

Modeling the Impacts of Road Construction on Lands Values

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Abstract : Change in land value typically occurs when a new interurban road construction causes an increase in accessibility; this change in the adjacent lands values differs according to land characteristics such as geographic location, land use type, land area and sale time (appraisal time). A multiple regression model is obtained to predict the percent change in land value (CLV) based on four independent variables namely land distance from the constructed road, area of land, nature of land use and time from the works completion of the road. The random values of percent change in land value were generated using Microsoft Excel with a range of up to 35%. The trend of change in land value with the four independent variables was determined from the literature references. The statistical analysis and model building process has been made by using the IBM SPSS V23 software. The Regression model suggests, for lands that are located within 3 miles as the straight distance from the road, the percent CLV is between (0-35%) which is depending on many factors including distance from the constructed road, land use, land area and time from works completion of the new road.

Keywords : interurban road, land use types, new road construction, percent CLV, regression model

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