

# ECONOMICS OF URBAN PROBLEMS AN INTRODUCTION

### **Third Edition**

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#### **Preface**

This is a book about the economics of important problems facing urban areas, whether or not these are purely urban problems or are problems that fit into a preconceived definition of urban economics. While this book touches on all the subject areas in the field of urban economics, the emphasis is on the economics of urban problems rather than on the location theory and urban growth content of this field. We believe that this emphasis provides the student who is not specializing in urban economics with the material most important and most relevant to gaining an economic perspective on the problems besetting urban areas.

This text is intended for use in an introductory course in urban problems at the undergraduate level and in graduate programs in urban affairs and public administration. While we have endeavored to make it accessible to the student with no previous courses in economics, the student with such courses, particularly the "micro" part of the principles of economics sequence, will find the material easier to understand. The concepts developed early in the book are fundamental, and are applied throughout the remainder of the book. Our goal has been to minimize discussion of theories that do not find application later in the book. Also, we have tried to achieve a consistent level of analytical sophistication throughout the book. Too many textbooks intersperse chapters that are needlessly difficult with chapters that are needlessly unanalytical. Throughout, we have attempted to relate real world considerations to proposed policies by pointing out the difficulties inherent in their implementation.

The first chapter discusses the subject matter of urban economics and the emphasis of this book, as well as provides an overview of the contents of the text. Chapters 2, 3, and 4 serve as the background for the discussion of specific urban problems found in the remainder of the text. Of particular importance is the distinction between the concepts of equity and efficiency, both for determining the causes of urban problems and for evaluating potential solutions to these problems. The reader is encouraged to devote considerable time to understanding the theoretical framework of Chapters 3 and 4, since this will pay large dividends in later chapters. Chapters 5 through 15 deal with specific urban problems—poverty, housing, transportation, pollution, crime, urban public finance as well as their interrelationships. Suggested readings are included at the end of chapters.

The third edition represents a substantial revision of the second edition. About forty percent of the text has been rewritten. The sec-

tion on benefits or urban growth has been moved from Chapter 16 to Chapter 2. The concept of cost-effectiveness analysis is introduced and compared to cost-benefit analysis at the end of Chapter 4; it is then applied in several subsequent chapters. Chapter 6 contains a more comprehensive treatment of minimum wage laws. A section on rent controls has been added to Chapter 7. The analysis of housing programs in Chapter 8 has been significantly revised in light of recent changes in housing legislation and program emphasis. The discussion of alternative forms of rationing transportation facilities in Chapter 9 has been expanded and strengthened. Chapter 10 contains a more explicit and detailed discussion of bus rapid transit (BRT) systems as alternatives to rail transit systems. The impact of higher energy prices is addressed in greater detail in Chapters 9 and 10, as well as at relevant points in other chapters. Chapters 11 and 12 have been almost completely rewritten to achieve greater clarity and integration with the basic concepts used throughout the text, as well as to analyze recent legislative and regulatory changes in the environmental area. Results of recent research on the economics of crime are included in Chapter 13. Chapter 14 includes a new section on the growth and scope of local government. Chapter 15 contains a more comprehensive discussion of property taxation and related issues, such as Proposition 13. Chapter 16 is a new chapter that examines central city and SMSA population trends, the problems resulting from these urbanization trends, and the basic public policy options for dealing with these problems.

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A. F. S. R. B. C.

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1 Introduction One of the most striking trends in modern economies during the past century has been the increasing physical concentration of people and economic activities, the process of urbanization. Some 70 percent of the population now lives on about 2 percent of the total land area—the urban areas. In contrast, a century ago the United States was predominantly rural. Sometime between 1910 and 1920, urban population passed rural in total numbers, and this trend continues.

Although the population trend has been toward centralization (concentration of population in urban areas), most of the population growth in major urban areas in recent years has been in the sub-urbs—a trend toward decentralization within these urban areas. Both of these trends in the urbanization process have proceeded so rapidly that we have yet to make many major adjustments required by the process. Accordingly, many of the most pressing economic and social issues of the day, which affect the majority of the population, are related to living in urban areas.

There are advantages to be gained (increases in the standard of living) from concentrating economic activities in close proximity to each other, and the costs of moving goods and people within urban areas are a major determinant of the land-use patterns in these areas. (Chapter 2 discusses these determinants in detail.) The present degree of urbanization and land-use patterns are primarily the aggregate result of decisions made by producers and consumers in the private market. At the same time, this concentration of jobs and people in urban areas and their spatial arrangement within these areas have created many problems (such as traffic congestion and pollution), which exist primarily because markets are not very satisfactory in resolving them.

This book analyzes the economic problems that stem from urbanization and evaluates potential solutions to these problems. An understanding of the historical trends in the location of jobs and people and the underlying reasons for these trends (Chapter 2) is necessary for a discussion of urban problems, because many of these problems are caused by the spatial separation of jobs and people within urban areas. For example, it is difficult to discuss traffic congestion and potential solutions to that problem without an understanding of the spatial distribution of jobs and people within urban areas—the cause of the problem. No matter how large the urban area, if most people lived very close to their jobs, then urban transportation problems would be significantly reduced. However, for most people in urban areas the place of residence and place of employment are a considerable distance apart. Many people consider the only urban transportation problem worth discussing to be traffic congestion associated with people commuting to jobs located in the central business district (CBD) of the urban area, and they presume that this will get much worse over time as the number of jobs in the CBD increases. But there may be forces at work that are more likely to decrease than to increase the number of jobs in the CBD during the rest of this century. The magnitude of the problem and potential solutions to it (should we spend billions on rail systems?) critically depend on these locational forces.

The market is the primary allocator of resources in our economy; yet it may be incapable of resolving many of the problems resulting from urbanization. Two economic criteria underlie the analysis of all urban problems. The first criterion is efficiency, or optimal use of resources. Even in an affluent society, resources are always scarce relative to the wants of the members of that society. Given this scarcity, resources must be used in the most productive way if society wants to maximize the satisfaction it receives from their use. This is the basic efficiency concept, defined in a benefit-cost framework in Chapter 3 with a discussion of conditions under which the market can allocate resources so as to achieve efficiency. In many cases, the conditions necessary for the market to achieve efficiency do not exist (Chapter 4), and this situation is the source of many urban problems.

Society may consider some economic outcomes undesirable or "unfair." If these outcomes are not attributable to an inefficient use of society's scarce resources, then they are attributable to the distribution of income (purchasing power) among members of society. The term equity is used here to refer to the fairness of the distribution of income. Most urban problems arise because of either inefficiency or inequity. The treatment of urban problems in this book emphasizes the distinction between these two causes of urban problems, because it is critical to determine the cause of a problem in order to arrive at a rational solution. Many proposals for solving urban problems are couched in terms of equity when the real problem is a matter of resource misallocation (inefficiency).

After completing the development of a theoretical benefit-cost framework, Chapter 4 discusses the use of benefit-cost analysis as a tool in real-world analysis of resource allocation decisions. The authors' intent was to make the material in Chapters 3 and 4 comprehensible to students and general readers without a background in economics, but the reader with such a background will find his or her understanding broadened. The reader is encouraged to devote considerable time to understanding this economic framework, since the remaining chapters apply its concepts to various urban problems.

Poverty is not found only in urban areas; in fact, the proportion of the rural population in poverty is greater that the proportion in urban areas. However, poverty in urban areas seems to be interwoven with other economic problems that are primarily urban in nature—problems of housing, transportation, crime, and local government finance. A reduction in poverty in urban areas would have a large impact on such problems; therefore, the magnitude, causes, and potential solutions to poverty (Chapters 5 and 6) are discussed before other urban problems.

Defining "inadequate housing" is similar to defining poverty. Inadequate housing may be a symptom of poverty (low income) or may be a result of inefficiencies in the housing market. Confusion over these two causes has led to many ill-conceived housing policies. Problems inherent in housing markets that lead to inefficiency must be analyzed in order to evaluate present and potential housing programs as solutions to the housing problem (Chapters 7 and 8).

Urban transportation and pollution problems and policies are grouped together in Chapters 9 through 12, because they have conceptual similarities that will become apparent to the reader as he or she covers this section of the book. It might be worth noting now that the similarities have nothing to do with the fact that transportation is a source of pollution (although this and other sources of pollution will be discussed). Some forms of pollution are primarily the result of urbanization; others may be unrelated to urbanization. Peak-hour congestion is the urban transportation problem of concern to most people; however, the traditional solution of building more transportation facilities (expressways, rapid rail systems) is usually not the efficient solution to the congestion problem.

Crime has always existed in society, whether urban or rural, but crime rates in urban areas are much higher than in rural areas and crime is a major concern to many urban residents. Economic reasons for higher urban crime rates and the economic motivation to engage in criminal activity differ significantly from the more traditional legal and moral approaches to crime. Reducing crime requires the use of society's scarce resources; therefore, the goal is to achieve the efficient level of crime, not to eliminate it (Chapter 13).

Because of the concentration of economic activity in urban areas, the provision of public services by local governments is more complex and difficult in urban areas than it is in a nonurban setting. For example, animal control (rounding up stray and rabid dogs, etc.) is a service that some local governments in rural areas might not provide at all because the low population density and the small total population do not warrant it. However, in large urban areas animal control is essential because a large number of people are affected by failure to provide such a service. Chapter 14 develops economic criteria for the efficient use of resources in providing public services and analyzes alternative means of determining demands for, financing of, and production of public services. These criteria are applied in Chapter 15 to public services such as education and to the property tax and alternative sources of local government revenues.

As mentioned earlier, the motivation for urbanization has been to improve our standards of living. At the same time this concentration of jobs and people has created many presently unresolved problems. most of which are discussed in Chapters 1 to 15. Having gone through the rest of the book, the reader should then be in a better position to gain a perspective on the powerful economic forces at work. Chapter 16 discusses some of the economic and social trends that have led to radical changes in the location of the U.S. population.