

This Week's Citation Classic

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Muth R F. *Cities and housing: the spatial pattern of urban residential land use.*
Chicago, IL: University of Chicago Press, 1969. 355 p.

This book analyzes the workings of the price system in urban housing markets and investigates the determinants of the spatial structure of urban areas and the growth of cities. It contrasts and tests alternative theories of housing quality in innercity areas. [The Science Citation Index® (SCI®) and the Social Sciences Citation Index™ (SSCI™) indicate that this book has been cited over 345 times since 1969.]

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"My work in this field began over 20 years ago while at Resources for the Future in Washington, DC. One day while reading a book by a good friend and colleague, I came across the claim that the rental value of farmland is determined without reference to external markets. Thinking this to be surely incorrect, I sat down to work out what I thought to be a correct analysis of how markets determine land values, especially in a spatial context. Much of this was worked out over a two day period while more-or-less confined to my apartment by a severe snowstorm. It resulted in my first paper on the subject.¹

"Roughly six months later I was visiting at the department of economics, Vanderbilt University, Nashville, Tennessee. I was chatting with my former teacher Milton Friedman, who had come down from Chicago to give a public lecture and several seminars. After describing my recent work, I mentioned that under certain circumstances, it implied that urban population densities would decline negative exponentially with distance from the city center. Milton

remarked that Colin Clark had found this to be the case empirically in a paper published eight years earlier,² of which I had previously been unaware. Finding true confirmation of the analysis, I determined to pursue it further.

"Shortly thereafter I accepted an appointment in the Graduate School of Business at the University of Chicago. My position was supported by a grant from the RELM Foundation, which wanted to sponsor research related to the new federal urban renewal program. On moving to Chicago in the summer of 1959, I read everything I could find in Rockefeller Library on urban land and housing markets and on real estate. I concluded that we then understood very little about these markets and that some basic research had to be done before tackling applied questions such as urban renewal. Richard A. Ware, secretary of the RELM Foundation, quite graciously encouraged me to do so. As described in the preface of my book, I set myself the first task of developing further the theory of city structure and land use. Almost all of the research for the book and the writing of the first draft was done before I left Chicago for Washington five years later.

"The one feature of the book that has seemed to me to inspire more professional attention than any other is Chapter 2 on the spatial equilibrium of the household. This analysis resulted largely from earlier conversations with Lowdon Wingo in Washington and reviewing his manuscript³ for publication. It had seemed to me then that the appropriate way to determine how the price of housing and/or urban land varies is to consider the maximization of household utility as constrained by income less transport costs. The other feature of my book that seems to distinguish it from other contributions to the same subject at about the same time is its extensive empirical work."

1. **Muth R F.** Economic change and rural-urban land conversions. *Econometrica* **29**:1-23, 1961.
2. **Clark C.** Urban population densities. *J. Roy. Statist. Soc. Ser. A* **114**:490-6, 1951.
3. **Wingo L, Jr.** *Transportation and urban land.*
Washington, DC: Resources for the Future, Inc., 1961. 132 p.