

Beautiful City*

BY GERALD CARLINO

Proponents of the City Beautiful movement advocated for sizable public investments in monumental spaces, street beautification, and classical architecture. Today, economists and policymakers see the provision of consumer leisure amenities as a way to attract people and jobs to cities. But past studies have provided only indirect evidence of the importance of leisure amenities for urban growth and development. In this article, Jerry Carlino uses a new data set on the number of leisure tourist visits to metropolitan areas to examine the correlation between leisure consumption opportunities and population and employment growth in metropolitan areas during the 1990s. His study suggests that leisure amenities are important for an area's growth, even after controlling for other characteristics, such as climate or proximity to a coast.

The City Beautiful movement of the late 19th and early 20th centuries advocated city beautification as a way to improve the living conditions and civic virtues of urban dwellers. Proponents of the



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movement advocated for sizable public investments in monumental public spaces, street beautification, and classical architecture, with an emphasis on aesthetic and recreational values. The Benjamin Franklin Parkway in Philadelphia with its many public buildings (for example, the Philadelphia Museum of Art, the main branch of the Free Library of Philadelphia, the Franklin Institute,

*The views expressed here are those of the author and do not necessarily represent the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

and the Rodin Museum) exemplifies this movement.

Today, economists and policymakers see the provision of consumer leisure amenities as a way to attract people and jobs to cities. But most amenities, such as pleasant weather or scenic views, are not standard goods that are traded in visible markets, making it difficult to quantify the contribution of a city's quality of life to its growth. Past studies have provided only indirect evidence of the importance of leisure amenities for urban growth and development.

My 2008 study with Albert Saiz makes the point that since leisure tourists are attracted by an area's special traits (such as proximity to the ocean, scenic views, historic districts, architectural beauty, and variety in cultural and recreational opportunities), the number of leisure tourist visits to a city can serve as a fairly comprehensive proxy for the quality of life the city offers. Put differently, some of the very characteristics that attract tourists to cities also attract households to cities when they choose these places as their permanent homes.¹

Using a new data set on the number of leisure tourist visits to metropolitan areas, Albert Saiz and I looked at the correlation between

¹“City” and “metropolitan area” are used here to designate a metropolitan statistical area (MSA). In general, MSAs are statistical constructs used to represent integrated labor market areas. They typically are geographic areas combining a large population nucleus with adjacent communities that have a high degree of economic integration with the nucleus.

leisure consumption opportunities and population and employment growth in metropolitan areas during the 1990s. We found that, all else equal, during the 1990s, population growth was about 2.2 percentage points higher and employment growth 2.6 percentage points higher in a city with twice as many leisure tourists as another city. The extra growth associated with leisure amenities is not trivial when one takes into account that during the 1990s, population grew 12 percent in the typical metropolitan area in our sample, while employment grew 20 percent. Over a long period of time, even relatively small differences in growth rates translate into relatively large differences in population and employment growth. Among the forces Saiz and I considered in our study, our leisure measure was the third most important predictor of population growth in the 1990s.

Cities around the world (such as Barcelona and Bilbao; Glasgow; and Oklahoma City, Camden, and San Antonio) have used public investments in leisure spaces and city beautification in an attempt to spur economic development. My study with Saiz suggests that leisure amenities are important for an area's growth, even after controlling for an area's proximity to a coast and for its climate. This is an important finding, since if people are largely attracted by an area's natural advantages, such as coastlines or nice weather, these types of amenities are not something local policymakers can reproduce. Instead, my study with Saiz provides policymakers with evidence that spending public funds to provide public goods that are oriented toward leisure activity (such as museums, waterfront parks, and open-air shopping centers) yields a return on the investment in terms of a city's economic growth. The association

between leisure amenities and growth may occur because such amenities disproportionately attract more productive workers.

WHY ARE PEOPLE AND JOBS CONCENTRATED IN CITIES?

Although metropolitan areas account for less than 20 percent of the overall territory of the U.S., they contain about 80 percent of the nation's population and almost 85 percent of its jobs. Why are people and jobs so spatially concentrated? Economists have developed the notion of agglomeration economies — that is, the benefits that firms and households receive from locating near one another

firms are too small to have a full-time chief financial officer but big enough to have some of the same problems that confront larger companies. However, by locating in a large city, a small firm will be able to find a local business that provides financial managers who spend part of each week doing what CFOs are supposed to do: prepare budgets, project sales, and negotiate with banks. A similar story applies to other types of specialized business services, such as access to legal services and advertising agencies.

Consumer Agglomeration Economies. Cities also offer numerous leisure consumption opportunities to households, and the larger the city,

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— to explain this concentration. The two main types of agglomeration economies are described below.

Business Agglomeration Economies. Cities offer numerous advantages to business firms, and often, the larger the city, the greater the advantages. Agglomeration economies constitute an important source of a firm's productivity. Increases in productivity due to agglomeration economies depend not on the size of the firm itself (internal economies of scale) but rather on the size of a firm's industry in a particular city or on the size of the city itself. For example, firms in large cities are better able to find workers who possess the specific skills the firms require than if they were in much smaller places. Also, firms can reduce their costs by locating in large cities and sharing specialized inputs. For example, many

the greater the opportunities. Large concentrations of population can provide consumers with a greater variety of goods and services. Our largest cities can support professional sports teams, theater, opera, and a symphony orchestra. If consumers prefer a large variety of goods and services and there are substantial economies of scale in providing them, economic welfare will depend on the size of the local market. For example, studies by Joel Waldfogel and by Waldfogel and Lisa George have shown that larger cities have more and better newspapers and more and better radio and television stations.

From a social point of view, larger cities make it easier for people to make wider social contacts and to have a more diverse set of friends. Along these lines, larger cities appeal to younger, more highly educated workers

because large cities better facilitate development of professional and social connections. Dora Costa and Matthew Kahn note that power couples (both partners have bachelor's degrees) are increasingly locating in larger cities because they offer better labor-market outcomes for working couples.

It's important to recognize that an area's quality of life depends on more than the variety of goods and services that increase with city population size. People are also attracted by an area's "natural" amenities, such as its historic character, architectural variety, natural scenic beauty, nearness to the ocean, or climate. Richard Florida has also pointed out that people are paying increasing attention to the provision of public goods that are oriented toward leisure activities, such as museums, waterfront parks, open-air shopping centers, and other public spaces enjoyed by families and individuals.

But increased urbanization brings not only greater productive efficiency and greater variety of cultural and leisure activities but also costs, such as congestion, that take the form of long-distance commuting and higher housing prices. These costs eventually balance the gains from the various amenities. The higher cost of housing as cities get congested reduces households' purchasing power and limits the inflow of people.²

WHAT'S THE EVIDENCE?

Until recently, the vast majority of studies have looked at the relationship between business agglomeration economies and city growth. As I've pointed out in previous articles, technical improvements, especially in transportation, mean that, today, businesses are freer to locate wherever

² See my 2005 *Business Review* article for further discussion of consumer agglomeration economies.

they want, and, unlike before, their choice of location will depend on where their workers choose to live.³ This means that an area's special features, such as its quality of life, will be an important determinant of where households and, ultimately, firms locate.

Comparisons of the quality of life across cities have generated a fair amount of interest from workers, the media, and local policymakers.

Beginning in the late 1970s, economists introduced a methodology for determining the value of an area's special characteristics by observing what people are willing to pay to live there in terms of higher rents and lower wages.

Since 1981, David Savageau has compiled the *Places Rated Almanac*. A "places rated" index is used to produce a ranking of cities. The index is based on nine categories of amenities: cost of living (mostly housing costs); the economy (e.g., the risk of unemployment); climate; education; health care (physicians and hospitals); transportation (e.g., airline connections); safety; recreation; and location (e.g., scenic beauty). In constructing the index, David Savageau uses his own judgment in three ways. First, he uses his own preferences to determine which items to include in each of these categories. Second, Savageau assigns points to each of the nine categories. Finally, he applies equal weights to the rankings in each of the nine categories to compute an index number reflecting

³ See my 2005 *Business Review* article.

the amenities offered in each city (the places rated index). As Glenn Blomquist has pointed out, "This equal weighting means that a one-position difference in climate is equally important as a one-position difference in the crime ranking." Obviously, the rankings of cities will be quite sensitive to weights assigned to the various characteristics. For example, I might put more weight on the cost of living in a city and much less weight on a

city's economy. This would almost certainly result in a different ranking of cities than one produced by equally weighting the various categories of quality of life.

Beginning in the late 1970s, economists introduced a methodology for determining the value of an area's special characteristics by observing what people are willing to pay to live there in terms of higher rents and lower wages.⁴ Individuals who choose to live in areas with a high quality of life are willing to move to these locations despite facing some combination of higher housing prices (or rents) and lower wages. This combination of higher housing costs

⁴ See, for example, the articles by Jennifer Roback; Glenn Blomquist, Mark Berger, and John Hoehn; Joseph Gyourko and Joseph Tracy; and David Albouy. See Glenn Blomquist's 2007 article for an accessible review of the quality-of-life literature.

and lower wages is the premium, or implicit price, that people must pay to live in places with a high quality of life.

A comparison across metropolitan areas is achieved using a quality-of-life index, or QOLI. The index is constructed by first weighting each amenity an area offers by its implicit price. Next, the final index is produced by summing all amenities. Finally, the QOLI is used to rank cities by quality of life. Notice that the weights for each amenity in the index are based on preferences as expressed by thousands of consumers in local housing markets and thousands of workers in local labor markets and not on the preferences of the person constructing the index, as is the case for the *Places Rated Almanac*. Many QOLIs have been constructed for metropolitan areas in the United States, and they show that quality of life matters. There appear to be sizable differences in the quality of life across locations, and residents “pay” for these differences through some combination of higher rents and lower wages.

There are important shortcomings with the calculations of what households are willing to pay for quality of life and the associated rankings. According to the quality-of-life view, relatively higher wages are one way to compensate workers for a lack of local amenities (such as unpleasant weather, relatively high crime rates, and pollution). One advantage of the quality-of-life approach is that it uses data on individual workers and individual households (called micro data). It is easy to account for observable worker characteristics, such as education, job experience, occupation, and industry. However, an important shortcoming of this approach is that it is largely impossible to account for the many intangible characteristics of workers (motivation, dedication, creativity, and so on) that can make some workers more productive even when they are com-

pared with other, very similar workers. If these high-productivity workers are disproportionately attracted to high-amenity cities, the higher wages reflect the relatively higher productivity of these workers and not compensation for a lack of amenities. Thus, the omission of the many intangible worker characteristics may introduce a serious bias when calculating quality-of-life

concern in that it ranks San Jose 88th and San Francisco 105th out of the 185 cities they considered.

An additional limitation of the quality-of-life approach is that it is virtually impossible to include in any study the vast variety of private (such as restaurants) and public leisure-oriented goods (pleasant weather) that draw people to cities.

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rankings. For example, suppose that the hardest working and most creative software engineers are attracted to Silicon Valley in California because they are more productive there, and this greater productivity translates into higher wages. In the quality-of-life calculations, these relatively higher wages for otherwise similar software engineers give San Jose and San Francisco lower QOLIs than they probably deserve.⁵ The ranking of cities reported in the article by Glenn Blomquist and co-authors supports this

Typically, researchers have chosen the types of amenities (usually limited to environmental amenities such as weather) to include in their studies. In addition to being subjective, the set of amenities chosen will not be comprehensive.

Measuring Quality of Life Based on Leisure Tourism. Given the shortcomings of the quality-of-life approach, in our study, Albert Saiz and I suggest a more encompassing measure of the demand for urban amenities that stems from a revealed preference for these amenities as represented by the number of leisure tourists who visit a metropolitan area. Leisure tourists are attracted by an area’s special traits, such as its restaurants and its theater but also by its unique ambiance, architectural variety, pleasant public spaces, or natural scenic beauty. We point out that the special traits that attract tourists to an area are some of the very characteristics that attract households to cities when they choose these places as their permanent homes. Since households are attracted to cities

⁵ In the article by Jordan Rappaport and the one by David Albouy both authors point out that ranking cities based on the QOLI often produces rankings that are counter-intuitive. For example, in the ranking of 185 U.S. cities in the study by Glenn Blomquist and co-authors, Pueblo, Colorado, ranks first, while San Francisco ranks 105th and New York City ranks 216th. Recall that these indexes are calculated using only local wages and local rents. David Albouy goes a step further and also accounts for federal taxes paid by local residents, nonhousing costs, and nonlabor income to produce a QOLI and finds that his city rankings are much closer to people’s intuitive rankings.

by many of the same traits that attract tourists, the number of leisure tourists can serve as a comprehensive measure, or proxy, for consumer amenities offered in cities. In our research, we find a positive correlation between the number of leisure tourist visits to cities and subsequent economic growth.

But why should leisure-related amenity levels be associated with economic growth? Jesse Shapiro has shown that “beautiful cities” are especially attractive to high-skill workers, who can stimulate employment and population growth. The idea is that high-skilled (highly educated) individuals are not only highly productive workers, but they also enhance the productivity of other workers they come into contact with. Along these lines, Sanghoon Lee notes that the demand for variety may increase more than proportionately with income and as high-skill individuals account for a larger share of the workforce in large cities.⁶

In our study, Saiz and I use a new data set on leisure tourist trips provided by D.K. Shifflet and Associates, a firm specializing in consulting and market research for the travel industry. The Shifflet data provide the destinations for individuals who traveled for leisure purposes.⁷ The

⁶ Of course, highly educated workers might move to relatively faster growing cities rather than directly affecting city growth. Studies have offered evidence that this is not the case (see, for example, the study by Jesse Shapiro).

⁷ Shifflet defines travel as any overnight trip or any day trip greater than 50 miles one way. Households were asked to report on travel destinations during the last three months. Questionnaires were mailed to 180,000 households in 1992 (the year we use in our study). Returned samples were demographically re-balanced on five key measures (state of origin, age, gender, household size, and household income) to ensure that they are representative of the U.S. population. Shifflet provided leisure travel data for the top 200 tourist destinations for 1992.

table shows the 1992 destinations of leisure tourists for selected cities. The average cities drew almost 4.5 million leisure tourists in 1992. Orlando and Las Vegas are at the top of the list, drawing 22.3 million and 18 million tourists, respectively. In our study, we excluded these two cities, since tourism in these locations is related to recreational resorts (Orlando) or the gaming industry (Las Vegas), and these activities are, at best, only weakly

Philadelphia ranked 20th overall, having almost twice as many tourists in 1992 as did a typical city.

related to urban amenities that draw residents.⁸ Many of the cities typically thought to be high-amenity locations (such as New York, San Diego, San Francisco, and Los Angeles) rank in the top 10 in terms of leisure tourist visits in 1992. Philadelphia ranked 20th overall, having almost twice as many tourists in 1992 as did a typical city. At the other extreme, Oakland, California, and Newark, New Jersey, had the fewest leisure tourists (under 100,000 in 1992).

Since Saiz and I use leisure tourist visits as a proxy for the quality of life offered in cities, it's important to demonstrate that leisure tourist visits are, in fact, positively correlated with

⁸ Albert Saiz and I show that our findings are not sensitive to the inclusion or exclusion of the Orlando and Las Vegas metropolitan areas from our sample.

many variables thought to influence the quality of life. We show that this turns out to be the case. For example, we find that leisure tourists tend to be attracted to sunnier metro areas with more colleges; lower poverty rates; lower manufacturing employment; greater average distances to hazardous sites; accessibility to the ocean, parks, and golf courses; and more historic buildings.

Next, we look at the association between leisure consumption opportunities, proxied by the number of leisure tourists, and population and employment growth in metropolitan areas during the 1990s. There is indeed a positive correlation between population growth in the 1990s and the number of leisure tourist visits to metropolitan areas in 1992 (see the figure). Of course, many other things could potentially account for this positive correlation. For example, New York City would be expected to have more tourists than, say, Philadelphia, since New York City has a much larger population base to begin with; thus, we control for city size. Since many people are attracted to coastal cities and to cities with pleasant weather, we also control for whether a city is within about 30 miles of an ocean or a Great Lake, and we also account for a city's average January temperature and for its relative humidity in July. After controlling for a city's coastal/ Great Lakes proximity, its climate, and a variety of other factors that might account for the positive correlation between leisure visitors and growth (such as the previous share of the adult population with a college degree, previous average income, and so forth), Saiz and I find that population growth during the 1990s was 2.2 percentage points and employment growth was 2.6 percentage points higher in a metropolitan area with twice as many leisure visits as another metropolitan

TABLE

Tourist Destinations in 1992 for Selected Cities

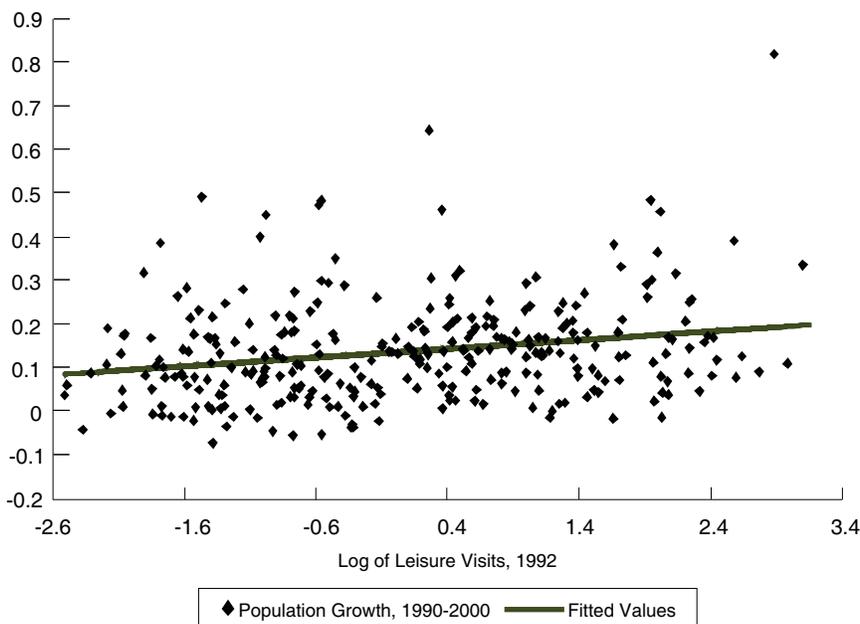
Top 20 Destinations		Bottom 20 Destinations	
Metropolitan Area	Number of Visits in 1992 (millions)	Metropolitan Area	Number of Visits in 1992 (millions)
Orlando, FL	22.3	Miami, FL	3.15
Las Vegas, NV-AZ	17.95	San Jose, CA	3.05
New York, NY	15.99	Charleston-North Charleston, SC	2.97
San Diego, CA	14.05	Toledo, OH	2.86
Los Angeles-Long Beach, CA	13.41	Fort Lauderdale, FL	2.72
Atlanta, GA	13.22	Wilmington-Newark, DE-MD	2.43
Chicago, IL	11.6	Grand Rapids-Muskegon-Holland, MI	2.39
Washington, DC-MD-VA-WV	11.32	Bakersfield, CA	2.13
San Francisco, CA	11.17	Allentown-Bethlehem-Easton, PA	2.08
Knoxville, TN	10.83	Baton Rouge, LA	2.06
Tampa-St. Petersburg-Clearwater, FL	10.56	Fort Worth-Arlington, TX	2.06
St. Louis, MO-IL	10.17	Fresno, CA	2.02
Houston, TX	9.58	Greenville-Spartanburg-Anderson, SC	1.55
Columbus, OH	9.42	Hartford, CT	1.52
Nashville, TN	9.42	Akron, OH	1.44
Norfolk-Virginia Beach-Newport News, VA-NC	9.36	West Palm Beach-Boca Raton, FL	1.32
San Antonio, TX	9.15	Tacoma, WA	1.14
Dallas, TX	8.49	El Paso, TX	1.11
Indianapolis, IN	8.27	Oakland, CA	0.96
Philadelphia, PA-NJ	8.02	Newark, NJ	0.66
AVERAGE	4.42		

Source: D.K. Shifflet and Associates

FIGURE

Population Growth Increases with Tourism

Population Growth, 1990-2000



area.⁹ Among the things we considered in our study, our leisure tourist measure was the third most important predictor of population growth in the 1990s. (The most important factor for growth is prior immigration, and the second most important factor is previous changes in local tax revenue.)

As we have seen, economists believe that more educated workers tend to be disproportionately drawn to cities offering a relatively high quality of life. Saiz and I investigate this point and find that growth in the share of highly educated workers is positively related to greater leisure tourism in cities. We also find evidence of acceleration in house-price appreciation and rent growth in metropolitan areas with more leisure tourists. Specifically, we find that a city with twice as many leisure tourists as another city has a 0.3-percentage-point increase in the growth rate of the share of the population with at

least a college education. Similarly, a city with twice the level of leisure tourists as another city has about a 2-percentage-point higher house-price appreciation and a 1.3-percentage-point higher rent growth. During the 1990s, the share of the population with a college degree grew 4 percent in the typical metropolitan area in our sample, while house values grew 42 percent and rents, 31 percent. Based on these estimates, in a city with twice the previous level of leisure tourists as another city, the share of the adult population with a college education would have increased 4.3 percent instead of 4 percent during the 1990s, while housing prices would have appreciated 44 percent rather than 42 percent and rents would have grown almost 32.3 percent as opposed to 31 percent.

CONCLUSION

For some time urban economists

have believed that consumption amenities, especially those geared to the enjoyment of leisure, were becoming more important in explaining urbanization and the location of individuals. Until now, urban economists were not able to provide an estimate of the importance of consumption amenities for city growth. The main benefit of my study with Albert Saiz is to provide such an estimate. Using the number of tourist visits to cities as a proxy for the amenities offered in these cities, Saiz and I found the predicted decadal population growth rate would be 2.2 percentage points higher and its

⁹ No doubt tourism leads to growth, but to some extent, growth (perhaps due to agglomeration economies in production) helps finance cultural and recreational amenities and the growth of these amenities draws leisure tourists.

The difficulty lies in trying to differentiate the extent to which tourism causes growth or growth causes tourism. Saiz and I use an approach (instrumental variables) that attempts to break the reverse causality of growth on tourism. We argue that historic places (such as Independence Hall in Philadelphia) cause tourism today, but tourism today is unlikely to have caused historic places. Similarly, the coastal share within a 10-km. radius (about six miles) of an MSA's boundary will cause tourism, but not vice versa. That is, historic places and access to the coast are highly correlated with tourism (and therefore serve as good instruments for tourism), but these instruments are not caused by urban growth during the period 1990-2000 we considered. We find that reverse causation does not appear to be a problem in interpreting our findings.

Another concern is that a metropolitan area that is geographically close to other population centers may disproportionately draw leisure visitors relative to the amenities they offer. For example, Philadelphia may draw relatively more leisure tourists because the city is somewhat close to New York City and to Washington, D.C. People who visit New York City or Washington, D.C. might also visit Philadelphia, even though they might not have if Philadelphia were not close to these other cities. In our research, Saiz and I controlled for the population *potential* of each city in our data set, where the population potential of a city measures how near people in all cities are to any given city. We found essentially identical results after controlling for the population potential of cities compared with the results when we did not control for population potential.

predicted decadal employment would be 2.6 percentage points higher in a city with twice the level of leisure tourists as another city.

My study with Saiz provides important implications for policymakers who want to stimulate local economic growth. First, we find that consumer leisure amenities do appear to positively enhance city population and employment growth, even after controlling for a city's natural advantages, such as its distance to a coast and its climate. This is an important finding because if people were largely attracted by an area's natural advantages, these types of amenities are not something local policymakers can reproduce. However, we find an association between growth and amenities that policymakers can affect.

Second, as policymakers think about ways to stimulate local economic growth, spending public funds on

leisure and cultural activities may prove to be an avenue worth exploring. This may explain why policymakers and private investors are paying increasing attention to providing public goods oriented toward leisure, such as museums, waterfront parks, open-air shopping centers, and other public spaces enjoyed by families and individuals. Cities around the world (such as Barcelona and Bilbao; Glasgow; and Oklahoma City, Camden, and San Antonio) have used public investments in leisure spaces and city beautification as a way to spur economic growth.

An important issue is whether some types of amenities are better at stimulating growth than are other types of amenities. While using the number of tourist visits is a useful way to summarize in a single number the vast array of consumption amenities offered by cities, it does not help in addressing the question of which types

of leisure amenities stimulate growth the most or if they even stimulate growth at all. That is, my research with Saiz does not allow us to tell the extent to which having, say, clean and safe streets affects city growth as opposed to the effect on growth of a city offering, say, waterfront parks, open-air shopping centers, and other public spaces. The answer to the question about which types of amenities affect growth the most awaits future research. An additional caveat is that the finding that leisure amenities are associated with higher local growth is not the same thing as recommending that cities immediately decide to fund activities that attract tourists/residents if only because the opportunity cost of appropriating such funds is the elimination of other, possibly more worthy, programs, such as building new schools. 

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