
Growth Controls and Fragmented Suburban Development: The Effect on Land Values

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Abstract

Spatially fragmented patterns of development have led to an interest in growth control measures aimed at altering the fragmented pattern and creating incentives to cluster development in the landscape. Due to the spatially dependent nature of land values, a geographic information system is used with statistical software to visualize and analyze the spatial pattern of land values in a fast growing suburban county of Washington DC. Spatial statistical measures of correlation and the semivariogram are used to measure the degree of spatial correlation and the distance over which the residuals of the hedonic land value model are correlated. These results are used in a spatial econometric framework to more efficiently draw inference on the effects of growth controls on the spatial pattern of land value. Hedonic analysis reveals that open space and rural preservation are implicitly positively capitalized into newly developed land values through zoning regulations.
