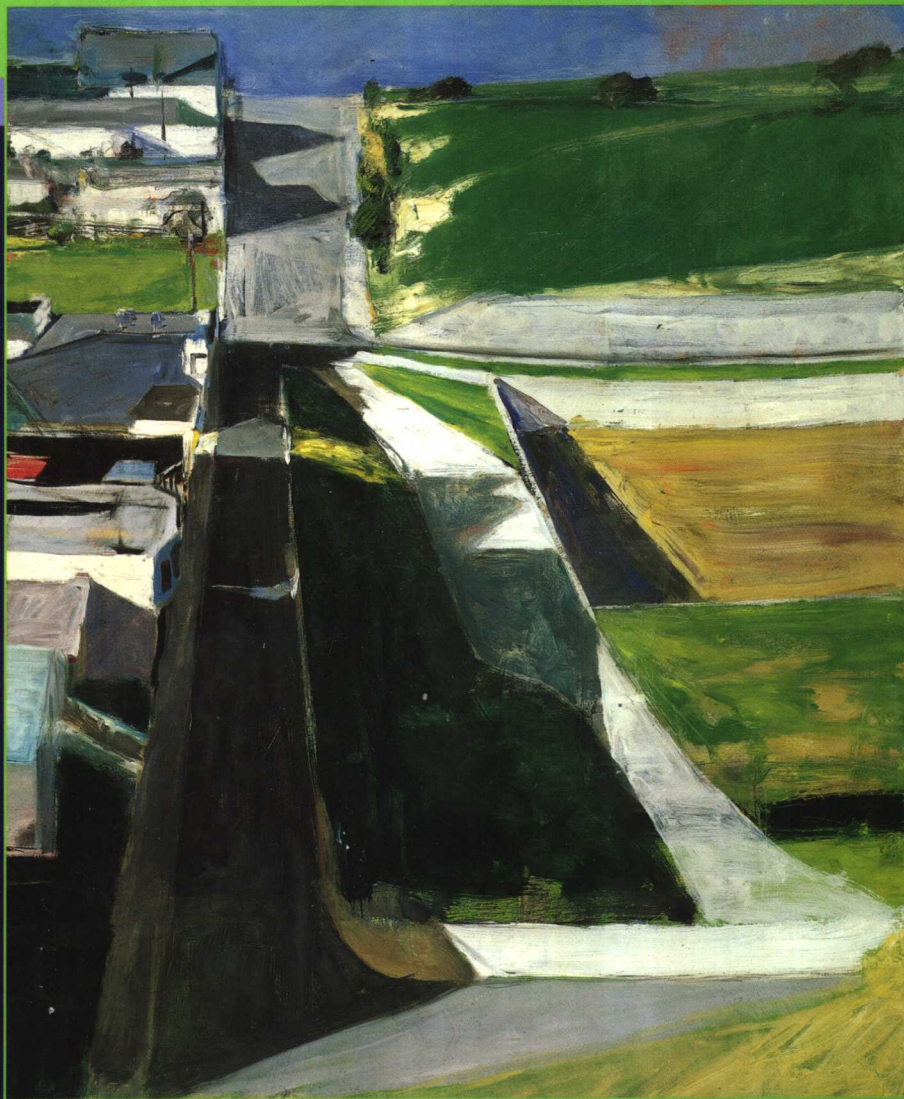


# URBAN ECONOMICS



*Fourth  
Edition*

Arthur O'Sullivan

# URBAN ECONOMICS

*Fourth Edition*

Arthur O'Sullivan

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## *Urban Economics*

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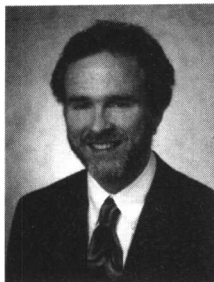
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To Professor Edwin S. Mills, whose *Urban Economics* (First Edition) remains my favorite textbook of all time. The book is full of Professor Mills' remarkable insights into urban phenomena and is written in a way that gave me and my fellow students many opportunities to think for ourselves. Thanks, Ed.

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## About the Author



**Arthur O'Sullivan** is a professor of Economics at Oregon State University. After receiving his B.S. in Economics at the University of Oregon, he spent two years in the Peace Corps, working with city planners in the Philippines. He received his Ph.D. in Economics from Princeton University in 1981 and then spent eleven years at the University of California, Davis, where he won several teaching awards. At Oregon State University, he teaches introductory and intermediate microeconomic and urban/regional economics. Professor O'Sullivan's research explores economic issues concerning urban land use, environmental protection, and public finance. His articles appear in many economics journals, including *Journal of Urban Economics*, *Journal of Environmental Economics and Management*, *National Tax Journal*, and *Journal of Public Economics*.

# URBAN ECONOMICS

# PREFACE

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This book uses economic analysis to explain why cities exist, where they develop, how they grow, and how different activities are arranged within cities. It also explores the economics of urban problems such as poverty, inadequate housing, segregation, congestion, pollution, and crime.

The text is designed for use in undergraduate courses in urban economics and urban affairs. It could also be used for graduate courses in urban planning, public policy, and public administration. All of the economic concepts used in the book are covered in the typical intermediate microeconomics course, so students who have completed such a course will be able to move through the book at a rapid pace. For students whose exposure to microeconomics is limited to an introductory course—or who could benefit from a review of the concepts covered in an intermediate microeconomics course—I have provided an Appendix (Tools of Microeconomics) that covers the essential concepts.

The book covers more topics than the typical urban economics text, giving instructors several options for a one-semester course in urban economics. A course that emphasizes interurban location analysis would cover all five chapters in Part I (Market Forces in the Development of Cities), while other courses might omit some of these chapters. A course emphasizing intraurban location analysis would cover all five chapters in Part II (Land Rent and Urban Land-Use Patterns), while other courses might omit Chapter 9 (General Equilibrium Land Use) or Chapter 11 (Land Use Controls and Zoning). A course emphasizing urban problems would cover all four chapters in Part III (Poverty and Housing) and most of the chapters in Part V (Urban Transportation) and Part VI (Education and Crime). The three chapters on local government (in Part IV) could be omitted in a course emphasizing traditional urban problems, but would be an integral part of a course emphasizing urban public finance.

## *What's New in the Fourth Edition?*

There are many changes in the book for the Fourth Edition. The tables and charts have been thoroughly updated with the most recent data. Throughout the book, I've

added insights and facts from recent theoretical and empirical research. The policy analysis has been updated to reflect recent changes in public policy and refinements in the economic analysis of policy alternatives.

There are a couple of organizational changes. The material on poverty and public policy has been thoroughly rewritten, with one chapter on the effects of racial segregation in housing on poverty in the central city. A second chapter explores some other reasons for poverty and discusses antipoverty policies, including the recent overhaul of the welfare system, which requires most welfare recipients to work in exchange for time-limited assistance. The second poverty chapter also has a new section that explores the reasons for homelessness. I also regrouped the chapters in the old Parts III and IV into four parts:

- Part III: Poverty and Housing
- Part IV: Local Government
- Part V: Urban Transportation
- Part VI: Education and Crime

Here are some highlights of the most important changes in the book, organized by the six parts of the book.

### ***Part I: Market Forces in the Development of Cities***

- Incorporates many insights from the new field, “Economic Geography”
- Includes a formal model of labor-market pooling as an agglomerative economy (Chapter 2)
- Evaluates the prediction that innovations in telecommunications will cause cities to disappear as workers disperse to work in “electronic cottages” in rural areas (Chapter 2)
- Explores the effects of localization economies on the location patterns of firms and the spatial concentration of industries (Chapter 3).
- Includes two new case studies of firms’ location decisions: Japanese automobile firms, and the Mexican garment industry (Chapter 3)
- Explores the forces responsible for the development of large primary cities in developing countries, including trade, trade restrictions, infrastructure investment, and politics (Chapter 5)
- Incorporates agglomerative economies into the model of labor demand and supply (Chapter 6)

### ***Part II: Land Rent and Urban Land-Use Patterns***

- Explores the effects of Pittsburgh’s graded property-tax policy (under which land is taxed at a higher rate than structures) on urban development (Chapter 7)
- Contrasts the pattern of income segregation in the United States with the pattern in other countries and explores the effects of cultural amenities on the location choices of high-income households (Chapter 8)



- Includes new material on the development of employment subcenters (Chapter 10)
- Explores the role of suburban subcenters in the metropolitan economy, focusing on the relationship between subcenters and the central city (Chapter 10)
- Documents the development of “edge cities” and explores the forces behind their development (Chapter 10)
- Explains how the New Jersey legislature weakened the Mt. Laurel exclusionary-zoning ruling by modifying the court’s quotas for low-income housing and allowing communities to buy and sell their quotas (Chapter 11)

### ***Part III: Poverty and Housing***

- Emphasizes the spatial aspects of poverty and the problem of poverty in central cities, focusing on the effects of segregation in housing, segregation in schools, differences in educational achievement, and the spatial mismatch (Chapter 12)
- Includes a new section on the problem of homelessness (Chapter 13)
- Discusses the overhaul of the welfare system, including the replacement of Aid to Families with Dependent Children (AFDC) with a system of block grants to states that emphasize “workfare” (Chapter 13)
- Discusses recent changes in housing policy—the shift away from supply-side policies in favor of demand-side policies such as housing vouchers—and the implications for the urban poor (Chapter 15)

### ***Part IV: Local Government***

- Includes the latest data on government taxes and expenditures
- Explores the connection between poverty and the fiscal problems of central-city governments (Chapter 16)
- Discusses metropolitan government as a possible response to interjurisdictional spillovers (Chapter 16)
- Explains why welfare reform—the switch from matching grants to block grants—will reduce welfare spending (Chapter 18)

### ***Part V: Urban Transportation***

- Summarizes recent experiences with congestion pricing in the United States and other countries (Chapter 19)
- Discusses a possible role for commercial paratransit—to fill the gap in the urban transportation system between solo-rider taxis and large public buses (Chapter 20)
- Provides new data on the costs of alternative transit systems (buses, light rail, and heavy rail) (Chapter 20)

- Explores the efficacy of HOV lanes and HOT (high-occupancy toll) lanes in controlling congestion (Chapter 20)
- Discusses the connection between land use and transportation and the reasons for the apparent weakening of the connection (Chapter 20)

### ***Part VI: Education and Crime***

- Describes inequalities in education spending and the efficacy of equalization programs (Chapter 21)
- Describes the effects of equalization programs on central-city schools (Chapter 21)
- Discusses the possible effects of education vouchers on segregation (with respect to income, race, and ability) and achievement among students of different abilities (Chapter 21)
- Discusses the sensitivity of crime rates to changes in police resources, arrest ratios, imprisonment rates, and the wages of low-skill workers (Chapter 22)
- Explores the effects of the prison system on crime rates, focusing on relative importance of incapacitation and deterrence (Chapter 22)
- Discusses the benefits and costs of three-strike laws (Chapter 22)
- Explores why crime rates are higher in large cities (Chapter 22)
- Explains how criminal activity changes when a criminal's legal status changes from juvenile to adult (Chapter 22)

### ***Acknowledgments***

I am greatly indebted to my two mentors in urban economics. As an undergraduate at the University of Oregon, I was taught by Ed Whitelaw, whose enthusiasm for urban economics is apparently contagious. He used a number of innovative teaching techniques that made economics understandable, relevant, and even fun. As a graduate student at Princeton University, I was taught by Edwin Mills, one of the founding fathers of urban economics. He refined my mathematical and analytical skills and also provided a steady stream of perceptive insights into urban phenomena. I hope that some of what I learned from these two outstanding teachers is reflected in this book.

I am also indebted to many people who read the book and suggested ways to improve the coverage and the exposition. In particular I would like to thank those instructors who participated in surveys and reviews that were indispensable in the development of the Fourth Edition of *Urban Economics*. The appearance of their names does not necessarily constitute their endorsement of the text or its methodology.

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