

Review of: "How Urban Heat Islands Effect Crime: Understanding the Implications of Temperature, Population Density, and Green Canopy Cover in Shaping Built Environments"

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Potential competing interests: No potential competing interests to declare.

This study is timely and much needed to provide a better understanding on development of future cities. The study focuses on the relationship between urban heat island phenomena with crimes reported in Midland, a suburb of Perth in West Australia from 2007 to 2020. My queries and suggestions are as follows.

Title: Not entirely reflective of content. This study did not help to better understand the implication of temperature, population density and green canopy cover in shaping built environment.

Language and grammar: Generally readable but there are some noticeable errors especially in the usage of capital letters. Some sentences felt disconnected. It is difficult to pin-point the errors without line numbers or page, I suggest the authors to go through the paper again in search for these errors.

1. Urban heat island effect can also be understood as the urban-rural temperature difference. This is to highlight how rapid (unplanned) urbanization can lead to hotter thermal environment in city centers as compared to the sub-urb or rural areas. In this case study, there is no comparison. How do the authors justify the phenomenon of "urban heat island"? Perhaps, using another term such as overheating cities could be more appropriate in this context. The increasing trend in air temperature could be a supporting evidence for this statement.
2. Queries on crime data set: Are there duplications in terms of recorded crime from the same offender? This would lead to bias. The authors should identify and discuss this in the paper.
3. The main concern I have is on the validity of findings from this paper. As shown in the current study, the correlation in between climate and crime is very low. I would even argue that the weak correlation if any, could be influenced by other confounding variable. In many (if not most), crimes committed are grounded on motives that are closely linked to the individual themselves. As such, I think it would be more meaningful to discuss about prevention of crime through placemaking and safe-inclusive urban design rather than understanding the crime itself.