

## Distribution Urban Public Spaces Among Riyadh Residential Neighborhoods

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**Abstract :** Urban Open Space (UOS) a central role to promotes community health, including daily activities, but these resources may not available, accessible enough, and or equitably be distributed. This paper measures and compares spatial equity of the availability and accessibility UOS among low, middle, and high-income neighborhoods in Riyadh city. The measurement methodology for the UOS availability was by calculating the total of UOS with respect to the population total (m<sup>2</sup>/inhabitant) and the accessibility indicated by using walking distance of a 0.25 mi (0.4 km) buffering streets network. All UOS were mapped and measured using geographical information systems. To evaluate the significant differences in UOS availability and accessibility across low, medium, and high-income Riyadh neighborhoods, we used a One-way ANOVA analysis of covariance to test the differences. The findings are as follows; finding, UOS availability was lower than global standards. Riyadh has only 1.13 m<sup>2</sup> per capita of UOS, and the coverage accessible area by walking distance to UOS was lower than 50%. The final finding, spatial equity of the availability and accessibility, were significantly different among Riyadh neighborhoods based on socioeconomic status. The future development of UOS should be focused on increasing Urban park availability and should be given priority to those low-income and unhealthy communities.

**Keywords :** distribution urban open space, urban open space accessibility, spatial equity, riadh city

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