Quantifying the Impact of Urban Form and Residential Zoning Law on the Housing Market

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The state of Hawai?i is facing a severe housing crisis, characterized by some of the highest housing costs in the nation and a growing exodus of residents. At the same time, cities across the US, particularly Honolulu, are grappling with a uniquely American urban planning crisis known as suburban sprawling—when the urban environment is dominated by single use, single family housing development: the result of restrictive zoning law. The purpose of this research is to explore the role of such zoning law on the housing market by utilizing geospatial and econometric analysis to quantify the relationship between urban form and housing costs, and utilizing bivariate and multivariate regression models to predict how changes in zoning law will affect housing costs in a vacuum. The results of this research imply that the current legal framework for zoning has led to the domination of detached, single family housing while leaving little room for affordable development, and that that a higher share of mixed use, multifamily zoning will lead to more affordable housing.

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