

# Defining the Pedestrian Catchment Area of Subway Station Based on the Structural Change of a Modal Choice Model

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## **Abstract**

*The purpose of this paper is to set the scope of a railway station sphere according to structural changes in probability models using subways. This study conducted a survey targeting residents near Gongdeok Station wherein various housing types exist and people them on foot or by their own cars. It analyzed the influence factors to select means of analysis by using a different method from the standards which measure the distance from human settlements to subway stations based on the model. The scope of a subway station, and the air distance from human settlements to the subway entrance. These results will be helpful for comparing the scope of a railway station sphere according to the standards and differences in methods and can be utilized as important reference data even in development of the railway station sphere based on pedestrians.*

Keywords: Subway, Catchment Area, New Urbanism, Binary Logit Model, Walkable Distance