

Sathita Malaitham 2010: Hedonic Study of Influenced Area along BTS Sukhumvit Line. Master of Engineering (Civil Engineering), Major Field: Civil Engineering, Department of Civil Engineering. Thesis Advisor: Assistant Professor Varameth Vichiensan, Ph.D. 142 pages.

The two existing mass transit systems in Bangkok Metropolitan Region, namely Bangkok Mass Transit System (BTS skytrain) and Bangkok Mass Rapid Transit (MRT subway) which have been in serviced since 1999 and 2004 are bringing large developments along the corridors.

The purposes of this research are to examine the impact of urban railway on land development with real evidences. Case study is done along the railway corridor from Chidlom to On Nut station. The investigation, which is classified into three groups by age, found that the numbers of buildings, usable area and appraised land values on the area development have been increasing as the result of the railway. Three kinds of a hedonic price models, as follows: Ordinary Least Squares Method (OLS), Geographically Weighted Regression (GWR) and Spatial Autoregressive Model (SAR), based on a standard regression, are developed for analyze the relationship between the independent variables and the prices of the residences. The study found that size, floor location, distance to railway station, job accessibility, through soi and neighborhood's characteristics are statistically significant.

The Geographically Weighted Regression points out that the variable factors have provided different influences to the residential price of each location. Therefore in order to develop the residential project, it should consider such as the convenience of traveling, the connection of the mass transit system etc. In conclusion, it can be said that the variable factors can be used to develop the residential project and is used as a basic factor for the transportation development project in each area of Bangkok metropolitan.

---

Student's signature

---

Thesis Advisor's signature