

Title: The Hidden Cost of Place: How Transportation Shapes Affordability in Austin

Team 6 [Individual Project]

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Abstract

Affordable housing and transportation access are key to ensuring equity and quality of life in fast-growing cities like Austin. While the City of Austin's SMART Housing program aims to provide affordable homes for low- to moderate-income residents, affordability is often measured by housing cost alone—overlooking transportation expenses tied to a home's location. This study evaluates the locational affordability of SMART Housing by integrating housing, transportation, and accessibility data from the Location Affordability Index (LAI) and Smart Location Database (SLD). In addition to descriptive spatial analysis, an Ordinary Least Squares (OLS) regression was conducted to examine built environment and household predictors of combined housing and transportation affordability, revealing key sociodemographic influences. Results show that nearly 42% of SMART Housing properties are in neighborhoods where transportation costs exceed 20% of income. Additionally, 28% are located in areas where combined housing and transportation costs surpass the 45% affordability threshold. While many SMART Housing sites meet transit access requirements, their surrounding transportation burdens may still strain residents financially. These findings suggest that location alone does not guarantee true affordability. The study recommends that Austin align affordable housing placement with access to jobs and frequent transit, ensuring developments support both housing and mobility needs. Future research should compare locational affordability across other subsidy programs and cities and explore income-sensitive affordability benchmarks that better reflect lived experiences.