

**A ULI Working Paper on Land Use Policy**

# **The Benefits of Growth**



**Urban Land  
Institute**

# The Benefits of Growth

Robert W. Wassmer  
Marlon G. Boarnet



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Institute

## About ULI—the Urban Land Institute

ULI—the Urban Land Institute is a nonprofit education and research institute that is supported by its members. Its mission is to provide responsible leadership in the use of land in order to enhance the total environment.

ULI sponsors education programs and forums to encourage an open international exchange of ideas and sharing of experiences; initiates research that anticipates emerging land use trends and issues and proposes creative solutions based on that research; provides advisory services; and publishes a wide variety of materials to disseminate information on land use and development. Established in 1936, the Institute today has more than 16,000 members and associates from more than 60 countries representing the entire spectrum of the land use and development disciplines.

**ULI Working Papers on Land Use Policy.** ULI is in the forefront of national discussion and debate on the leading land use policy issues of the day. To encourage and enrich that dialogue, ULI publishes summaries of its forums on land use policy topics and commissions papers by noted thinkers in land use on a range of topics relevant to its research and education agenda. Through its Working Papers on Land Use Policy series, the Institute hopes to increase the body of knowledge and offer useful insights that contribute to improvements in the quality of land use policy and real estate development practice throughout the country.

Richard M. Rosan  
*President*

## About This Paper

The Urban Land Institute is recognized as the leading real estate and land use research and education organization in the United States. For more than 60 years, we have served as a forum for discussion among diverse interests on a host of issues relating to real estate practice and land use policy.

*The Benefits of Growth* is the first in a series of papers by noted authors that ULI hopes to publish on land use policy issues of pressing concern to our members and the broader real estate and land use community. In this paper, we have asked Professors Robert W. Wassmer and Marlon G. Boarnet to share their thinking on the benefits of growth as a way to understand better why communities should consider accommodating growth rather than opposing it. The ideas and insights in this paper are those of the authors and do not necessarily represent the views of all ULI members.

We believe that by publishing this paper and others like it in our series ULI Working Papers on Land Use Policy, we continue to raise and illuminate topics of interest and importance to our members. We hope this paper and others to follow accomplish that goal.

As always, your comments and insights are welcome.

Richard M. Rosan  
*President*

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# About the Authors

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Robert W. Wassmer is a professor of public policy and economics in the Graduate Program in Public Policy and Administration at California State University, Sacramento. He earned his PhD in economics from Michigan State University in 1989 and previously taught at Wayne State University and Eastern Michigan University. Professor Wassmer's research and teaching interests are policy-oriented microeconomic analysis, state and local public finance, and urban economics. He has authored or co-authored more than 20 published articles on those subjects as well as two books: *Readings in Urban Economics: Issues and Public Policy* (Blackwell, 2000) and *Bidding for Business: The Efficacy of Local Economic Development Incentives in a Metropolitan Area* (with coauthor John Anderson, W.E. Upjohn Institute, 2000). For 2000 to 2002, he is serving as a visiting consultant to the California Senate Office of Research. As the coordinator of the systemwide California State University Faculty Research Fellows Program, he also manages a group of academic public policy consultants to the state of California. In fall 2000, Dr. Wassmer received the President's Award for Research and Creative Activity from Sacramento State. Visit his Web site at: <http://www.csus.edu/indiv/w/wassmerr>.

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Marlon G. Boarnet earned his PhD from Princeton University and is an associate professor of urban and regional planning and economics and a research associate of the Institute of Transportation Studies at University of California (UC), Irvine. He is currently the faculty director of the master's and PhD degrees in Urban and Regional Planning at UC-Irvine. His research interests include the economic and urban development impacts of highway infrastructure, the links between urban design and travel behavior, and the determinants of population and employment growth patterns within metropolitan areas. Professor Boarnet has authored or coauthored more than 20 published articles on those topics, including the book *Travel by Design: The Influence of Urban Form on Travel* (with coauthor Randall Crane, Oxford University Press, 2001). He won the Best of ACSP award for one of three papers presented at the 1997 meetings of the Association of Collegiate Schools of Planning (ACSP) and the Fannie Mae Foundation prize for best paper on a housing and community development topic presented at the 2000 meetings of the ACSP. Professor Boarnet serves on the editorial boards of the *Journal of Regional Science and Papers in Regional Science*. Visit his Web site at: <http://www.seweb.uci/faculty/boarnet.htm>.

# Acknowledgments

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# Executive Summary

Communities around the country often take a slow-growth or, in some cases, no-growth stance toward increases in population or development, appearing to assume that further growth is neither desirable nor inevitable. Yet, population growth in most parts of the United States is projected to rise steadily over the next 25 years. Why is growth important, and what are its benefits? Growth generates new jobs, income, and tax revenue, and raises property values, offering residents more choices and diversity. Examining more closely the benefits of growth offers insights into how to promote smart growth, to manage better the impacts of growth, and to respond to local resistance.

This paper focuses on the short- and long-term benefits of growth to local communities and larger regions. Growth is defined as an increase in population, employment, and number of housing units or nonresidential structures. The authors intentionally exclude detailed discussion of the costs of growth or strategies to minimize these costs.

The authors identify five short-term benefits and three long-term benefits of growth.

In the short term, growth:

- Maintains the current standard of living, at a minimum;
- Accommodates the steadily growing population of the United States that results from annual birthrates and immigration levels that continue to outpace the number of deaths and the rate of out-migration;
- Provides additional choices of where to live and work;
- Generates new jobs, new income, new tax revenue, and higher property values; and
- Stimulates greater opportunities for the revitalization of urban areas.

In the long term, growth:

- Lowers the costs of goods and services through greater economies of scale in production;
- Allows businesses and people to share resources more efficiently through greater economies of scale from geographic clustering; and
- Provides more consumer choices, employment options, and social diversity.

To consider whether the benefits of growth outweigh the costs, this paper compares scores calculated by the *Places Rated Almanac* for eight quality-of-life factors in selected

high- and low-growth metropolitan areas in the United States. This comparison shows that growth clearly benefits metropolitan regions: the fastest-growing and most populated metropolitan areas score higher on average than their slowest-growing and least populated counterparts in most categories, including transportation, employment, education, the arts, and recreation. However, the fastest-growing and most populated metropolitan areas score lower on average on indicators for crime and cost of living. On health care, though, the fastest-growing and least populated metropolitan areas score lower.

A closer analysis reveals that while the benefits of growth apply to a region as a whole, the costs of regional growth are often borne by specific localities. Thus, communities may seek to reject growth locally in order to enjoy the regional benefits while not having to bear its costs. The risk is that if a majority of communities in a metropolitan area reject growth, the region as a whole is unlikely to grow and many of the benefits of growth will be lost.

The authors suggest ways to counteract this risk. In some cases, local resistance to growth may be dissipated by education about its benefits. However, for a region to realize the full benefits of growth and to overcome local resistance to it, the local benefits must outweigh the local costs. Public policy can help ensure that this is the case through:

- State encouragement of regional cooperation or governance; and
- Appropriate fees that reflect the full social and public costs that growth in outlying, fringe suburban areas imposes upon the entire metropolitan area. Such fees would encourage higher-density development in existing urbanized areas that are better equipped to absorb growth.

Communities implementing policies that help all localities in a metropolitan area to bear growth's costs more equitably will profit in the long term from the shared benefits of that growth.

# Why Do We Need a Paper on the Benefits of Growth?

Smart growth has never meant zero growth. The inherent principle of the smart-growth movement is planning for the growth that will occur in a region in a manner that maximizes the benefits derived from this growth while minimizing its costs. For growth to be smart, a careful consideration of the benefits it produces, as well as the costs, is necessary. In this paper, our intent is to offer a description of only the benefits of growth that accrue to a region or locality experiencing growth. We purposefully do not discuss in detail the costs of growth or the strategies that minimize those costs. In so doing, we realize that we cover only half the material needed to make planning decisions that result in smart growth. However, in many instances, the costs of growth have been clearly articulated, and a focus on benefits is needed to keep the policy discussion more balanced.

The prevailing assumption at ULI and elsewhere has been that individuals and communities intuitively recognize the value of growth and, therefore, little need exists to enumerate or discuss those benefits. Yet, local resistance to growth, as well as other not-in-my-backyard (NIMBY) attitudes, continues throughout the United States. Increasingly, many communities are taking a slow-growth or, at times, no-growth stance. Such communities appear to believe that further growth is neither desirable nor inevitable. Thus, we see that a practical need exists to produce a document that explores the local and regional benefits of growth. Growth, for most parts of the United States in the coming years, will be inevitable. So that this inevitable growth can proceed in the “smartest” way possible, policy makers and the private sector need to understand both what the costs and benefits of growth are and how public and private decisions can influence the size and distribution of those costs and benefits.

In this paper, ULI has asked us to concentrate on the benefits of growth, both to complement its earlier work on managing the costs of growth and to illustrate that growth, when well managed, brings many benefits to local communities and larger regions. This paper describes the benefits that arise from growth, provides quality-of-life comparisons of selected U.S. regions and cities that have grown relative to those that have not, and discusses the disconnect that often exists between the benefits that a region receives from further growth and the benefits

that accrue to a particular community in the region where the growth actually occurs.

## What Follows

In the next section, we clarify what we mean by growth and why it is helpful to consider growth from both a short- and long-term perspective; we then offer evidence of the inevitability of growth in America’s future. Next, we offer five facts related to the short-term benefits of growth, and three different facts on the long-term benefits of growth. By “facts,” we mean that the points we discuss are supported by both theory and a large amount of evidence. Although one might be able to cite exceptions to some of the facts that follow, a large body of evidence suggests that those are exceptions and not the norm.

We support these facts with simple explanations and real-world examples. We also compare quality-of-life indicators between U.S. metropolitan regions that have experienced some of the greatest growth during the 1990s and similar metropolitan regions that have experienced substantially less growth in recent years. We make the same comparison between the most populated metropolitan areas in the United States and the least populated. In addition, we offer a comparison of the same quality-of-life indicators for pairs of metropolitan regions throughout the United States that were very similar in population 30 years ago, but in which one of the pair experienced a significant growth in population while the other did not (for instance, Austin, Texas, and Baton Rouge, Louisiana).

Next, we categorize a list of benefits of growth according to those that are primarily regional and those that are confined to jurisdictions within the region. This analysis illustrates the point that NIMBYism often arises because the benefits of growth are more likely to be dispersed throughout an entire region, rather than to be confined to a specific jurisdiction, whereas the costs of growth may be more localized. Finally, we describe how the basic tenets of smart growth, the use of appropriate local fees and subsidies, and regional coordination can and have been used to overcome local resistance to growth and to provide growth that benefits a broad spectrum of persons and businesses within a metropolitan area.



# Defining and Understanding Growth

*Webster's New World College Dictionary* (3rd edition, 1996) defines growth as the process of growing or developing. Most would point first to an increase in population as the best example of growth in a region or a community. However, even without an increase in the number of people, growth occurs in a place if the number of people employed, number of houses, number of stores, or number of other nonresidential structures increase. Thus, we consider increases in any or all of these place-based measures as indicators of growth.

As *Webster's* points out, growth is a process that results in an entity's changing from a smaller to a larger size. We therefore define place-based growth in terms of both the short-term process of what causes a place to grow and the long-term implications of what becoming a place with significantly more people, jobs, houses, or nonresidential structures means. Later, we use this way of thinking about the short-term process of growth and the long-term implications of becoming larger to offer facts on the benefits of growth derived from each.

## Short-Term Process of Growth

Not growing is not staying the same. Places that do not grow become smaller and, often, less vibrant. Residents die or migrate. Businesses move or close. Local structures and infrastructure depreciate and eventually must be replaced. Without replacement growth, a place shrinks in scale. Although no-growth policies might be popular in particular places at particular times, in the long run, they are a recipe only for stagnation. The year-to-year changes in population, businesses, buildings, and infrastructure that are required for replacement growth are all part, but often only part, of the short-term process of growth.

In the short term, places in the United States grow to accommodate population increases caused by our country's birthrate being greater than its death rate. In addition, because more people enter the United States each year than leave it, short-term growth needs to occur somewhere in the country to accommodate these new residents. Finally, even without an increase in U.S. population, some regions or communities grow from year to year to accommodate the internal migration of people and businesses. Americans value their freedom to live where they want. Over time, some areas of the country—

and even places within a metropolitan area—have gained in popularity, while others have lost favor. The accommodation of these preferences, through growth in popular residential or business locations, is also an important part of the short-term process of growth.

The short-term process of growth occurs so that (1) places can remain the same size, compensating for the natural loss of people and businesses, (2) increases in population through birthrates and immigration can be accommodated, and (3) desired movement within the country by people and businesses can be accommodated. We later offer facts about the benefits that arise from each of these three components of the short-term process of growth. A couple of facts are also mentioned about the overall benefits of new jobs, new income, new local tax revenue, and increased property values, as well as the opportunities for revitalization that the short-term process of growth generates for a region or a community.

## Long-Term Implications of Growth

Short-term growth, or the year-to-year process of increasing in size, will eventually lead to a place being larger in terms of people, businesses, homes, and nonresidential structures. A region or community of 100,000 people whose population grows at an annual rate of 3 percent will have a population of 134,392 in ten years and 180,611 in 20 years. Increase the annual growth rate to 6 percent, and the region or community's population will be 179,085 in ten years and an astounding 320,714 in 20 years. The short-term process of growth leads to a place that in the long term is much larger in scale.

A larger place has more people, more businesses, more buildings, and greater infrastructure. Often, the locally produced goods and services that this increased number of people and businesses want to buy require large fixed costs to produce. Large fixed costs mean the total cost to produce something is nearly identical whether 100, 1,000, or 10,000 people purchase it. As examples, think of amenities such as recreational, sporting, educational, retail, entertainment, and cultural activities. If a place contains more people (consumers), then the price charged per individual use of these activities can be less because the per-person cost to produce the activities has fallen.

The fact that a place has more people, businesses, and structures also means that greater choices exist for all who live there in terms of where and how they want to live, work, and shop. In addition, more people, more

businesses, and more local governments in a region mean greater competition in the private and public production of goods and services that people and businesses want to purchase. Greater competition means lower prices and greater selection for the region's consumers and businesses that purchase these goods.

A long-term implication of growth in size is not only that a place has more people, but also that it has a more diverse mix of residents. Because immigration and higher birthrates among minority populations drive much of the growth in the U.S. population, diversity comes in the form of greater variation in the racial and ethnic makeup of a place's population and a greater percentage of young people. Furthermore, growth often assists in the revitalization of distressed urban neighborhoods. In some fast-growing cities, shortages in developable land have caused both the private and public sectors to turn their attention to previously neglected and stagnated neighborhoods. Revitalization often accompanies growth in those places.

Some of the long-term results of a place being significantly larger than it once was are (1) many of the things that people and business want to purchase can be produced by both the public and private sectors at a lower cost per person; (2) greater choices are available in residence, shopping, and employment; and (3) greater diversity exists in population and the economy. Facts about the benefits that arise from each of these three components of the long-term results of a place being larger are described later.

## The Inevitability of Growth in the United States

According to the U.S. Census Bureau, growth in the population of the United States is inescapable. The Census Bureau's middle-range projection indicates that the country's population will rise from 275 million in 2000 to 288 million in 2005, 312 million in 2015, and 338 million in 2025. The population of the United States is projected to grow by 23 percent over the next 25 years.

Importantly, in thinking about this growth on a regional or local basis, we must understand that it will not occur evenly across the states. Factors that drive the short-term process of growth (replacement population, accommodation of births and immigration, and popularity of place) differ by state. Table 1 (see pages 5 and 6) offers the population projections made by the Census Bureau

for each of the 50 states and the District of Columbia, and the percentage increase in a state's population expected to occur between 2000 and 2025.

As Table 1 indicates, expected population growth between 2000 and 2025 clearly varies by state. At the low end, West Virginia's population is expected to increase by only 0.2 percent, while Hawaii is at the other extreme with an expected population increase of 44 percent. Hawaii's high percentage growth rate is from a base population—1.3 million—lower than that of most U.S. states. However, already highly populated places like Texas (20.1 million in 2000), Florida (15.2 million in 2000), and California (35.5 million in 2000) are expected to grow by 35, 36, and 39 percent, respectively.

Given that 80 percent of the U.S. population currently lives in metropolitan areas, we may reasonably expect the majority of a state's population growth over the next 25 years to occur in already established metropolitan areas. With the exception of perhaps Portland, and some other metropolitan areas in Oregon, Florida, and Washington that have metropolitan-wide urban growth boundaries in place, most U.S. metropolitan areas lack the overall coordinated regional policy to alter the total amount of growth that occurs in a region. (For instance, a region that adopts a regionwide urban growth boundary that tries to squeeze a given amount of future development into a limited area may raise the price of land and buildings within the urban growth boundary and effectively reduce the total amount of future development and population in the region.) Nevertheless, individual jurisdictions within a metropolitan area can try to limit growth locally and many times are successful at restricting growth within their boundaries. Local growth restrictions are typically of little use in slowing overall regional (or metropolitan area) growth, but local jurisdictions still sometimes seek to deflect the region's growth away from their municipality. Because communities often attempt to control growth, possibly without understanding the benefits of growth, we next offer five facts about the overall short-term benefits of growth to a community or a region, and three facts about the long-term benefits that arise from a community or region being larger.

**TABLE 1: U.S. POPULATION PROJECTIONS BY STATE AND DISTRICT, IN THOUSANDS**

<b>State</b>	<b>2000</b>	<b>2005</b>	<b>2015</b>	<b>2025</b>	<b>Percentage Growth, 2000–2025</b>
Alabama	4,451	4,631	4,956	5,224	17.3%
Alaska	653	700	791	885	35.5
Arizona	4,798	5,230	5,808	6,412	33.6
Arkansas	2,631	2,750	2,922	3,055	16.1
California	35,521	34,441	41,373	49,285	38.7
Colorado	4,168	4,468	4,833	5,188	24.5
Connecticut	3,284	3,317	3,506	3,739	13.9
Delaware	768	800	832	861	12.1
District of Columbia	523	529	594	655	25.2
Florida	15,233	16,279	18,497	20,710	36.0
Georgia	7,875	8,413	9,200	9,869	25.3
Hawaii	1,257	1,342	1,553	1,812	44.2
Idaho	1,347	1,480	1,622	1,739	29.1
Illinois	12,051	12,266	12,808	13,440	11.5
Indiana	6,045	6,215	6,404	6,546	8.3
Iowa	2,900	2,941	2,994	3,040	4.8
Kansas	2,668	2,761	2,939	3,108	16.5
Kentucky	3,995	4,098	4,231	4,314	8.0
Louisiana	4,425	4,535	4,840	5,133	16.0
Maine	1,259	1,285	1,362	1,423	13.0
Maryland	5,275	5,467	5,862	6,274	18.9
Massachusetts	6,199	6,310	6,574	6,902	11.3
Michigan	9,679	9,763	9,917	10,078	4.1
Minnesota	4,830	5,005	5,283	5,510	14.1
Mississippi	2,816	2,908	3,035	3,142	11.6
Missouri	5,540	5,718	6,005	6,250	12.8
Montana	950	1,006	1,069	1,121	18.0
Nebraska	1,705	1,761	1,850	1,930	13.2
Nevada	1,871	2,070	2,179	2,312	23.6
New Hampshire	1,224	1,281	1,372	1,439	17.6
New Jersey	8,178	8,392	8,924	9,558	16.9

*continued on the following page*

**TABLE 1: U.S. POPULATION PROJECTIONS BY STATE AND DISTRICT, IN THOUSANDS (continued)**

State	2000	2005	2015	2025	Percentage Growth, 2000–2025
New Mexico	1,860	2,016	2,300	2,612	40.4%
New York	18,146	18,250	18,916	19,830	9.3
North Carolina	7,777	8,227	8,840	9,349	20.2
North Dakota	662	677	704	729	10.1
Ohio	11,319	11,428	11,588	11,744	3.8
Oklahoma	3,373	3,491	3,789	4,057	20.3
Oregon	3,397	3,613	3,992	4,349	28.0
Pennsylvania	12,202	12,281	12,449	12,683	3.9
Rhode Island	998	1,012	1,070	1,141	14.3
South Carolina	3,858	4,033	4,369	4,645	20.4
South Dakota	777	810	840	866	11.5
Tennessee	5,657	5,966	6,365	6,665	17.8
Texas	20,119	21,487	24,280	27,183	35.1
Utah	2,207	2,411	2,670	2,883	30.6
Vermont	617	638	662	678	9.9
Virginia	6,997	7,324	7,921	8,466	21.0
Washington	5,858	6,258	7,058	7,808	33.3
West Virginia	1,841	1,849	1,851	1,845	0.2
Wisconsin	5,236	5,479	5,693	5,867	12.1
Wyoming	525	568	641	694	32.2

Source: U.S. Census Bureau at [www.census.gov/population/www/projections/stproj.html](http://www.census.gov/population/www/projections/stproj.html).

## Facts about the Benefits of Growth

In the short term, the benefits of growth result from the year-to-year process of a community or region's growth to a larger size. In the long term—that is, once a place has grown larger—an increase in scale offers benefits. In an effort to clarify all of these benefits, we next describe them in the form of eight widely accepted facts about how a community or region benefits from growth.

### Short-Term Benefits Derived from the Process of Growth

#### Fact #1: Growth Is Necessary Just to Remain the Same.

In any city or region, unfortunately, people pass away, businesses close, and houses and nonresidential structures wear out. For a place to stay the same size, people, businesses, and structures must be replaced. Some growth is replacement growth.

**Examples.** Consider a hypothetical U.S. city of 100,000 residents and 1,000 businesses. Because the average household size in the United States in 1998 was about 2.5 persons, this city has about 40,000 households. (All data are from various editions of *The Statistical Abstract of the United States*.) If this city were truly average for the United States, about one-third of its residents (13,333) would live in rental units, and two-thirds (26,667) would own their home. Because the death rate per 1,000 Americans in 1998 was 8.6, this city would require 860 new residents each year just to maintain its population of 100,000. Because the failure rate per 1,000 businesses in the United States in 1998 was 7.6, this city would also require about eight new business startups to replace the businesses lost in the previous year.

The replacement number of new housing units and non-residential structures required to remain the same is not as easy to calculate. If the average structure lasts 100 years with maintenance, and the building of structures in the city occurred evenly over the last 100 years, about 1 percent would require replacement each year. For our average city of 100,000 residents and 1,000 businesses to remain the same, each year it requires growth in the form of 133 new rental units, 267 new owner-occupied homes, and ten new business structures (assuming that each business occupies one structure).

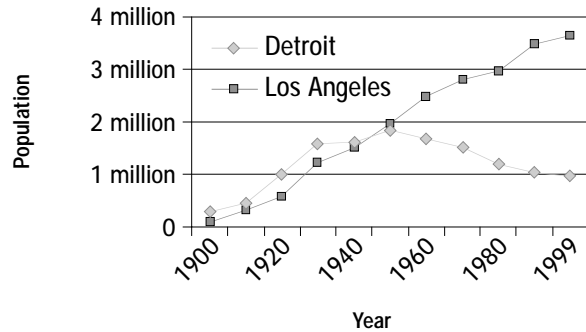
In the short term of one year, replacement growth is necessary so that every city and region can just remain the same. A hard-line, no-growth policy results in more than just stagnation; it results in a place that shrinks to a smaller size. Over the course of many years, this policy can result in places being significantly smaller than when they began their no-growth, or even slow-growth, policy.

### Growth is necessary to avoid stagnation.

*The population growth trends of the cities of Detroit and Los Angeles, shown in Figure 1, illustrate Fact #1. In 1900, both Detroit and Los Angeles were medium-sized cities. Even at that time, the larger of the two (Detroit) was not among the ten largest cities in the United States. Both grew rapidly in the first half of the 1900s, but after 1950, their growth paths diverged. As Detroit's economy declined, population growth reversed, whereas Los Angeles continued to grow, and its economy remained robust through the end of the past century. Certainly, this association is both cause and effect—persons left Detroit, in part, due to the declining economic fortunes there—and economic factors are not*

*the only explanation for the growth and decline of these two cities. But the broad correlation between population growth and a growing city economy is unmistakable.*

**CHART 1: POPULATION—DETROIT AND LOS ANGELES**



Source: U.S. Census Bureau, *The Statistical Abstract of the United States* (Washington, D.C.: U.S. Census Bureau, various editions).

### Fact #2: Growth Accommodates Federal Immigration Policy and a Birthrate that Exceeds a Corresponding Death Rate.

Americans, throughout most of their history, have had more children in a given year than the number of people who have died. A birthrate that is greater than the death rate necessarily means that each year more Americans require a new place to live and eventually to work. In addition, the United States prides itself on a history of maintaining a reasonable, and relatively liberal, immigration policy. Our country's immigration policy has been a yearly source of new residents who need a place to live and work. An individual's choice to have children and the federal government's public policy choices regarding immigration confer obvious benefits on parents, new immigrants and their families, and the U.S. economy. Without accommodating these new people through the short-term process of growth of places in the United States, those benefits would not exist.

**Examples.** In 1998, the United States experienced a yearly average of 14.6 births and 8.6 deaths per 1,000 persons. Thus, for every 1,000 persons in the United States, population in 1998 grew by six just because more people were born than died. After one year, our hypothetical U.S. city of 100,000 residents would thus need to grow by 600 residents to accommodate this natural growth in existing residents. In addition, for every year between 1991 and 1998, 24 new immigrants entered the United States for every 1,000 residents already here. To accommodate its share of these new immigrants, after one year, the hypothetical city of 100,000 would need to grow by 2,400 new

residents. This growth must go somewhere. Short-term growth in a place accommodates such population increases and allows the continuation of the personal and economic benefits that births and immigration produce for the United States. We would not need to accommodate such growth somewhere in the United States only if Americans were to stop having as many children or to start dying younger, or if the federal requirements for immigration into our country became stricter. Most Americans would be against at least two of those three things occurring.

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### **Immigration has been an important component of growth in some U.S. cities.**

*From 1960 to 1970, the population of Miami, Florida, increased from 292,000 to 335,000, due in part to immigration from Cuba. From 1980 to 1990, the population of Santa Ana, California, increased from 203,713 to 293,742, due in large part to in-migration of persons from Mexico and Central America. Other areas that might have experienced stagnating or declining populations, such as the western San Gabriel Valley in the Los Angeles area, have had recent periods of vibrant population and economic growth, partly due, in the case of the San Gabriel Valley, to in-migration of persons from Asia.*

Source: U.S. Census Bureau, *The Statistical Abstract of the United States* (Washington, D.C.: U.S. Census Bureau, various editions).

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### **Fact #3: Growth Accommodates Changes in Where We Wish to Live and Work.**

Residents and businesses of the United States have always valued their ability to pick up and move to a new location of their choice. People move for various reasons, but we may reasonably assume that people who move of their own free will—and not because of loss of employment or a change in family responsibilities, for example—consider themselves better off in their new location than in their old one. Businesses in the United States also enjoy the flexibility of moving to where they think they can enjoy the highest profit. In turn, business mobility benefits consumers by allowing the provision of demanded goods and services at a price and level of selection that is a key component to the United States's high standard of living. The nearly unhindered mobility that people and businesses enjoy in the United States, and the benefits it confers upon them, requires that popular locations grow to accommodate the desires of those wishing to move there.

**Examples.** The United States in 1998 contained approximately 104 million households. In that year alone, an astonishing 15.6 million households (or about 15 percent of the total) changed their place of residence. Most of those moves (60 percent) were within the same county of residence, while 20 percent of the moves were within the state. The remaining 20 percent resulted in households moving out of state. Households in the western United States and southern United States (as defined by the U.S. Census Bureau) were even more mobile. In 1998, 18 percent of all western households and 17 percent of all southern households moved.

If all destinations in the United States placed a moratorium on growth, residential and business mobility could by no means continue at its current rate. The allowance for growth accommodates the free movement of people and businesses. Personal and business mobility, in turn, helps produce the level of personal satisfaction and efficient business operations that Americans desire.

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### **American cities, and cities throughout the world, have been decentralizing for at least a century.**

*Brooklyn, New York, developed in the early 1800s as one of the earliest suburbs of Manhattan. Similar central locations in other metropolitan areas were, in earlier times, residential suburbs. As cities decentralize, firms follow persons to the suburbs. This movement of persons and firms has created vibrant new economic centers, called "edge cities" by some. In many locations, such as the Post Oak–Galleria area of Houston, Texas, or South Coast Metro in Orange County, California, these edge cities are employment centers that rival downtown. Some of these edge cities, which were initially located on the urban fringe, are now far interior to the edge of the metropolitan boundary and have, over time, developed into dense urban settings in their own right.*

Source: Joel Garreau, *Edge City: Life on the New Frontier* (New York: Doubleday, 1991; reprint, New York: Anchor Books, 1992).

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### **Fact #4: Growth Generates New Jobs, New Income, New Tax Revenue, and Higher Property Values.**

The short-term process of growth in a city or region occurs to replace worn out buildings and to accommodate a birthrate greater than its death rate, federal immigration policy, and the changing desires of where people and firms wish to live and do business. When the popu-

lation of a place increases, new residents require new houses and the new production of other goods and services. Growth in a place results in a local and regional building boom, the creation of new jobs to produce the goods and services desired by the new residents, and the generation of new local tax revenues. If we assume that the new residents contribute more in taxes than it costs to provide them with local government services, growth results in additional revenue that can be used to provide more local government services or to cut the local taxes to pre-growth residents. Growth, and the increased demand for local and regional land to accommodate it, also raises the market value of property to people who own it. All of these occurrences are part of the fourth fact, which holds that the short-term process of growth clearly generates economic benefits for the place that experiences it.

**Examples.** As a tangible example of the employment benefits derived from statewide growth, consider that, between 1995 and 1999, the populations of West Virginia and North Dakota grew the least of all states in percentage terms (-0.7 and -1.2 percent, respectively). The populations of Arizona and Nevada increased the most in percentage terms (10.9 and 18.6 percent, respectively). Population growth spurs development, and development requires construction workers. In 1999, only 4.7 percent of West Virginia's workforce was in construction. The figure for North Dakota was 5.3 percent. Alternatively, in the high-population-growth states of Arizona and Nevada, respectively 7.2 and 9.2 percent of the total workforce was in construction. If we consider that in 1999 the median weekly income from a construction job was \$571, while in a service-sector job (a reasonable alternative to construction employment) it was only \$402, we can see that greater construction activity in a place can provide economic benefits.

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### **In many metropolitan areas, sectors associated with growth are vital to the economy.**

*Construction, housing, and real estate all provide a source of jobs. Often, as noted previously, those jobs pay well compared to other employment opportunities. For example, in California, average hourly earnings in construction for general building contractors were \$23.48 in 1999. Average hourly earnings in retail trade were \$10.88 in 1999.*

Source: California Department of Finance, *California Statistical Abstract* (Sacramento: California Department of Finance, 2000).

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### **Fact #5: Growth Can Generate Greater Opportunities for Smart-Growth Revitalization.**

Most of America's metropolitan areas have a central city and some surrounding inner-ring suburbs that contain neighborhoods that are badly in need of revitalization. Those neighborhoods have abandoned homes and vacant storefronts. Revitalization of such underused resources, and the benefits it would bestow on existing residents, could occur if an inflow of new residents and businesses moved into these neighborhoods and either rehabilitated or replaced the deteriorated housing, non-residential structures, and public infrastructure there. Only growth, however, produces a new inflow of residents and businesses to a region. New entrants require places to live and work and, therefore, offer opportunities to revitalize central-city and inner-ring suburban neighborhoods. If planned appropriately, such revitalization does not have to displace existing residents and businesses, but rather it can serve to raise residential property values and provide new customers to existing enterprises.

Of course, many of these new entrants will choose to locate at the fringe of a metropolitan area. However, if even a small portion of them choose central-city and inner-ring suburban locations, the number entering such depressed neighborhoods will be higher than if there were no growth in the region. Growth offers opportunities for urban revitalization. Those opportunities can be made even stronger if the growing region imposes metropolitan-wide growth boundaries or offers targeted incentives that direct new residents, businesses, and investment to the part of the metropolitan area most in need of revitalization. Regional growth does not guarantee urban revitalization, but most cities with growing central areas are in growing metropolitan regions.

**Examples.** Between 1990 and 1998, 21 central cities in the United States experienced a decline in population that was more than 5 percent. To illustrate the point that loss in population at the core of a metropolitan area—and hence the opportunity to revitalize core neighborhoods—is related to overall metropolitan growth, Table 2 (see page 10) provides the corresponding rate of metropolitan population growth for these declining central cities. For comparison, the average rate of population growth for all metropolitan areas between 1990 and 1998 was 9.1 percent.

As Table 2 illustrates, only the metropolitan areas containing Kansas City, Missouri, and Washington, D.C., exhibited overall growth rates that were above the national

**TABLE 2: CENTRAL CITY AND METROPOLITAN POPULATION GROWTH RATES FOR LOW-GROWTH CITIES**

City	1990–1998 Central City Growth Rate	1990–1998 Metropolitan Area Growth Rate
Baltimore, MD	-12.3%	4.3%
Cincinnati, OH	-7.6	6.0
Dayton, OH	-8.0	-0.3
Erie, PA	-5.6	0.3
Flint, MI	-6.6	1.3
Fort Wayne, IN	-5.1	5.5
Gary, IN	-7.0	3.2
Hartford, CN	-5.9	-1.2
Jackson, MS	-6.8	8.7
Kansas City, MO	-6.7	9.7
Milwaukee, WI	-7.9	1.9
New Haven, CT	-5.6	-1.4
New Orleans, LA	-6.3	1.9
Norfolk, VA	-17.6	6.7
Pittsburgh, PA	-7.9	-2.0
Providence, RI	-6.1	-1.0
Shreveport, LA	-5.1	0.6
Springfield, MA	-5.6	-2.4
Syracuse, NY	-7.1	-1.0
Toledo, OH	-6.2	-0.7
Washington, DC	-13.8	10.7

Source: U.S. Census Bureau at [www.census.gov/prod/99pubs/99statab/sect-1/pdf](http://www.census.gov/prod/99pubs/99statab/sect-1/pdf).

average for all U.S. metropolitan areas. Of the 21 metropolitan areas whose central cities shrank in population size between 1990 and 1998 at a rate greater than 5 percent, 91 percent had population growth rates that were below the national average. Eight of the metropolitan areas containing central cities that lost population also decreased in population size. As Table 2 illustrates, a below-average growth rate in an entire metropolitan area is likely to have severe consequences for the prospects for revitalization of a metropolitan area's central places.

## A recent Brookings Institution report discusses the growth of residential downtowns in major cities.

*The report noted that Denver's population increased in the 1990s for the first time since 1970 and that this increase was accompanied by residential growth downtown. This downtown growth included an area of converted warehouses that has become known as LoDo (Lower Downtown). Houston's downtown population has risen since the mid-1990s and is expected to quadruple by 2010. The residential population of downtown Atlanta is projected to increase by almost 50 percent from the late 1990s to the year 2010. Although some cities in declining regions are experiencing growth downtown, rapid regional population growth makes redevelopment and revitalization more attractive as the supply of developable land elsewhere shrinks.*

Source: Brookings Institution Center on Urban and Metropolitan Policy and the Fannie Mae Foundation, "A Rise in Downtown Living," November 1998. Available at <http://www.brookings.edu/ES/urban/top21fin.pdf>.

## Long-Term Benefits of Growing to Be Larger in Scale

### Fact #6: Larger Size Means Greater Economies of Scale in Production.

Growth results in a region that is larger in population. A region with more population also has more businesses and jobs within it. All of this growth can be thought of as an increase in scale. As cities grow larger, the per-unit cost of producing many goods and services drops. Economists call this relative decline in cost "economies of scale." One benefit from living in a larger region is that many locally produced items cost less to produce; consequently, residents and businesses in the area can consume them at a lower cost. Be it a regional shopping mall, a system of hiking or bike trails, a professional sports team, or a respected art museum or symphony, a certain number of consumers (population) in a region are usually necessary to support the high fixed costs (or costs that do not vary as more people consume) to produce each of these goods or services.

**Examples.** Economies of scale also exist in the production of goods and services that traditionally have been provided by local governments. For instance, the per-person cost of police or fire protection decreases as the number of patrol cars or fire trucks increase. Therefore,



a larger region, which on average has larger local governments providing police or fire services, can produce the desired level of protection at a lower per-person cost. A second example is a desirable system of mass transit. Much evidence shows that cities with greater population density are better able to support more cost-effective mass transit.

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### **The largest urban centers appear to be uniquely poised to support the arts and culture.**

*The great museums, opera houses, and performing arts companies overwhelmingly tend to be located in the nation's and the world's largest cities, because to survive those arts need to draw on a large population of patrons and customers. Smaller communities often find it more difficult to sustain not only a range of artistic and cultural events, but also publicly funded amenities such as parks, zoos, and other attractions.*

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### **Fact #7: Larger Size Means Economic Benefits Derived from Clustering.**

After growth occurs in a given size area, groups of people or businesses are more likely to be clustered together. Benefits, separate from economies of scale, arise from a greater number of people or activities locating near each other. The benefits of businesses locating near each other are demonstrated by the clustering of high-technology firms in a few areas, such as Silicon Valley in Northern California; Research Triangle in North Carolina; and similar high-tech clusters in Boston, Austin, Ann Arbor, Boulder, Seattle, and Portland.

Clustering benefits also extend beyond high technology. Retail stores cluster in districts and shopping centers to benefit from increased traffic created by proximity. This clustering not only results in more customers per store, but also allows greater comparison shopping by customers. In addition, clustered businesses can share a sophisticated network of suppliers, service providers, and a skilled labor pool, none of which is likely to be as readily available in smaller regions. These benefits of clustering are sometimes referred to as “agglomeration economies.”

The clustering of people, which is more likely to occur as a place grows to a larger population, should also be considered a benefit of growth. The spatial concentration of large groups of people permits more personal interaction, which in turn generates more new ideas, products,

and processes. The advantages of clustering people and businesses together in a large metropolitan area also make it easier to attract and keep highly skilled workers and the businesses that employ them. This factor produces a competitive advantage for a larger region and can make it less susceptible to economic downturns.

**Examples.** Perhaps an often-told anecdote is in order here. Consider a small town that currently has a courtroom and only one practicing lawyer. Such a situation is likely to produce more free time for the lawyer than if one, two, or multiple lawyers moved into town and began practicing their craft. The nature of not only legal activities, but also economic, social, and even learning activities benefits from, and even requires, multiple interactions between multiple people. Growth offers the larger number of people that usually makes such essential activities more efficient from both a personal and social perspective.

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### **Currently, places with high-tech agglomerations, or “cyber cities,” are where fast job growth, rising wages, and profits are producing prosperity-inducing income increases.**

*The large existing agglomerations of high-tech industries in San Jose, Boston, Chicago, Washington, D.C., and Dallas have been sustaining fast job growth as older firms grow and new firms are born faster than recent startups die. . . . Another factor is the number of competitive businesses in the mix of the economic base. San Francisco, for example, has strong attractions that maintain the strength of a vibrant visitor industry, along with high-tech and strong service industries. To date, this critical mass of agglomerations has been strong enough to offset the missing pillar of affordable housing. . . .*

Source: Gruen Gruen + Associates, “Pillars of Regional Prosperity,” Trends E-mail newsletter, January 2001.

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### **Fact #8: Larger Size Means Greater Choices and Diversity.**

The last, but certainly not least, fact on the benefits of growth to a larger size is the increased choices available to consumers and laborers in the now larger place. By consumer choices, we refer to both greater options in where to live and shop—the increased diversity in the type of housing and local government services that comes with choice of residence—and greater options regarding recreational, sporting, and cultural activities

within a region. In addition, an increase in regional population, and the subsequent economic activity that it generates, creates greater employment choices and even employment security for existing residents. Finally, the benefits of greater social diversity (which could include greater tolerance and respect for others; greater choices in cultural, retail, and restaurant experiences; or greater likelihood of new and innovative ideas) are far more likely to occur in a region after it experiences population growth and grows to a larger size.

**Examples.** Economists have long recognized that consumers of a good or service are better off when more producers exist. The same is true regarding the provision of local government services. A person wishing to buy a certain type of home within a given price range will be worse off if forced to live in just one community that offers it. In such a situation, both the private provider of homes and the public provider of local government services hold a degree of monopoly power that they can use to the consumer's disadvantage. Also, the more populated a given region is, the more likely it is that it offers greater choices in the number of potential employers to work for. This employment diversity gives an individual a better chance of finding job opportunities within the metropolitan region.

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### The proliferation of municipalities in large metropolitan areas allows cities to specialize.

*In most metropolitan areas, some cities actively seek to attract business or industrial development, while other cities seek to preserve a residential character and zone out industry. Often, cities similarly specialize in the tax and service packages that they offer. Residents have more choice of where to live in these specialized metropolitan areas. Local specialization is also, at times, counter to a need for regional coordination, and so can be detrimental in certain instances. However, specialization, when it provides more choice, can be beneficial to citizens and firms.*

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## Quality-of-Life Differences in High- and Low-Growth U.S. Metropolitan Areas

In the previous section we offered five facts on the benefits of growth that arise from the process of growth itself and three facts on the benefits of growth that result from being larger. Different facts exist, of course, on the costs of a place's growing and becoming larger. As mentioned earlier, we will not discuss those in detail here, but the costs of growth can include traffic congestion, more crowded public facilities, loss of open spaces, higher tax burdens for new residents, and greater pollution. Because the process of growth and the fact of being larger result in both benefits and costs to a place, the important issue to consider is whether the benefits outweigh the costs, or whether faster-growing and larger areas are on average better off than slow-growing or smaller areas. Answering this question requires an acceptable measure of what is meant by "better off." In this section, we use the quality-of-life ratings provided in the 2000 edition of David Savageau and Ralph D'Agostino's *Places Rated Almanac* to compare high-growth and low-growth metropolitan areas.

### Method

The *Places Rated Almanac (PRA)*, now in its fifth edition, is a quantitative attempt to rank the relative desirability of the 354 metropolitan areas that exist in the United States and southern Canada as of 1999. The *PRA* establishes rankings by assigning a score to each metropolitan area in nine factors: (1) cost of living, (2) transportation, (3) jobs, (4) education, (5) crime, (6) climate, (7) arts, (8) health care, and (9) recreation. The choice of these categories, and how scores are calculated for desirability in each of them, is laden with value judgments. We recognize this potential for bias, but still use the *PRA* because of its proven acceptability, which is demonstrated by a fifth edition, and because the *PRA* offers one of the only available calculations of this sort.

Our method is first to find the ten U.S. metropolitan areas that had the largest percentage growth rate in population between 1990 and 1997 and the ten that had the lowest percentage growth rates over the same period. We also find the ten most populated and ten least populated metropolitan areas in the United States in 1997. For these 40 metropolitan areas, we then note the scores calculated by the *PRA* in eight of the nine desirability categories and

look for systematic differences between the two sets of 20 metropolitan areas. The score in climate is excluded because more or less growth does nothing to change it. This method of comparison is also repeated for four pairs of cities—one drawn from each of the four major census regions in the United States (west, northwest, south, and northeast)—which are chosen for having similar population levels in 1970 but significantly different ones in 1997.

Before we report our findings, we must explain a bit about how the scores in each category are calculated. Consider the cost-of-living category as an example. The *PRA* calculates what a household with a typical income would pay in state and local taxes and for housing, food, health care, transportation, and recreation in each metropolitan area. These costs are then ranked from lowest to highest and assigned a score such that 100 represents the least expensive (most desirable) and zero represents the most expensive (least desirable). For transportation, a similar scoring system is used that rates connectivity, commute time, and centrality. Growth rate of jobs, number of new jobs, and number of high-paying jobs make up the score for the jobs category. The education score is based on dollar support for public schools, library popularity, number enrolled in college, and college options. The score in the crime category is based on violent crimes and property crimes reported per person, with property crimes receiving one-tenth the weight of violent crimes. The score in the arts category comes from looking at the number of art museums; museum attendance; and ballet, touring artists, opera, professional theater, and symphony performances. The *PRA* produces its health care score on the basis of the number of general medical practitioners, specialists, and surgeons per 100,000 persons; available hospital beds; and physician residency programs. Finally, the recreation score is derived from the number and size of activities, recreational land available, and quality of available recreation.

## Comparisons

Table 3 (see page 14) offers data drawn from the ten U.S. metropolitan areas whose population increased the most between 1990 and 1997 (at an average rate of nearly 31 percent) and the ten areas whose population increased the least (at an average rate of -4 percent). Recall that 100 is the highest score that the *PRA* assigns in any category, and zero the lowest. The average scores for each of the two groups of metropolitan areas in each of the relevant

categories are provided at the foot of the city lists. For five of the eight quality-of-life categories, the averages for the fastest-growing metropolitan areas are larger than the averages for the slowest-growing metropolitan areas. In particular, compare the high average jobs score of nearly 86 in the country's fastest-growing areas to the very low average jobs score of about 13 for the slowest-growing areas. Only the average quality-of-life scores for cost of living, crime, and health care are lower in the fastest-growing cities.

The low cost-of-living and health scores in fast-growing areas may be due, in part, to the supply of goods and services not being able to keep up with rapidly increasing demand in fast-growing areas. Over time, some of this shortfall of goods and services could be expected to diminish. Because housing cost is a large component of the cost of living, the lower cost-of-living score in the fastest-growing areas is not surprising. But note that higher housing costs also mean greater increases in property values for existing property owners, although renters are still placed at a significant disadvantage.

Table 4 (see page 15) is like Table 3 except it contains the *PRA* quality-of-life scores for the ten most populated and the ten least populated metropolitan areas in the United States in 1997. For this comparison, the average cost-of-living and crime scores for the most populated metropolitan areas were again lower than the average scores for the least populated areas. However, unlike the advantage that slow-growth metropolitan areas exhibit in health care, large metropolitan areas on average score better in this category than small metropolitan areas.

Tables 3 and 4 demonstrate that observable quality-of-life benefits accrue to fast-growing U.S. metropolitan areas and in large U.S. areas in general. The only clear exception is the higher rates of violent and property crime that people and businesses in fast-growing and large metropolitan areas must tolerate. By the measures chosen by the *PRA* to account for the degree of ease in getting around an area, finding a quality job, obtaining a superior education, enjoying world-class art, and benefiting from ample recreational opportunities, the winners in this quality-of-life assessment are clearly the fastest-growing and largest metropolitan areas in the United States.

Another way to approach a quality-of-life comparison is to pick pairs of metropolitan areas that were similar in population size a number of years ago, but in which one has grown much faster and consequently now has a much larger population than the other. Table 5 (see page 16)

**TABLE 3: QUALITY OF LIFE IN METROPOLITAN AREAS WITH FASTEST- AND SLOWEST-GROWING POPULATIONS**

Fastest-Growing Metro Areas	1990–1997 Cost-of-			Jobs Score	Education Score	Crime Score	Arts Score	Health	
	Growth Rate	Living Score	Transportation Score					Care Score	Recreation Score
Las Vegas, NV	48.0%	38.5	87.5	99.7	16.4	52.1	50.2	24.4	95.2
Laredo, TX	37.5	99.7	46.7	72.8	8.8	25.5	2.0	2.3	0.6
McAllen, TX	33.2	98.6	32.3	88.1	3.7	35.7	12.5	12.5	23.0
Boise, ID	29.7	55.0	67.4	91.2	61.8	72.0	75.6	60.3	46.2
Naples, FL	28.7	20.7	35.7	76.2	13.9	31.7	29.2	21.8	52.4
Phoenix, AZ	26.9	37.7	89.5	100.0	85.0	20.7	86.7	51.6	94.9
Fayetteville, AR	26.6	78.2	42.8	60.6	29.7	10.8	48.5	17.8	17.3
Austin, TX	26.6	50.4	78.8	98.0	98.0	40.2	72.2	64.9	68.8
Wilmington, NC	24.7	40.5	45.9	78.8	40.8	28.1	18.1	61.5	88.4
Provo, UT	24.5	48.2	11.0	89.5	51.0	91.2	54.4	3.7	56.7
<b>Average</b>	<b>30.6%</b>	<b>56.8</b>	<b>53.8</b>	<b>85.5</b>	<b>40.9</b>	<b>40.8</b>	<b>44.9</b>	<b>32.1</b>	<b>54.4</b>

Slowest-Growing Metro Areas	1990–1997 Cost-of-			Jobs Score	Education Score	Crime Score	Arts Score	Health	
	Growth Rate	Living Score	Transportation Score					Care Score	Recreation Score
Victoria, TX	-5.6%	99.4	17.0	20.4	20.1	21.3	8.5	72.3	3.4
Binghamton, NY	-4.8	28.9	67.2	14.7	37.1	96.0	47.3	22.9	57.5
Jacksonville, NC	-4.6	82.7	30.9	22.4	0.8	78.8	4.3	1.1	37.7
Steubenville, OH	-4.1	68.8	7.4	0.0	28.7	96.3	31.7	7.9	13.3
Lewiston, ME	-4.0	26.6	15.0	8.5	44.2	91.5	9.9	36.5	20.1
Alexandria, LA	-3.9	92.4	42.5	19.3	11.6	7.1	40.8	62.0	22.7
Pine Bluff, AR	-3.8	81.0	8.2	7.4	7.9	2.6	11.1	39.1	5.1
Pittsfield, MA	-3.7	22.7	19.5	0.6	4.8	86.7	69.4	30.3	48.4
Wheeling, WV	-3.2	67.4	14.2	13.6	62.3	97.5	49.3	79.0	17.6
Scranton, PA	-2.6	52.1	62.3	21.0	81.9	97.2	67.7	80.5	72.0
<b>Average</b>	<b>-4.0%</b>	<b>62.2</b>	<b>28.4</b>	<b>12.8</b>	<b>29.9</b>	<b>67.5</b>	<b>34.0</b>	<b>43.2</b>	<b>29.8</b>

Source: David Savageau and Ralph D'Agostino, *Places Rated Almanac* (Foster City, California, IDG Books Worldwide, 2000).

compares pairs of metropolitan areas in each of the four major census divisions of the United States. We have tried to make these pairings on the basis of U.S. metropolitan areas that were very similar in population 30 years ago, and that one could argue were somewhat simi-

lar in other categories, before one of the areas began its growth spurt.

Column one of Table 5 names the metropolitan-area pairs, their similar 1970 populations are listed in column two, and column three contains their quite divergent 1997

**TABLE 4: QUALITY OF LIFE IN MOST POPULATED AND LEAST POPULATED METROPOLITAN AREAS**

Most Populated Metro Areas	1997 Population (1,000s)	Cost-of-Living Score	Transportation Score	Jobs Score	Education Score	Crime Score	Arts Score	Health Care Score	Recreation Score
Los Angeles, CA	9,117	5.7	93.5	48.2	77.1	1.1	99.4	68.0	92.6
New York, NY	8,650	0.0	99.4	41.9	94.6	0.6	100.0	92.1	92.4
Chicago, IL	7,883	9.4	100.0	87.0	98.9	2.3	99.2	81.3	97.2
Philadelphia, PA	4,940	10.2	95.8	78.2	89.8	45.3	98.3	85.6	74.8
Washington, DC	4,609	4.5	97.2	92.9	97.7	38.3	99.7	98.3	88.7
Detroit, MI	4,469	14.7	98.9	80.7	70.5	17.0	95.2	49.0	96.6
Houston, TX	3,847	59.5	94.3	94.9	71.1	24.7	89.8	65.4	85.3
Atlanta, GA	3,634	39.4	98.3	99.2	82.7	12.2	94.7	57.2	76.2
Boston, MA	3,273	1.1	94.6	49.0	99.7	46.7	98.6	94.9	77.1
Dallas, TX	3,123	49.3	95.5	95.2	90.0	9.4	93.2	48.2	89.0
<b>Average</b>	<b>5,355</b>	<b>19.4</b>	<b>96.8</b>	<b>76.7</b>	<b>87.2</b>	<b>19.8</b>	<b>96.8</b>	<b>74.0</b>	<b>87.0</b>

Least Populated Metro Areas	1997 Population (1,000s)	Cost-of-Living Score	Transportation Score	Jobs Score	Education Score	Crime Score	Arts Score	Health Care Score	Recreation Score
Enid, OK	57	90.4	26.1	2.3	4.0	26.9	11.3	33.7	1.7
Casper, WY	63	90.7	38.9	12.7	9.1	57.2	42.5	35.1	11.0
Pocatello, ID	74	65.2	40.8	33.7	30.9	69.1	14.5	40.8	14.7
Jonesboro, AR	77	73.7	25.5	24.9	22.9	67.1	7.4	78.5	5.7
Cheyenne, WY	78	85.8	38.0	11.3	12.5	85.0	25.8	22.4	5.9
Great Falls, MT	79	76.5	58.4	2.5	2.5	64.3	15.0	30.6	9.3
Victoria, TX	82	99.4	17.0	20.4	20.1	21.2	8.5	72.5	3.4
Pine Bluff, AR	82	81.0	8.2	7.4	7.9	2.6	11.1	39.1	5.1
Rapid City, SD	87	86.7	55.0	29.7	22.4	65.2	9.1	51.3	19.8
Dubuque, ID	88	63.5	54.4	8.8	80.2	92.1	46.8	24.9	19.5
<b>Average</b>	<b>77</b>	<b>81.3</b>	<b>36.2</b>	<b>15.4</b>	<b>21.3</b>	<b>55.1</b>	<b>19.2</b>	<b>42.9</b>	<b>9.6</b>

Source: David Savageau and Ralph D'Agostino, *Places Rated Almanac* (Foster City, California, IDG Books Worldwide, 2000).

populations. The respective quality-of-life scores are in columns four through 11, and the last column is an average of all quality-of-life scores for a given area. The first thing to notice is that the average scores for the now higher-population metropolitan areas are all greater than for the now lower-population areas. Only three of the specific

quality-of-life indicators are lower in the now higher-population metropolitan areas. These include the education score for Las Vegas, Nevada, and the cost-of-living scores for Austin, Texas, and Grand Rapids, Michigan. But again, because housing is a major component of the PRA's cost-of-living score, and population growth in a

**TABLE 5: QUALITY-OF-LIFE COMPARISONS BETWEEN SIMILAR FAST- AND SLOW-GROWING METROPOLITAN AREAS**

Metro Areas with Similar Populations in 1970	1970 Population (1,000s)	1997 Population (1,000s)	Cost-of-								Average
			Living Score	Transportation Score	Jobs Score	Education Score	Crime Score	Arts Score	Health Care Score	Recreation Score	
Austin, TX	360	1,070	50.4	78.8	98.0	98.3	40.2	72.2	64.9	68.8	<b>71.5</b>
Baton Rouge, LA	376	571	68.3	57.2	82.4	39.1	1.7	45.9	57.5	57.8	<b>51.2</b>
Grand Rapids, MI	539	1,028	52.7	77.3	90.4	79.3	57.0	77.1	27.2	99.4	<b>70.0</b>
Youngstown, OH	537	595	70.3	49.0	65.4	58.6	50.7	21.8	20.4	73.7	<b>51.2</b>
Las Vegas, NV	273	1,262	38.5	87.5	99.7	16.4	16.7	50.2	24.4	95.2	<b>53.6</b>
Stockton, CA	291	540	23.8	1.4	64.9	24.6	11.1	36.8	16.1	32.3	<b>26.4</b>
Washington, DC	2,910	4,609	4.5	97.2	92.9	97.7	38.3	99.7	98.3	88.7	<b>77.2</b>
Newark, NJ	2,057	1,943	4.0	96.0	32.6	93.8	18.1	96.6	88.4	76.5	<b>63.3</b>

Source: David Savageau and Ralph D'Agostino, *Places Rated Almanac* (Foster City, California, IDG Books Worldwide, 2000).

region drives up property values, this score in part represents a benefit of growth to residents who owned property before the period of rapid population growth in Austin and Grand Rapids.

## Categorizing the Local and Regional Benefits of Growth

The quality-of-life indicators discussed in the previous section are calculated for an entire metropolitan region. Using these indicators, we have shown that measurable benefits accrue to a region when it grows. But the growth of an entire region can occur through the growth of some localities within the region, while other localities remain the same or even shrink in size. In fact, this pattern is often observed in the United States. An entire metropolitan area will grow, but many communities within the area have adopted no- or slow-growth land use policies. Table 6 is intended as a tool to better understand why this local NIMBYism may arise.

Table 6 (see pages 17 and 18) lists 14 possible benefits that can arise from a region's growing larger. In one way or another, these benefits have all been covered earlier in this paper. Table 6 also categorizes these benefits according to whether they apply to the entire region or only to the specific locality in which growth occurs. A quick glance at this table shows that all but one of the possible 14 benefits of growth apply to an entire region. Because substate taxes are almost exclusively raised at the local level in the United States, growth will generate greater tax revenue only

in the locality in which it occurs. Conversely, numerous benefits of growth offer few specific benefits to the locality in which the growth occurred. We believe that nine of the 14 benefits listed in Table 6 fit this category.

Understanding that the benefits of growth in a region accrue primarily to the region as a whole, and that many of the costs of growth in a region fall on the specific localities in which the growth occurs, goes a long way toward explaining why many communities throughout the United States have tried to reject growth. If a community's residents and businesses can enjoy the regional benefits of growth and not have to bear its costs, then it is rational for their policy makers to aim for this goal. The solution, of course, is to try to change such locally optimal, but regionally and even nationally nonoptimal, behavior. After all, if a majority of communities in a metropolitan area rejects growth, then none of them can enjoy the benefits that growth offers to the entire region.

## Overcoming Local Resistance to Growth

As is well known and widely discussed, population growth also imposes costs on citizens and businesses in a region. Therefore, when accounting for whether a community embraces or rejects population growth, we need to consider both the local benefits of growth and the local costs. The purpose of this paper has been to shed further light on the benefit side of growth. Of utmost importance are regional versus local disjunctions in these benefits and

**TABLE 6: DIVISION OF BENEFITS OF GROWTH BETWEEN REGION AND LOCALITIES**

Possible Benefits of Growth	Does this benefit apply to the entire region in which growth occurs?	Does this benefit apply to the specific locality in which growth occurs?
1. Replacement to remain the same	<b>Yes;</b> the character of a region is made up of the character of each locality. If replacement does not occur in a locality, then the region does not stay the same.	<b>Yes</b>
2. Accommodation of births greater than deaths	<b>Yes;</b> births being greater than deaths is best thought of as a regional or even national issue.	<b>Not Much</b>
3. Accommodation of immigration	<b>Yes;</b> immigration into the United States is best thought of as a regional or even national issue.	<b>Not Much</b>
4. Accommodation of location decisions	<b>Yes;</b> people and businesses from outside the region choose to move to the region because of its overall attractiveness.	<b>Yes;</b> people and businesses in the region can also choose to move within the region.
5. Generation of new jobs	<b>Yes;</b> the labor market is region wide. Creating a job anywhere in the region allows someone from anywhere in the region to take it.	<b>Not Much;</b> in the sense of providing jobs for residents of a locality. In a region, people do not need to live and work in the same locality.
6. Generation of new income	<b>Yes;</b> new income earned by a region's residents is spent throughout the region.	<b>Not Much;</b> a resident's income does not need to be spent in the locality where it is generated or where the person lives.
7. Generation of new tax revenue	<b>Some;</b> nearly all local tax revenue is collected by the jurisdiction in which the tax base is located or generated, but a locality's sales or income tax revenue (if relevant) can grow if population growth occurs elsewhere in the metropolitan area.	<b>Yes</b>
8. Generation of higher property values	<b>Yes;</b> growth in an entire region can raise the demand for existing development within all of the region's localities, even if some of them do not allow growth.	<b>Yes</b>
9. Smart growth revitalization	<b>Yes;</b> the revitalization of a region's depressed areas can offer benefits to the entire region in the form of improving its overall image.	<b>Yes</b>
10. Economies of scale in production	<b>Yes;</b> a larger region can produce private and public goods that enjoy economies of scale in production and can be sold at a lower cost. People and businesses throughout the region can consume most of these things, even though they each need to be produced in a specific locality.	<b>Not Much;</b> a locality that grows larger can produce local government goods such as police and fire protection, libraries, parks, etc., at a lower per-citizen cost if the locality gains more residents or businesses. If the consumption of these goods or services requires local residency, then the benefit of growth is only local.

*continued on following page*

**TABLE 6: DIVISION OF BENEFITS OF GROWTH BETWEEN REGION AND LOCALITIES (continued)**

11. Economies of clustering in production	<b>Yes;</b> the benefits to be derived from the clustering of people and businesses that a larger region allows spill over local boundaries.	<b>Not Much</b>
12. Greater choices	<b>Yes;</b> the benefits to be derived from the greater choices that a larger region allows spill over local boundaries.	<b>Not Much</b>
13. Greater diversity	<b>Yes;</b> the benefits to be derived from the greater diversity that a larger region allows spill over local boundaries.	<b>Not Much</b>
14. Greater transportation, education, arts, health care, and recreation resources and opportunities	<b>Yes;</b> the benefits to be derived from all of these amenities are best considered regional because they spill over local boundaries.	<b>Not Much</b>

costs. Many of the benefits described above fall upon an entire region, whereas many of the costs of population growth (such as loss of small-town character, increased congestion, and loss of local open space) are local. Perceived local benefits are usually weighed against perceived local costs only, and if these local costs are greater than local benefits, growth is locally unwelcome. If growth is locally unwelcome in many places in a metropolitan area, then the area as a whole might not be able to grow, and many of the benefits of growth discussed earlier will be lost.

## Four Factors to Consider

Besides the important disconnect between the regional benefits and local costs of growth, we need to consider four other factors when accounting for the benefits of growth: population density before growth, pace of growth, long-run versus short-run considerations, and growth benefits to existing versus new residents. We summarize our thinking on each of these points next.

### Population Density before Growth

Two of the benefits of population growth, greater clustering and choices, result from an increased concentration of persons and economic activity. This increase in density might bring the largest benefits to regions that are initially relatively less dense. However, the costs of population growth are also related to initial population density. One implication of that fact is that growth in already dense places might bring more costs than benefits. Yet,

concluding that growth is more beneficial in sparsely populated regions ignores the rapid and likely highly beneficial growth in already dense locations such as the San Francisco Bay area and several other large U.S. cities. More properly stated, the benefits and costs of increasing density differ depending on the initial density of a place or region, and strong clustering benefits can offset considerable costs. This relationship does not suggest that we ignore the costs of growth, but it highlights the importance of analyzing both costs and benefits.

### Some high-density cities experienced vibrant economic growth.

*San Francisco and Boston, for example, are the second- and sixth-densest cities in the United States, but both have developed strong employment growth in sectors that include, among other things, high-technology businesses. Yet, some dense cities have more stagnant economies, such as Jersey City and Newark, New Jersey, the third- and seventh-densest cities in the United States. In some places, density produces economic benefits, but density by itself is not the only element of a vibrant economy. The link between density and economic growth is less ambiguous when one considers the least dense cities in the United States. Of cities with more than 200,000 persons, the ten least dense cities, in order of increasing density, are Anchorage, Alaska; Oklahoma City, Oklahoma; Lexington, Kentucky; Jacksonville, Florida; Nashville, Tennessee; Kansas City, Missouri; Colorado*



*Springs, Colorado; Fort Worth, Texas; Virginia Beach, Virginia; and Mobile, Alabama. Few of these places are cities that one would consider to be either a technology center or a more general growth pole.*

Source: U.S. Census Bureau, *The Statistical Abstract of the United States* (Washington, D.C.: U.S. Census Bureau, various editions).

### **Pace of Growth**

Perceptions regarding the benefits and costs of population growth are also a function of how fast the growth is occurring. Institutions, infrastructure and other government services, politicians, and existing residents are less likely to support growth the faster that it occurs. Citizens and policy makers are also far more likely to lament the loss of “community character” the faster that character changes.

### **From 1990 to 2000, the United States population, as a whole, grew at an annual rate of slightly faster than 1 percent per year.**

*Some persons suggest that rapid local growth is growth that substantially exceeds the 1 percent per year national average. Rapid local growth can, at times, overwhelm the ability of local and metropolitan officials to plan for growth, provide public services and infrastructure in a timely fashion, and cope with the costs of growth. Although it is difficult, and likely unwise, to attempt to slow growth in fast-growing metropolitan regions, public officials might recognize that rapid growth, especially growth well in excess of the national growth rate, brings short-term stresses, even if the long-run benefits can be substantial. More attention to the short-term “adjustment costs” associated with fast growth will help provide more balanced policy treatment of the issue of growth in general.*

### **Long-Run versus Short-Run Considerations**

The focus of people and politicians—especially Americans—is on the short term. Because a community or region is more likely to slowly realize the benefits of growth, while the costs are immediate, political processes and public opinion give disproportionate weight to short-run costs. For instance, growth and maturation of a city come with the short-run cost of unsightly leapfrog development that may later fill in to form a more complete and desirable city.

### **Los Angeles is considered by many to be the quintessential sprawling city, and in its early years, development in the city did often proceed in a leapfrog fashion.**

*Yet, as the city and metropolitan area have become built out, previously undeveloped plots of land have been developed—often at higher densities than surrounding, earlier, development. Now, very few undeveloped parcels are left in many parts of Los Angeles.*

### **Existing versus New Residents**

Often, a debate on the merits of growth will highlight the differing perspectives of current and future residents. If the costs of growth outweigh the benefits for current residents, but potential immigrants to the community gain more than current residents lose, growth that could increase social welfare in the entire region is not welcome locally.

### **Economic and migration theory both suggest that persons who move to a new city or metropolitan area are better off in their new location than in their old location.**

*Yet, existing residents might oppose growth if they perceive that growth might, for example, create congestion that will reduce their quality of life. Thus, growth opponents sometimes are arguing that benefits for existing residents should be preserved at the expense of providing benefits for possible new residents. To some extent, these arguments might overlook the broad-based benefits of growth discussed in this paper, and education on how growth is healthy for a metropolitan area might alleviate these concerns.*

### **Policies to Balance Better the Local Benefits and Costs of Growth**

As previously described, the purpose of this exploration is a better understanding of the benefits that population growth brings to a region or a locality. If the local plus regional benefits of population growth are truly less than the local plus regional costs, then it is socially appropriate for a jurisdiction to reject growth. If the local benefits of growth are truly greater than the local costs, and a jurisdiction still rejects growth, then a policy response might include further education regarding the local benefits of

growth. It is our hope that this paper assists in educating others on the benefits of growth.

If a jurisdiction rejects growth because the local benefits to be derived from it are truly less than the local costs, but the local and regional benefits of the growth are greater than the local and regional costs, then it is appropriate to suggest public policies to try to overcome this locally rational, but regionally irrational, NIMBYism. We next offer some public policies suggested by experts.

### **State Encouragement of Regional Cooperation**

The obvious solution to this problem is somehow to raise the direct benefits that a jurisdiction experiences from growth or to reduce a jurisdiction's direct costs from growth. Because regional governance of the sort necessary to make these changes does not exist in most metropolitan areas in the United States, state governments must devise appropriate subsidy or intergovernmental revenue-sharing formulas or put in motion legislation that encourages greater interjurisdictional cooperation or appropriate regional government structures that could undertake these tasks.

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### **A handful of metropolitan areas have moved toward more effective regional governance.**

*Examples include the unified city-county government in the Indianapolis, Indiana, metropolitan area; regional tax-base sharing in Minneapolis–St. Paul, Minnesota; and Portland, Oregon's regional growth boundary. The experiences in these places are generally cited as favorable. Greater metropolitan cooperation provides a framework for more effectively sharing in the benefits of regional growth.*

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### **Appropriate Fees and Charges**

Another related issue, one that is the mantra of antisprawl activists, is that the benefits of population growth to a region would be greater if more of the development occurred within existing urbanized areas and at higher densities. According to one version of this thinking, excessive growth at the urban fringe occurs because of market failures: a market price for urban fringe land that does not account for its social value, prices for private automobile use that exclude public costs (such as congestion and lower air quality), and public infrastructure construction costs that are less than fully paid for by the development that requires it. The solution may again be various forms of charges and fees that force the appro-

appropriate economic actors to consider the true social costs of their actions. The imposition of an urban growth boundary may achieve the same results, but the difficulty in placing it appropriately and the additional costs that growth boundaries generate in metropolitan areas (likely higher home and land prices within the boundary) make them less than an optimal policy instrument, according to most economists and some planners who have studied the outcomes associated with growth boundaries.

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### **Motivated in part by a shortfall of traditional highway revenues, some localities in California began experimenting with user fees and locally generated funding for street and highway improvements.**

*More than 50 new centerline miles of highway capacity in Orange County, California, have been built as toll roads, and tolls have also been used in a privately financed highway project in Orange County and in a previously underused carpool lane in San Diego County. Many transportation and urban experts argue that more optimal use of highway tolls, with other infrastructure charges that better incorporate the costs of accommodating growth, has the potential to contribute to more centralized, or less sprawling, urban development. Although the extent to which better pricing of infrastructure can change urban growth patterns is still incompletely understood, localities seem willing, under certain circumstances, to experiment with pricing schemes that better apportion the costs of growth to the persons that benefit from such growth. Experiments, such as the use of toll lanes in southern California, can help point the way.*

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## Conclusion

Growth brings both costs and benefits. In many places and at many times the benefits of growth outweigh the costs. Local opposition to growth is often based on several factors that include a misunderstanding of the regional benefits of growth, a mismatch between predominantly local costs and regional benefits, concern about the pace of growth, or a focus on either the short-run effects of growth or the effect on current, rather than new, residents. Education about the process of growth can help alleviate some of these local concerns. Other local concerns, most notably mismatches between local costs and regional benefits as well as adjustment costs caused by rapid growth, should be addressed by policy. Policies to help all localities in a metropolitan area better share in the benefits of growth, and attention to managing the costs of growth, will help ensure that the economic and social benefits of growth continue in urban areas throughout the United States.

This paper has served its purpose if it has clarified the benefits that can be derived from growth. Our hope is that we have spurred the reader's further interest and thought on this topic and helped to inform the continuing debate on what constitutes truly smart growth and the best practical ways to implement it.

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