime patterns in a Latin American context will help highlight the influence urban planning has on the crime problems that emerge in these settings, and how effectively urban planning can contribute to reducing crime.

Keywords: Agent-based Modelling, Environmental Criminology, Geographic Information System, Urban Morphology

Conference Title: ICCPP 2020: International Conference on Criminology and Public Policy

**Conference Location :** New York, United States

Conference Dates: April 23-24, 2020