Data and Analytics for Neighborhood Development: Smart Shrinkage Decision Modeling in Baltimore, Maryland

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Abstract

Many older cities in the United States confront the problem of long-term decline in population and economic activity resulting in blighted conditions that make conventional revitalization initiatives unlikely to succeed. Smart shrinkage, a planning approach that emphasizes alternative land uses while preserving quality of life, offers a way for cities to remain desirable places to live and work. However, there is little research on empirical methods to support planning decisions consistent with smart shrinkage.

We present results from two studies with planners from the City of Baltimore that provide novel insights regarding ways in which planners can perform vacant property redevelopment using methods from data analytics and decision science. This study provides a foundation for practitioners to make better use of large volumes of data describing blighted communities, accommodate diverse attitudes about policy and planning responses to blight, and judiciously apply advanced methods in data analysis and decision models.

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