

Tackling Disparities in Urban Sports Access

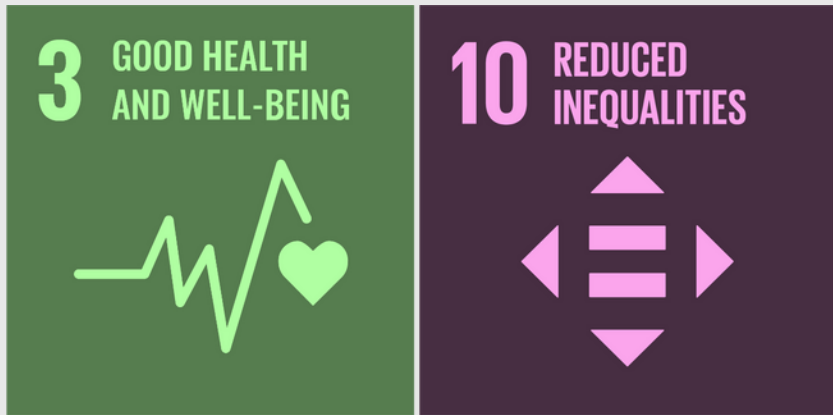
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Introduction

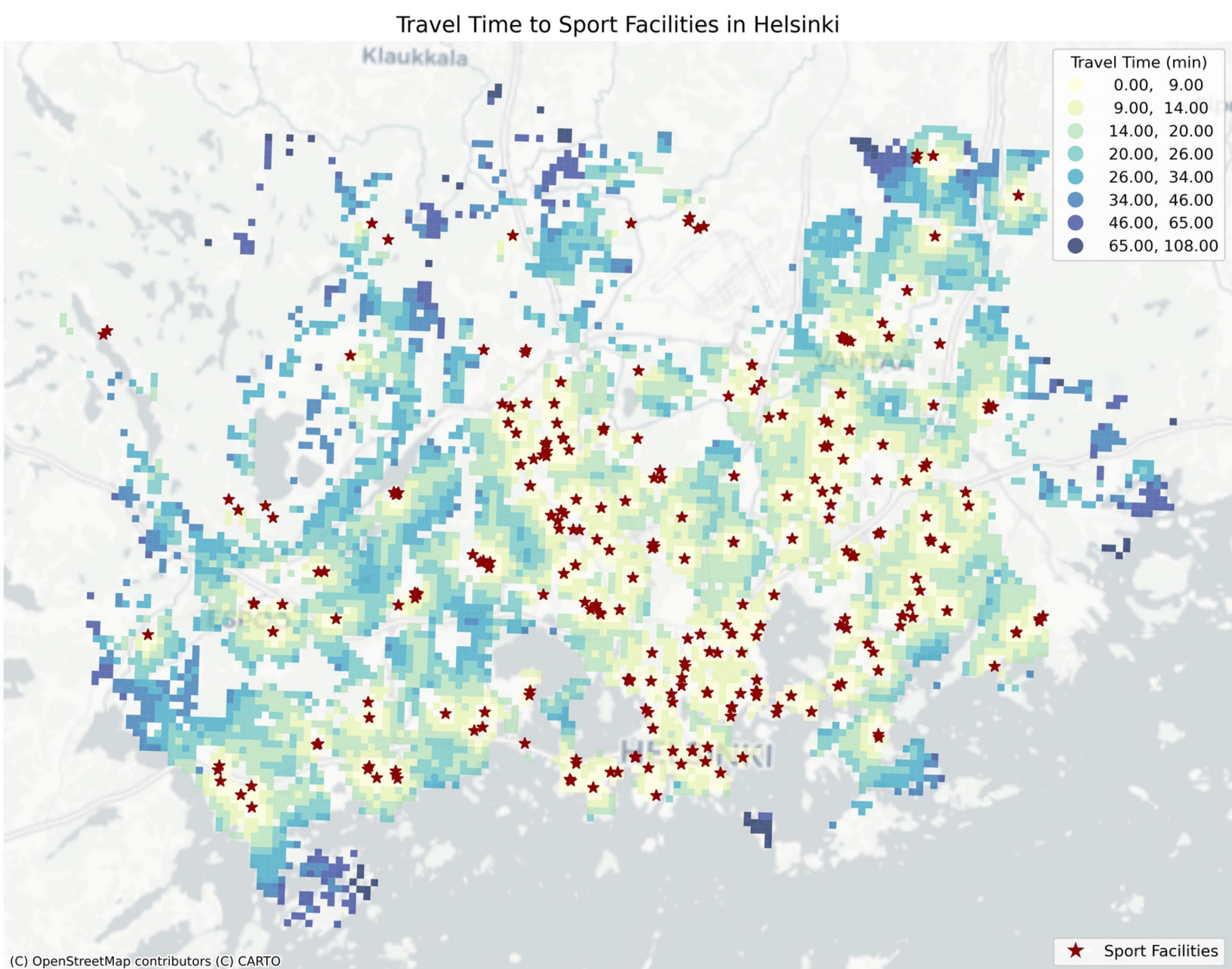
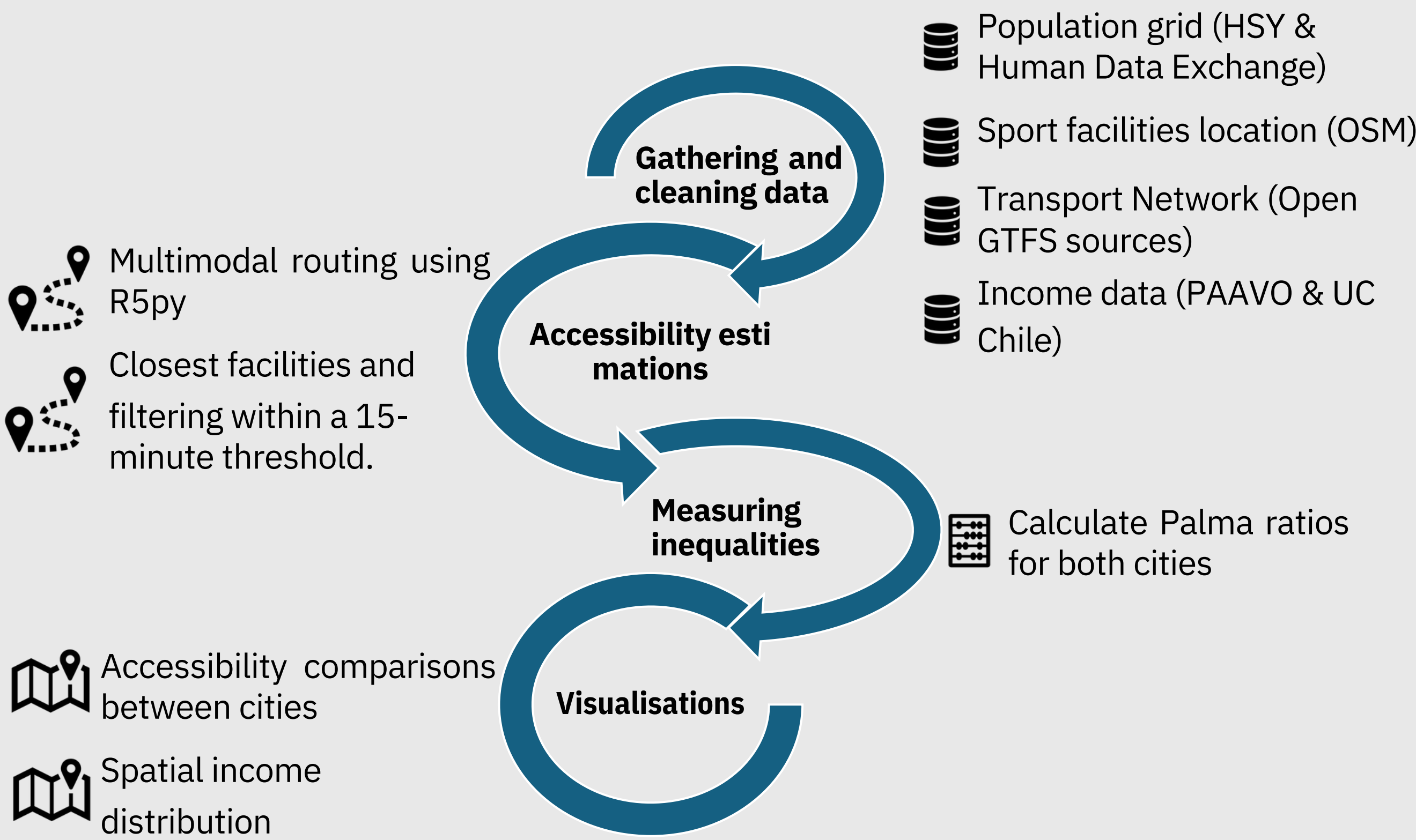
This study examines the accessibility of sports facilities in Helsinki and Santiago de Chile while exploring potential inequalities related to socio-economic aspects. Access to sports facilities significantly influences physical activity levels (Lee et al., 2016), life satisfaction (Huang & Humphreys, 2010), and overall well-being. However, socio-economic status can hide patterns in infrastructure accessibility, revealing disparities in recreational opportunities (Chen et al., 2021).

Accessibility was measured using a 15-minute travel threshold indicator, incorporating both public transportation and walking. Urban planners are increasingly endorsing city models such as the 15-minute city to encourage shorter trips and neighborhood-scale activities (Papas, Basbas, & Campisi, 2023).

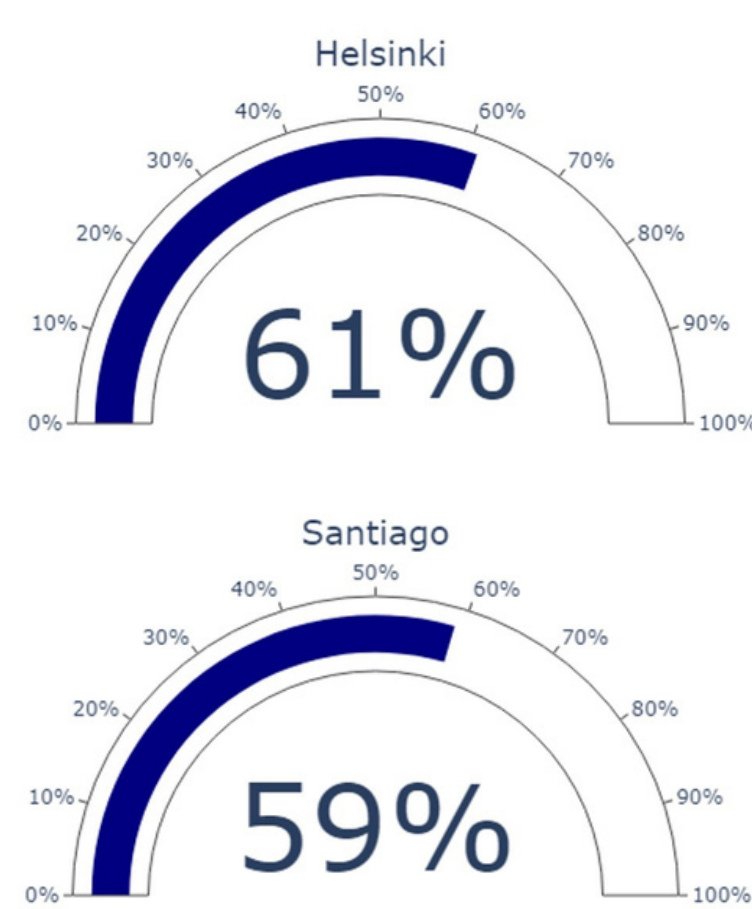
The importance of physical health is crucial for sustainable development goals as it enhances quality of life, reduces healthcare costs, and enables active participation in society, thereby supporting economic stability and environmental sustainability (World Health Organization, 2022). Through the analysis of sports accessibility and its correlation to socio-economic status, contributions can be made towards fostering healthier communities under SDG 3 and mitigating disparities in access to essential services as articulated in SDG 10.



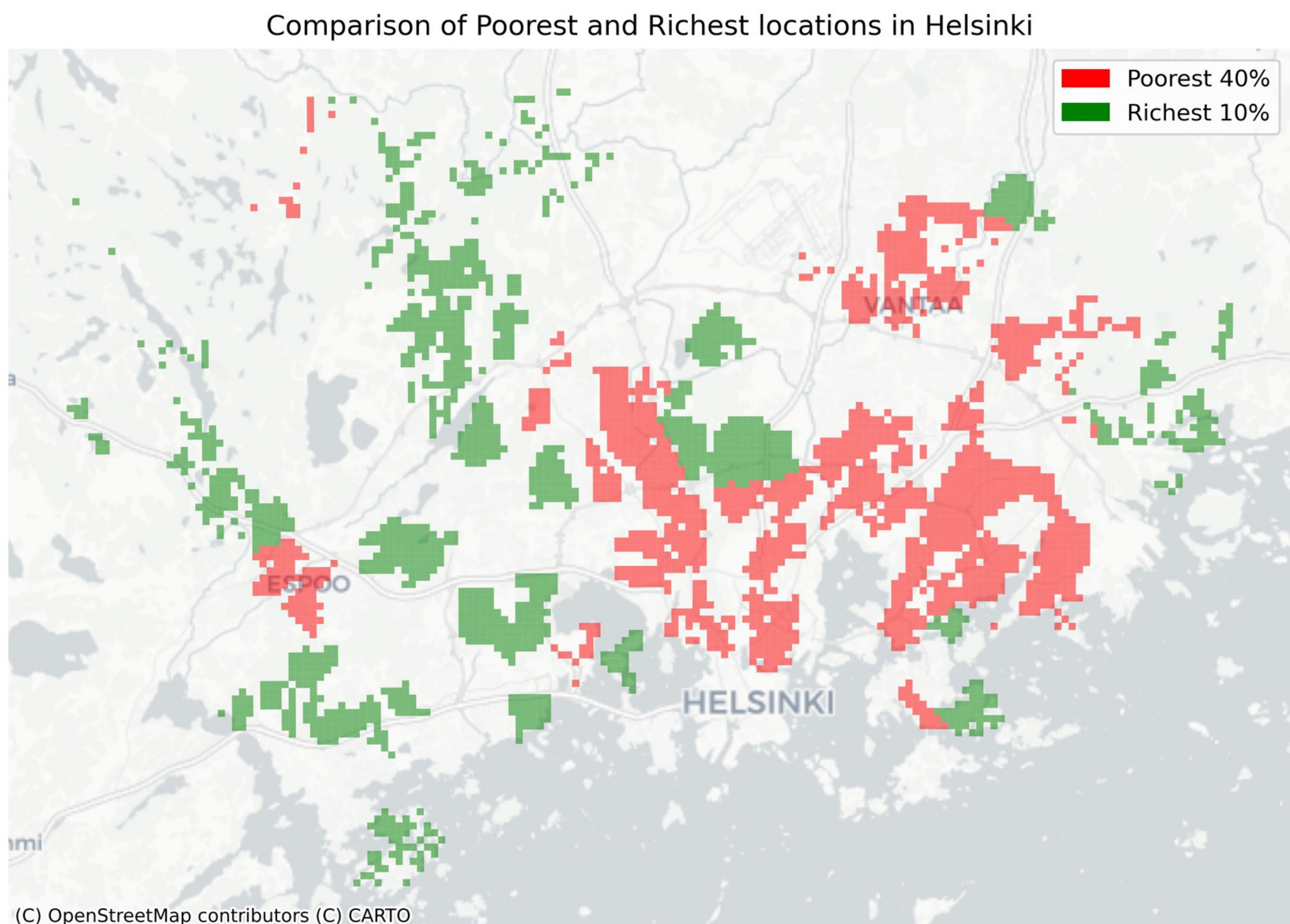
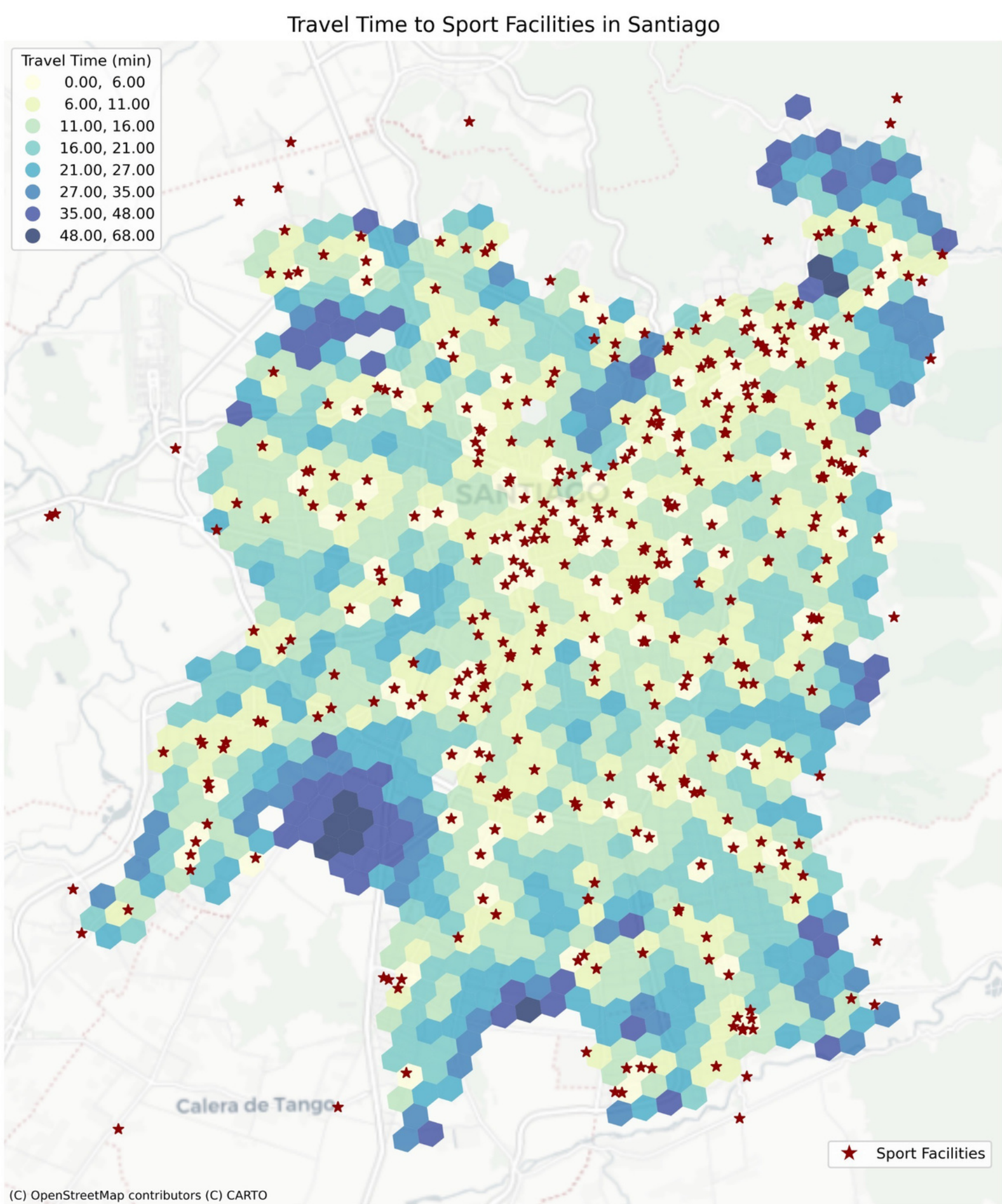
Data and Methods



On average, both cities have very similar over 50% accessibility within a 15-minute travel time



However, this similarity is not replicated when evaluating behavior across income levels



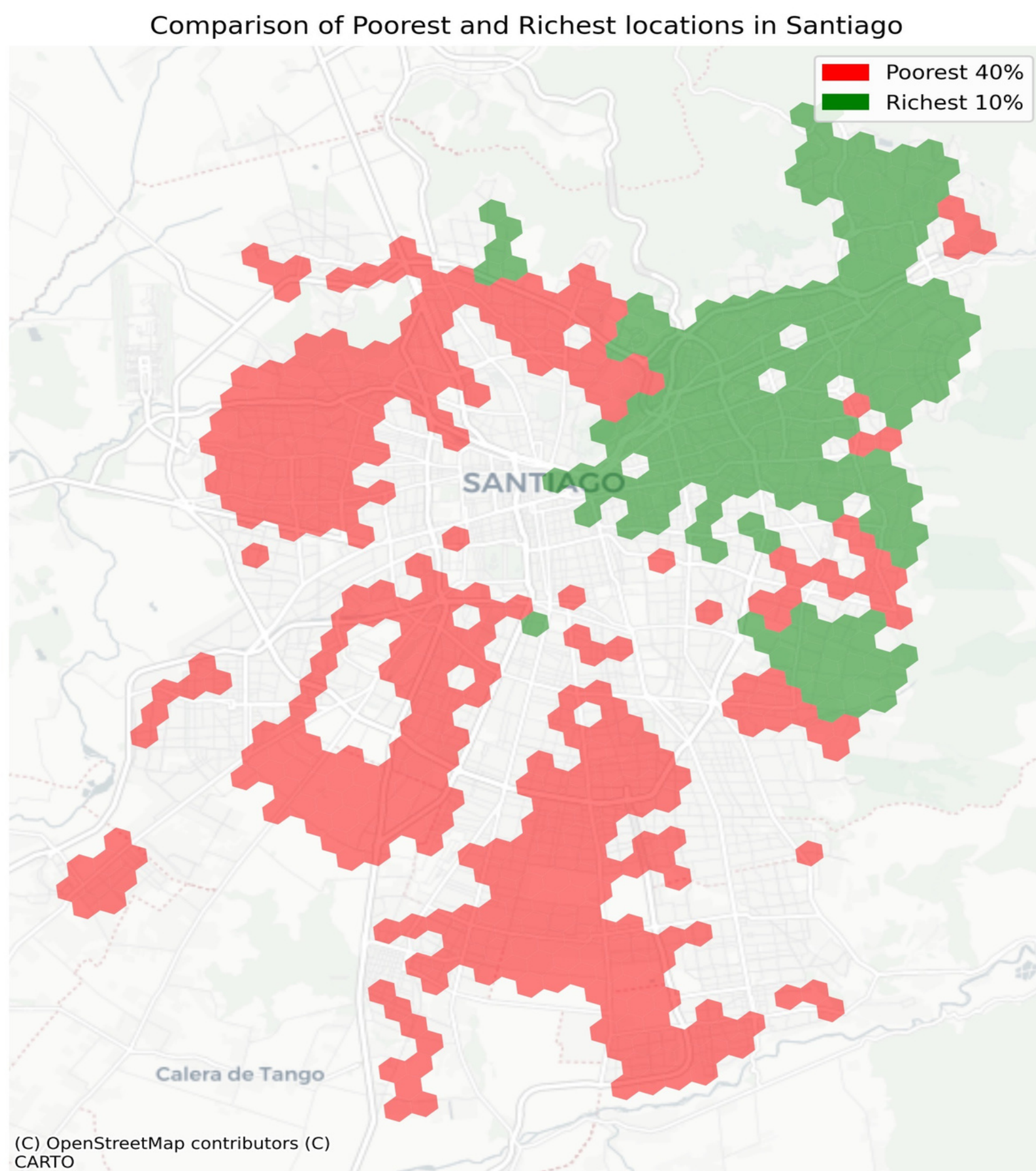
$$PalmaRatio = \frac{Top10\%Income}{Bottom40\%Income}$$

0.24 = Palma ratio in Helsinki
Palma ratio in Santiago = 1.4

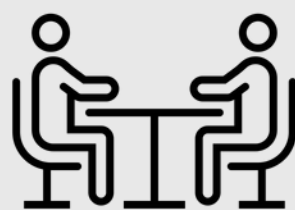
Poor communities in Helsinki have 4 times more access than rich areas.

Santiago exhibits heavy clusterization in the distribution of wealthier areas

Policies in Santiago should be aimed at improving accessibility in the most vulnerable areas



Discussion & reflection



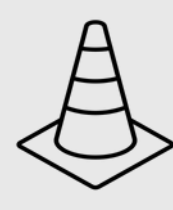
Emphasizing the examination of who benefits, rather than relying solely on average accessibility, underscores the disparities in access to sports facilities in the study areas.

The population with higher incomes is heavily clustered in Santiago to northeastern part of the city, whereas in Helsinki, these individuals mostly live farther away from the main urban centers, prioritizing aspects such as green areas and tranquility over accessibility, which mostly relies on private cars.

In parallel the parameter of cumulative opportunities was also studied. In this case, the Palma Ratio further increases the difference between the cities: 0.26 (Helsinki) vs 1.9 (Santiago). Santiago exhibits concerning disparities, where less privileged individuals have fewer opportunities.

Comparative studies like these can be very useful because they shed light on the disparities in accessibility to sports facilities between cities and provide valuable insights for policymakers.

Limitations



People can do sports nearly anywhere, so analyzing only the facilities might not paint an accurate picture of the accessibility of doing sports.

Income data is at postal code level, so the spatial distribution of the income is not modelled accurately. Calculations did not consider quality of the facilities and the potential necessity of people to practice a specific sports.

References

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