CEOs FOR CITIES

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CITY VITALS 2.0

Benchmarking City Performance


CONNECTED CITY


INNOVATIVE CITY


TALENTED CITY


YOUR DISTINCTIVE CITY

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INTRODUCTION

CEOs for Cities is a learning community and partnership network that connects cross-sector, cross-generational civic CEOs and urban leaders to each other and to smart research, ideas, practices, case studies, lessons learned, and compelling stories for making cities more economically successful.

We help cities and regions FACE (Frame, Act, Connect, & Engage) their opportunities and challenges:

- **We Frame** and measure work in a way that is easy-to-understand, remember, and use **(City Vitals- Connections, Innovation, Talent, Your Distinctiveness)**
- **We Act** by motivating, mobilizing, focusing, and accelerating action on memorable short-term goals that demonstrate measurable progress **(City Dividends and Dividend Prizes)**
- **We Connect** with the latest, up-to-date, cutting edge information from throughout the world about how to make cities more successful, and with the people creating and implementing those ideas **(Our Learning Community/Partnership Network)**
- **We Engage** by harnessing and connecting cross-sector, cross-generational talent within and between cities for the purpose of improving their city **(Our City Clusters)**

City Vitals is our signature research framework. We benchmark city/regional performance in the four areas most vital to CITY success: **C**onnections, **I**nnovation, **T**alent, and **Y**our distinctivenes s. We believe that given the complex, interconnected problems that cities and regions face, it is critical to first research, frame, and organize work that puts a focusing lens on the city and region, and helps to see and understand the critical levers for city and regional success. We believe that framing is critically important, because, as Wayne Dyer has noted, "if you change the way you look at things, the things you look at change."

We also believe that once the issues are framed and the levers of success are identified, it's equally important to motivate, mobilize, focus, and accelerate action that can show demonstrable and measurable progress on the critical success levers. **City Dividends is our signature action agenda.** We focus our action agenda on City Dividends and Dividend Prize competitions, premised on our research and experience that measurable progress, or "moving the needle," on targeted work reaps huge economic growth dividends for cities, and accelerates movement on important goals. City Dividends is based on what Harvard Professor Teresa Amabile calls the "progress principle"- the single most important motivator and catalyst of positive action is making progress and showing forward momentum in meaningful work.

Finally, we believe that it is important not only to frame and act but also to connect and engage. Cities must always be thinking ahead and learning from the best ideas and practices from all sectors, leaders at all levels, and cities, regions, states, and countries throughout the nation and the world. The world is coming at us at lightning speed, so this will require constant learning, change, and adaptation. As a 2012 McKinsey Global Institute report noted, "Be connected. Rather than seeing each other city as competition, building strong connections to other cities can become a collective strength…There are potentially large benefits from being able to tap into the experience of other cities." The cities that will win in the new networked economy are those that make their boundaries porous to new ideas and talent and demonstrate the humility to understand that there is always something more to learn from someone else, somewhere else.

The future belongs to those cities and regions who can frame their opportunities and challenges, act in ways that demonstrate measurable progress, and connect and engage with the smartest people and the smartest ideas in the most places and in the most ways. City Vitals is an important component of our mission to, in the words of Steve Jobs, "tear down walls, build bridges, and light fires."

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THE CITY VITALS INDICATORS

The **Connected** City

The indispensable asset in a knowledge economy is smart people. Cities are places where people build knowledge through education and experience. Cities attract smart people and create opportunities for them to develop and apply what they know. Talent, which we measure by educational attainment, the number of creative professionals, the migration of well-educated young adults and the number of foreignborn college graduates, reveals the underlying intellectual capital a region can draw on to build its economy and to weather the inevitable shocks of competition and change.

The **Innovative** City

The ability to generate new ideas and to turn those ideas into reality is a critical source of competitive advantage not just for businesses but for regions, as well. Economies and regions advance by a process of trial and error. Those places that generate many trials of novel products and services are most likely to move ahead. Invisible and weightless, ideas can't be measured directly, but the footprints they leave in the economic landscape can be traced by counting numbers of patents, the dollar value of venture capital investments, the extent of personal entrepreneurship and the number of small businesses.

The **Talented** City

Cities thrive as places where people can easily interact and connect. These connections are of two sorts: the easy interaction of local residents and easy connections to the rest of the world. Both internal and external connections are important. Internal connections help promote the creation of new ideas and make cities work better for their residents. External connections enable people and businesses to tap into the global economy. We measure the local connectedness of cities by looking at a diverse array of factors including voting, community involvement, economic integration and transit use. Our measures of external connections include foreign travel, the presence of foreign students and broadband Internet use.

Your Distinctive City

The unique characteristics of place may be the only truly defensible source of competitive advantage for regions. In a world of global competition, a strategy of "pretty much the same, maybe cheaper" is a recipe for mediocrity and economic stagination. Our measures of distinctiveness are inherently incomplete. Every city has its own unique characteristics for which there are few, if any, statistics. We offer some initial measures of distinctiveness drawn from market data about consumer behavior and its variance across U.S. metropolitan areas.

Core Vitality

A strong urban core also plays a critical economic role. The urban center of metropolitan areas is the focus of cultural activities, civic identity, governmental institutions and usually has the densest employment, particularly in fi nancial, professional and creative services. Urban cores are also the iconic centers of cities, where interaction and connections are strongest.

To measure the vibrancy of urban centers, we computed the income, educational attainment and poverty levels of the urban neighborhoods within 5 miles of the center of each region's central business district. (We use this common yardstick to overcome the problem that arises from using widely varying city boundaries to make inter-metropolitan comparisons.)

Metropolitan Performance

Ultimately, the four dimensions of success that we have outlined in City Vitals—talent, innovation, connections and distinctiveness—are reflected in the measurable performance of metropolitan economies. In our work with urban leaders, CEOs for Cities has identified several key indicators that are frequently used to assess metropolitan performance—per capita income, poverty, vehicle miles traveled and greenhouse gases.

What does it take for a metropolitan area to be economically successful today?

In an increasingly global and knowledge-driven economy, the ingredients of success are changing. At CEOs for Cities, we have observed four essential characteristics that underpin economic prosperity. In a sense, the four letters that make up the word "city" spell out the genetic code of urban success: **CONNECTIONS**, **INNOVATION**, **TALENT** and **YOUR DISTINCTIVENESS**. This report explores each of those characteristics and explains why they are of crucial importance to urban leaders.

Overwhelmingly, U.S. economic activity is concentrated in large metropolitan regions. The nation's large metropolitan areas are increasingly being recognized as the engines of the national economy. Globalization and technological change are reshaping the opportunities for economic prosperity. Cities and our nation have a strong stake in discovering what it takes to build competitive regional economies.

City Vitals is a benchmarking tool urban leaders can use to take stock of their metropolitan area performance relative to other large U.S. metropolitan areas in the four areas that matter most to urban success in the 21st Century: connections, innovation, talent and your distinctiveness. This report offers some comparative data showing how cities stack up on a series of indicators related to each of these four dimensions.

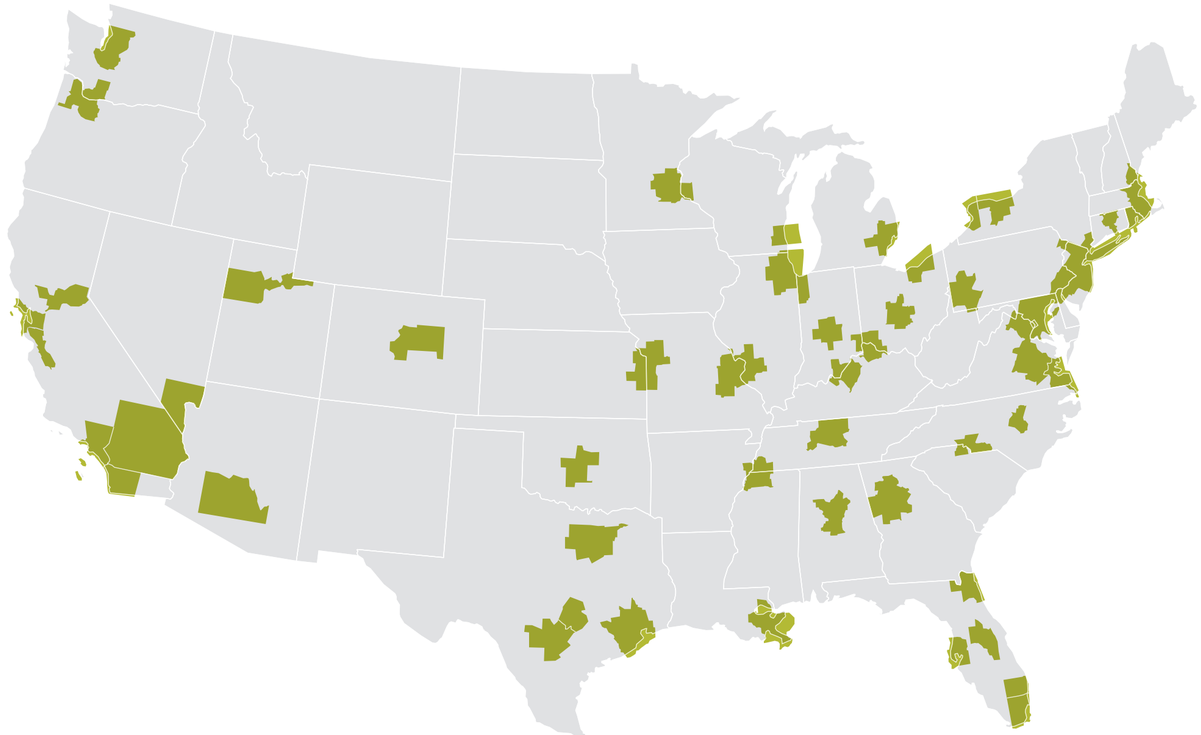
We have compiled data in each of these four areas—connections, innovation, talent and your distinctiveness—to illuminate and better define the discussion of what it takes to build a successful metropolitan economy. There are, as often is the case, limitations to the data. Our indicators of talent, for instance, are good, general measures of skill but should not be taken to imply that only those with a college degree are talented. Nor do such broad measures capture the highly specialized talents that exist for corporate finance in New York, for movie production in Los Angeles, for petroleum geology in Houston or for logistics in Memphis. But these data provide a means for individual metropolitan areas to assess candidly their relative strengths and weaknesses against their peers nationally. While the data are the best and most recent available, they are still only indicators of the broad subjects we discuss.

Each indicator is computed at the metropolitan level using the metropolitan area definitions adopted by the Office of Management and Budget. Metropolitan Statistical Areas generally encompass entire metropolitan economies and are the best reflection of regional economic performance. Political jurisdictions, like incorporated cities and counties, usually capture only a portion of a regional economy. The great variation in the scope of political boundaries makes it almost impossible to make reasonable comparisons of economic indicators across groups of cities.

Our analysis suggests there is no one recipe for success, no single path for cities to follow. As a result, we do not offer or suggest that there is an overall ranking from best to worst that emerges from this data. Each metropolitan area is different, and can reasonably expect to have different opportunities and challenges than other metropolitan areas.

METROPOLITAN AREAS

Atlanta-Sandy Springs-Marietta, GA	Minneapolis-St. Paul-Bloomington, MN-WI
Austin-Round Rock, TX	Nashville-Davidson-Murfreesboro-Franklin, TN
Baltimore-Towson, MD	New Orleans-Metairie-Kenner, LA
Birmingham-Hoover, AL	New York-N. New Jersey-Long Island, NY-NJ-PA
Boston-Cambridge-Quincy, MA-NH	Oklahoma City, OK
Buffalo-Niagara Falls, NY	Orlando-Kissimmee, FL
Charlotte-Gastonia-Concord, NC-SC	Phoenix-Mesa-Scottsdale, AZ
Chicago-Naperville-Joliet, IL-IN-WI	Pittsburgh, PA
Cincinnati-Middletown, OH-KY-IN	Portland-Vancouver-Beaverton, OR-WA
Cleveland-Elyria-Mentor, OH	Providence-New Bedford-Fall River, RI-MA
Columbus, OH	Raleigh-Cary, NC
Dallas-Fort Worth-Arlington, TX	Richmond, VA
Denver-Aurora-Broomfield, CO	Riverside-San Bernardino-Ontario, CA
Detroit-Warren-Livonia, MI	Rochester, NY
Hartford-West Hartford-East Hartford, CT	Sacramento-Arden-Arcade-Roseville, CA
Houston-Sugar Land-Baytown, TX	St. Louis, MO-IL
Indianapolis-Carmel, IN	Salt Lake City, UT
Jacksonville, FL	San Antonio, TX
Kansas City, MO-KS	San Diego-Carlsbad-San Marcos, CA
Las Vegas-Paradise, NV	San Francisco-Oakland-Fremont, CA
Los Angeles-Long Beach-Santa Ana, CA	San Jose-Sunnyvale-Santa Clara, CA
Louisville-Jefferson County, KY-IN	Seattle-Tacoma-Bellevue, WA
Memphis, TN-MS-AR	Tampa-St. Petersburg-Clearwater, FL
Miami-Fort Lauderdale-Pompano Beach, FL	Virginia Beach-Norfolk-Newport News, VA-NC
Milwaukee-Waukesha-West Allis, WI	Washington-Arlington-Alexandria, DC-VA-MD-WV



The **Connected** City

City economies work best when they do a good job of connecting people to one another, as Jane Jacobs famously argued decades ago (Jacobs, 1969). Nobel Laureate economist Robert Lucas echoed this observation: "What can people be paying Manhattan or downtown Chicago rents for, if not being near other people?" (Lucas, 1988). The fundamental purpose of cities is to connect people.

In cities, these connections are both internal and external: cities have to connect their residents to one another and also connect the city as a whole to the rest of the world. In a global economy, the essence of success is the ability to tap into the global marketplace. Ideas and knowledge are more valuable because there are so many more communities, consumers and businesses that can use them. Bill Gates would not be numbered among the richest people in the world if he could sell software only to people in Seattle or Washington State.

There are many dimensions in which a city has to connect. The simplest and most obvious are the physical connections—ports and airports—that facilitate the flow of goods among nations. But the importance of goods movement is increasingly being surpassed by connections between people, who are the lifeblood of nearly all urban economies. We define these connections broadly, from the far-reaching global, to the intensely local. Great cities are connected at all these levels. Consequently, we measure key international connections, especially among people, by examining the number of persons traveling outside the U.S. in each metropolitan area, as well as the number of foreign students each metropolitan area hosts. We also look at technology. To what extent are metro area residents equipped with wireless Internet access? At the other end of the spectrum, we consider more local connections like voting and volunteering, both indicators of how connected people are in their role as citizens. We also examine economic integration—the extent to which people in different income strata live near one another in the metropolitan area.

As economist Harald Bathelt and his colleagues have observed in a slightly different context, local success in the global economy is a function of "local buzz and global pipelines." That is to say, urban areas have to have their own strong localized interactions and knowledge to function well locally, but they must also have easy and extensive connections to other places with "buzz" around the world (Bathelt, Malmberg, & Maskell, 2002). Our measures consider both types of connections.

VOTING

Number of votes cast in the November 2008 presidential election divided by the voting age population of the metropolitan area, 2008.

One of the most basic measures of connections is whether people participate in the democratic process. The extent to which citizens register and vote is a good indication of their level of awareness of political issues and commitment to their fellow citizens. As Robert Putnam has argued, voting is a key indicator of social capital (Putnam, 2000).

We measure voting in cities as the number of ballots cast in the November 2008 presidential election divided by the voting age population of the metropolitan area (Leip, 2009). This measure is more broadly defined than conventional measures that look only at the number of persons who vote divided by the total number of registered voters. Not registering is an even stronger indicator of disconnectedness from civic life than not voting. In addition, because Census data counts all persons residing in the U.S. regardless of citizenship status, the denominator of our measure includes many adults who are not legally eligible to vote. As a result, rather than simply reflecting voter turnout, this measure reflects the extent to which the adult population of a community is actually participating in the most basic way in its governance.

There are pronounced differences in voting among U.S. metropolitan areas. The leader is Minneapolis, where more than three-quarters of all adults of voting age cast ballots in 2008. Milwaukee was a close second with about 72 percent of adults voting. In the typical metropolitan area, the number of votes cast was equal to about 62 percent of the voting age population. The lowest levels of voting were in the Southwest: Dallas, Phoenix, Las Vegas, San Antonio, Los Angeles, Houston and Riverside all had voting levels below 50 percent, reflecting in part the high numbers of non-citizens residing in these states. Riverside ranks the lowest with 43 percent turnout.

1	Minneapolis-St. Paul-Bloomington, MN-WI	76.4%
2	Milwaukee-Waukesha-West Allis, WI	72.3%
3	Raleigh-Cary, NC	69.7%
4	St. Louis, MO-IL	68.7%
5	Jacksonville, FL	68.4%
6	Columbus, OH	68.2%
7	Kansas City, MO-KS	68.1%
8	Richmond, VA	67.8%
9	Cleveland-Elyria-Mentor, OH	67.5%
10	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	66.8%
11	Detroit-Warren-Livonia, MI	65.7%
12	Denver-Aurora-Broomfield, CO	65.6%
13	Cincinnati-Middletown, OH-KY-IN	64.9%
14	New Orleans-Metairie-Kenner, LA	64.4%
15	Louisville-Jefferson County, KY-IN	63.9%
16	Portland-Vancouver-Beaverton, OR-WA	63.9%
17	Pittsburgh, PA	63.6%
18	Washington-Arlington-Alexandria, DC-VA-MD-WV	63.4%
19	Charlotte-Gastonia-Concord, NC-SC	62.7%
20	Virginia Beach-Norfolk-Newport News, VA-NC	62.7%
21	Hartford-West Hartford-East Hartford, CT	62.6%
22	Birmingham-Hoover, AL	62.5%
23	Baltimore-Towson, MD	62.3%
24	Seattle-Tacoma-Bellevue, WA	62.2%
25	Rochester, NY	62.2%
26	Boston-Cambridge-Quincy, MA-NH	61.7%
27	Indianapolis-Carmel, IN	61.3%
28	Buffalo-Niagara Falls, NY	60.9%
29	Memphis, TN-MS-AR	60.8%
30	Tampa-St. Petersburg-Clearwater, FL	60.3%
31	Orlando-Kissimmee, FL	59.5%
32	Nashville-Davidson-Murfreesboro-Franklin, TN	59.0%
33	Atlanta-Sandy Springs-Marietta, GA	58.2%
34	San Francisco-Oakland-Fremont, CA	57.8%
35	Providence-New Bedford-Fall River, RI-MA	57.2%
36	Sacramento-Arden-Arcade-Roseville, CA	56.6%
37	Chicago-Naperville-Joliet, IL-IN-WI	56.2%
38	Oklahoma City, OK	56.0%
39	Austin-Round Rock, TX	55.5%
40	San Diego-Carlsbad-San Marcos, CA	55.1%
41	Miami-Fort Lauderdale-Pompano Beach, FL	52.4%
42	Salt Lake City, UT	52.0%
43	New York-N. New Jersey-Long Island, NY-NJ-PA	50.7%
44	San Jose-Sunnyvale-Santa Clara, CA	50.1%
45	Dallas-Fort Worth-Arlington, TX	49.2%
46	Phoenix-Mesa-Scottsdale, AZ	48.6%
47	Las Vegas-Paradise, NV	48.2%
48	San Antonio, TX	47.9%
49	Los Angeles-Long Beach-Santa Ana, CA	46.9%
50	Houston-Sugar Land-Baytown, TX	44.9%
51	Riverside-San Bernardino-Ontario, CA	43.2%

COMMUNITY INVOLVEMENT

Percentage of the metropolitan area population that reported volunteering for a community activity in the past year (2011).

Volunteerism and personal engagement in non-profit and community-oriented endeavors has traditionally been a point of pride for Americans. The degree to which people freely give their time and energy to advance community interests is a good indicator of community involvement. Community involvement has economic and social benefits. Communities that promote easy interaction among community members facilitate economic interaction.

Since there is no comprehensive government data on the extent of volunteerism, we rely on private surveys that have asked a representative sample of persons about their private activities. Our source of data is a Scarborough Research survey, which asks whether respondents have participated in volunteer work in the previous year (Scarborough Research, 2011).

About half of surveyed adults report having volunteered for some type of civic or community project in the typical large metropolitan area. Volunteering is highest in Salt Lake City (43 percent) followed closely by Minneapolis (38 percent) and San Jose (36 percent). Self-reported volunteering rates were lowest in Miami (19 percent) and Providence (22 percent).

1	Salt Lake City, UT	42.8%
2	Minneapolis-St. Paul-Bloomington, MN-WI	37.5%
3	San Jose-Sunnyvale-Santa Clara, CA	35.8%
4	Portland-Vancouver-Beaverton, OR-WA	35.2%
5	Indianapolis-Carmel, IN	34.0%
6	Milwaukee-Waukesha-West Allis, WI	33.3%
7	San Francisco-Oakland-Fremont, CA	32.5%
8	Atlanta-Sandy Springs-Marietta, GA	31.9%
9	Seattle-Tacoma-Bellevue, WA	31.7%
10	Baltimore-Towson, MD	31.4%
11	Raleigh-Cary, NC	30.8%
12	Washington-Arlington-Alexandria, DC-VA-MD-WV	30.4%
13	San Antonio, TX	30.1%
14	Austin-Round Rock, TX	29.9%
15	Rochester, NY	29.6%
16	Denver-Aurora-Broomfield, CO	29.4%
17	Kansas City, MO-KS	29.2%
18	Detroit-Warren-Livonia, MI	28.8%
19	Cincinnati-Middletown, OH-KY-IN	28.7%
20	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	28.6%
21	Cleveland-Elyria-Mentor, OH	28.2%
22	Charlotte-Gastonia-Concord, NC-SC	28.0%
23	Columbus, OH	27.9%
24	San Diego-Carlsbad-San Marcos, CA	27.7%
25	St. Louis, MO-IL	27.5%
26	Boston-Cambridge-Quincy, MA-NH	27.2%
27	Richmond, VA	27.2%
28	Sacramento-Arden-Arcade-Roseville, CA	27.2%
29	Dallas-Fort Worth-Arlington, TX	26.8%
30	Phoenix-Mesa-Scottsdale, AZ	26.6%
31	Orlando-Kissimmee, FL	26.5%
32	Memphis, TN-MS-AR	26.4%
33	Virginia Beach-Norfolk-Newport News, VA-NC	26.4%
34	Pittsburgh, PA	25.9%
35	Buffalo-Niagara Falls, NY	25.3%
36	Jacksonville, FL	25.2%
37	Oklahoma City, OK	25.2%
38	Houston-Sugar Land-Baytown, TX	25.1%
39	Louisville-Jefferson County, KY-IN	25.1%
40	Birmingham-Hoover, AL	24.6%
41	Nashville-Davidson-Murfreesboro-Franklin, TN	24.6%
42	Riverside-San Bernardino-Ontario, CA	24.6%
43	Hartford-West Hartford-East Hartford, CT	24.1%
44	New York-N. New Jersey-Long Island, NY-NJ-PA	24.1%
45	Los Angeles-Long Beach-Santa Ana, CA	23.7%
46	Chicago-Naperville-Joliet, IL-IN-WI	23.6%
47	New Orleans-Metairie-Kenner, LA	22.8%
48	Las Vegas-Paradise, NV	22.6%
49	Tampa-St. Petersburg-Clearwater, FL	22.6%
50	Providence-New Bedford-Fall River, RI-MA	22.0%
51	Miami-Fort Lauderdale-Pompano Beach, FL	20.7%

ECONOMIC INTEGRATION

Percentage of the population living in middle-income neighborhoods (median family income was between 75 percent and 150% of metropolitan median family income), 2009.

A key aspect of the connected city is the extent to which our neighbors and acquaintances represent the diversity of our population. But the physical layout of many American cities effectively separates different income groups into entirely different neighborhoods. As a number of studies have shown, economic isolation exacerbates the problems associated with poverty. Neighborhoods with concentrated poverty make it harder to find positive role models and connect to social networks that enable employment, and they intensify problems of crime and drug abuse (Jargowsky, 2003). Like racial segregation, segregation by income has harmful effects on low-income people, including worse economic outcomes for adults, higher school dropout and teenage pregnancy rates, and worse academic achievement for schoolchildren. Research shows that poor people who live in mixed-income areas do better than poor people who live in areas of concentrated poverty (Jargowsky and Swanstrom 2009). Well-connected metropolitan areas have less division among economic groups.

There are a variety of ways to measure economic integration and compare metropolitan areas. We use an index developed by Sean Reardon and Sandra Bischoff that computes the fraction of a region's population living in middle-income neighborhoods where the median family income is between 67 percent and 150 percent of the median family income for the entire metropolitan area (Reardon & Bischoff, 2011). For the nation as a whole, median family income is about $75,000, so, in a typical metropolitan area, this definition of income includes neighborhoods where the median family income ranges from $50,000 to $112,500. However, the actual income cut-offs vary from one metropolitan area to another based on the overall median income for the metro area. Because this measure is based on families, it excludes households consisting of just one person or un-related persons.

The cities with the largest fraction of their population living in these middle-income neighborhoods were Minneapolis, Portland and Las Vegas. In each of these places, our economic integration measure suggests that 80 percent or more of the population lived in neighborhoods in which the median family income was between 67 percent and 150 percent of the metropolitan are median income. The greatest relative separation between rich and poor households is found in New York, Dallas, Los Angeles, Memphis and Houston, where fewer than 60 percent of all households lived in these middle-income neighborhoods.

1	Minneapolis-St. Paul-Bloomington, MN-WI	84.3%
2	Portland-Vancouver-Beaverton, OR-WA	81.0%
3	Las Vegas-Paradise, NV	80.4%
4	Jacksonville, FL	79.3%
5	Seattle-Tacoma-Bellevue, WA	79.2%
6	Virginia Beach-Norfolk-Newport News, VA-NC	78.5%
7	Rochester, NY	77.6%
8	Hartford-West Hartford-East Hartford, CT	77.4%
9	Orlando-Kissimmee, FL	77.3%
10	Pittsburgh, PA	76.6%
11	Cincinnati-Middletown, OH-KY-IN	76.1%
12	Salt Lake City, UT	75.9%
13	Louisville-Jefferson County, KY-IN	75.7%
14	Tampa-St. Petersburg-Clearwater, FL	75.7%
15	Raleigh-Cary, NC	75.1%
16	Buffalo-Niagara Falls, NY	74.4%
17	Richmond, VA	74.4%
18	St. Louis, MO-IL	74.2%
19	Kansas City, MO-KS	73.8%
20	Providence-New Bedford-Fall River, RI-MA	72.6%
21	Nashville-Davidson-Murfreesboro-Franklin, TN	71.9%
22	Atlanta-Sandy Springs-Marietta, GA	71.2%
23	Baltimore-Towson, MD	70.9%
24	Chicago-Naperville-Joliet, IL-IN-WI	70.5%
25	Washington-Arlington-Alexandria, DC-VA-MD-WV	70.5%
26	Boston-Cambridge-Quincy, MA-NH	70.5%
27	Charlotte-Gastonia-Concord, NC-SC	70.4%
28	Sacramento-Arden-Arcade-Roseville, CA	70.1%
29	Milwaukee-Waukesha-West Allis, WI	70.0%
30	New Orleans-Metairie-Kenner, LA	69.8%
31	Indianapolis-Carmel, IN	69.7%
32	San Jose-Sunnyvale-Santa Clara, CA	69.6%
33	Riverside-San Bernardino-Ontario, CA	69.1%
34	Oklahoma City, OK	68.8%
35	Detroit-Warren-Livonia, MI	68.3%
36	Cleveland-Elyria-Mentor, OH	68.0%
37	Columbus, OH	67.9%
38	Denver-Aurora-Broomfield, CO	65.8%
39	San Diego-Carlsbad-San Marcos, CA	65.8%
40	Phoenix-Mesa-Scottsdale, AZ	65.6%
41	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	65.5%
42	Miami-Fort Lauderdale-Pompano Beach, FL	65.1%
43	San Francisco-Oakland-Fremont, CA	64.5%
44	Birmingham-Hoover, AL	64.4%
45	Austin-Round Rock, TX	61.8%
46	San Antonio, TX	60.8%
47	New York-N. New Jersey-Long Island, NY-NJ-PA	59.7%
48	Dallas-Fort Worth-Arlington, TX	58.9%
49	Los Angeles-Long Beach-Santa Ana, CA	56.9%
50	Memphis, TN-MS-AR	56.5%
51	Houston-Sugar Land-Baytown, TX	53.9%

TRANSIT USE

Percentage of non-poor workers that commute via public transportation, 2010.

A comprehensive and well-functioning public transit system gives metropolitan residents more choices of how to travel and can be critical to the mobility of the young, the old, the disabled and the poor. And unlike private automobile transportation, which isolates citizens from one another, public transit requires us to sit and stand side-by-side with strangers. In order to gauge the degree to which transit use is a choice, rather than a necessity, we are especially interested in use of public transportation by a city's non-poor population.

Our data on transit use is drawn from the American Community Survey for the period 2008-2010, which asks workers about their usual means of transportation to work. We compute the percentage of non-poor workers, aged 18 to 64, that report having used public transportation for their journey to work. Our measure excludes those persons who work at home.

About one in ten non-poor workers in the typical large metropolitan area uses public transportation to commute to work. In larger cities with rail transit systems, the rate of use is highest, with 45 percent of workers in New York and a fifth or more of workers in Washington, Chicago, Boston, Philadelphia and San Francisco using transit. Fewer than 3 percent of non-poor workers regularly use transit in Indianapolis, Nashville and Oklahoma City.

1	New York-N. New Jersey-Long Island, NY-NJ-PA	45.1%
2	Washington-Arlington-Alexandria, DC-VA-MD-WV	20.9%
3	Chicago-Naperville-Joliet, IL-IN-WI	19.8%
4	Boston-Cambridge-Quincy, MA-NH	19.5%
5	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	19.3%
6	San Francisco-Oakland-Fremont, CA	18.8%
7	Baltimore-Towson, MD	18.6%
8	Los Angeles-Long Beach-Santa Ana, CA	16.2%
9	Pittsburgh, PA	14.4%
10	Milwaukee-Waukesha-West Allis, WI	14.0%
11	Buffalo-Niagara Falls, NY	13.7%
12	Portland-Vancouver-Beaverton, OR-WA	13.3%
13	Seattle-Tacoma-Bellevue, WA	12.8%
14	Hartford-West Hartford-East Hartford, CT	11.7%
15	Cleveland-Elyria-Mentor, OH	11.6%
16	Minneapolis-St. Paul-Bloomington, MN-WI	11.4%
17	Miami-Fort Lauderdale-Pompano Beach, FL	10.9%
18	Denver-Aurora-Broomfield, CO	10.4%
19	Richmond, VA	10.1%
20	Rochester, NY	10.0%
21	Cincinnati-Middletown, OH-KY-IN	9.9%
22	Atlanta-Sandy Springs-Marietta, GA	9.7%
23	Louisville-Jefferson County, KY-IN	9.7%
24	New Orleans-Metairie-Kenner, LA	9.6%
25	Las Vegas-Paradise, NV	9.2%
26	Salt Lake City, UT	8.4%
27	St. Louis, MO-IL	8.1%
28	San Diego-Carlsbad-San Marcos, CA	8.0%
29	San Jose-Sunnyvale-Santa Clara, CA	7.5%
30	Austin-Round Rock, TX	7.3%
31	San Antonio, TX	7.2%
32	Providence-New Bedford-Fall River, RI-MA	6.7%
33	Detroit-Warren-Livonia, MI	6.5%
34	Orlando-Kissimmee, FL	6.3%
35	Virginia Beach-Norfolk-Newport News, VA-NC	6.3%
36	Phoenix-Mesa-Scottsdale, AZ	6.2%
37	Columbus, OH	5.9%
38	Houston-Sugar Land-Baytown, TX	5.7%
39	Memphis, TN-MS-AR	5.7%
40	Raleigh-Cary, NC	5.3%
41	Jacksonville, FL	5.1%
42	Charlotte-Gastonia-Concord, NC-SC	5.1%
43	Sacramento-Arden-Arcade-Roseville, CA	4.7%
44	Tampa-St. Petersburg-Clearwater, FL	4.7%
45	Kansas City, MO-KS	4.6%
46	Riverside-San Bernardino-Ontario, CA	4.5%
47	Dallas-Fort Worth-Arlington, TX	4.4%
48	Birmingham-Hoover, AL	3.8%
49	Indianapolis-Carmel, IN	2.8%
50	Nashville-Davidson-Murfreesboro-Franklin, TN	2.3%
51	Oklahoma City, OK	0.9%

WALKABILITY

Average WalkScore for the principal city in each metropolitan area, 2011.

When they work well, cities give their residents a variety of ways to travel, including by automobile, transit, cycling and walking. Walking is a fundamental attribute of urban spaces. Urban spaces are, almost by definition, places where it is more convenient and common for people to walk between destinations than to take other modes of transportation. Places that are conducive to walking frequently have a host of other related characteristics: they are generally denser, better served by transit, more central and have a more diverse mix of land uses. As Jane Jacobs has observed, walkability is at the heart of urban vibrancy—short blocks, population density and diverse uses, building types and ages all play out in a "sidewalk ballet" (Jacobs, 1961). Walkability also appears to command significant value in the real estate marketplace. Homes located in more walkable locations command higher prices than otherwise identical homes with lower levels of walkability (Cortright, 2009).

For the past several years, the website Walkscore.com has used geographic data about the proximity of local destinations to calculate the walkability of residential properties throughout the United States (Front Seat Inc, 2011). Based on a house's proximity to schools, parks, grocery stores, restaurants, coffee shops, banks and other common destinations, the site computes a score ranging from zero to 100 to illustrate the relative walkability of any given house. The website has aggregated these scores for major cities in the U.S., and we use their estimates of the average level of walkability of the principal or most populous city in each metropolitan area.

By this measure, the most walkable cites in the United States are New York and San Francisco, with an average WalkScore of 85. Oklahoma City, Charlotte and Jacksonville have the lowest WalkScores among cities in the nation's largest metropolitan areas.

1	New York-N. New Jersey-Long Island, NY-NJ-PA	85.3
2	San Francisco-Oakland-Fremont, CA	84.9
3	Boston-Cambridge-Quincy, MA-NH	79.2
4	Chicago-Naperville-Joliet, IL-IN-WI	74.3
5	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	74.1
6	Seattle-Tacoma-Bellevue, WA	73.7
7	Washington-Arlington-Alexandria, DC-VA-MD-WV	73.0
8	Hartford-West Hartford-East Hartford, CT	72.7
9	Providence-New Bedford-Fall River, RI-MA	72.7
10	Miami-Fort Lauderdale-Pompano Beach, FL	72.5
11	Minneapolis-St. Paul-Bloomington, MN-WI	69.3
12	Portland-Vancouver-Beaverton, OR-WA	66.3
13	Los Angeles-Long Beach-Santa Ana, CA	65.9
14	Pittsburgh, PA	64.1
15	Baltimore-Towson, MD	63.9
16	Rochester, NY	63.1
17	St. Louis, MO-IL	61.4
18	Milwaukee-Waukesha-West Allis, WI	60.6
19	Denver-Aurora-Broomfield, CO	60.4
20	Buffalo-Niagara Falls, NY	60.1
21	Cincinnati-Middletown, OH-KY-IN	58.9
22	Cleveland-Elyria-Mentor, OH	58.3
23	Salt Lake City, UT	57.6
24	San Diego-Carlsbad-San Marcos, CA	55.7
25	New Orleans-Metairie-Kenner, LA	55.6
26	San Jose-Sunnyvale-Santa Clara, CA	54.5
27	Atlanta-Sandy Springs-Marietta, GA	52.9
28	Richmond, VA	51.1
29	Tampa-St. Petersburg-Clearwater, FL	51.1
30	Detroit-Warren-Livonia, MI	49.9
31	Houston-Sugar Land-Baytown, TX	49.8
32	Sacramento-Arden-Arcade-Roseville, CA	49.3
33	Las Vegas-Paradise, NV	49.2
34	Columbus, OH	47.4
35	Orlando-Kissimmee, FL	47.1
36	Dallas-Fort Worth-Arlington, TX	46.9
37	Austin-Round Rock, TX	46.7
38	Riverside-San Bernardino-Ontario, CA	46.7
39	Phoenix-Mesa-Scottsdale, AZ	45.4
40	Raleigh-Cary, NC	41.4
41	San Antonio, TX	40.8
42	Virginia Beach-Norfolk-Newport News, VA-NC	40.8
43	Birmingham-Hoover, AL	40.0
44	Louisville-Jefferson County, KY-IN	39.7
45	Memphis, TN-MS-AR	39.4
46	Kansas City, MO-KS	38.1
47	Indianapolis-Carmel, IN	37.4
48	Nashville-Davidson-Murfreesboro-Franklin, TN	36.4
49	Oklahoma City, OK	35.6
50	Charlotte-Gastonia-Concord, NC-SC	34.3
51	Jacksonville, FL	32.6

INTERNATIONAL STUDENTS

Number of foreign students enrolled in institutions of higher education in the metropolitan area per 1,000 population.

As the economy becomes increasingly global, connections to people in other countries become more important as a means of building understanding and providing a basis for commerce. The United States has long attracted many of the world's best and brightest to attend college, and the relationships and impressions foreign students form while here often last a lifetime.

Using data on foreign student enrollment gathered by the Institute for International Education, an affiliate of the United Nations, we are able to count the number of international students enrolled in institutions of higher education in every metropolitan area in the United States (Institute of International Education, 2008). We use this data to calculate the number of international students per 1,000 population in each of the nation's 51 largest metropolitan areas.

Buffalo and Boston have the highest concentrations of foreign students relative to their populations, with more than 50 foreign students per 10,000 population. Jacksonville has the lowest concentration with less than 3 foreign students per 10,000 population.

1	Buffalo-Niagara Falls, NY	55.5
2	Boston-Cambridge-Quincy, MA-NH	52.4
3	San Jose-Sunnyvale-Santa Clara, CA	48.0
4	Austin-Round Rock, TX	42.5
5	San Francisco-Oakland-Fremont, CA	37.4
6	Washington-Arlington-Alexandria, DC-VA-MD-WV	35.7
7	Oklahoma City, OK	34.2
8	Columbus, OH	30.0
9	Rochester, NY	28.3
10	Los Angeles-Long Beach-Santa Ana, CA	26.7
11	New York-N. New Jersey-Long Island, NY-NJ-PA	26.1
12	Seattle-Tacoma-Bellevue, WA	25.6
13	Baltimore-Towson, MD	25.0
14	Providence-New Bedford-Fall River, RI-MA	24.4
15	Dallas-Fort Worth-Arlington, TX	24.2
16	Pittsburgh, PA	22.5
17	Hartford-West Hartford-East Hartford, CT	22.3
18	San Diego-Carlsbad-San Marcos, CA	20.9
19	Miami-Fort Lauderdale-Pompano Beach, FL	20.3
20	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	19.9
21	Salt Lake City, UT	19.0
22	Raleigh-Cary, NC	18.6
23	Orlando-Kissimmee, FL	16.5
24	Houston-Sugar Land-Baytown, TX	16.0
25	Atlanta-Sandy Springs-Marietta, GA	15.7
26	Minneapolis-St. Paul-Bloomington, MN-WI	15.6
27	St. Louis, MO-IL	13.8
28	Chicago-Naperville-Joliet, IL-IN-WI	13.7
29	Cleveland-Elyria-Mentor, OH	13.6
30	Phoenix-Mesa-Scottsdale, AZ	13.1
31	Las Vegas-Paradise, NV	12.5
32	Detroit-Warren-Livonia, MI	12.4
33	Milwaukee-Waukesha-West Allis, WI	12.1
34	Cincinnati-Middletown, OH-KY-IN	12.1
35	Richmond, VA	12.0
36	Portland-Vancouver-Beaverton, OR-WA	12.0
37	Birmingham-Hoover, AL	10.6
38	Virginia Beach-Norfolk-Newport News, VA-NC	10.4
39	Nashville-Davidson-Murfreesboro-Franklin, TN	10.4
40	Tampa-St. Petersburg-Clearwater, FL	10.2
41	San Antonio, TX	9.0
42	Indianapolis-Carmel, IN	8.5
43	Memphis, TN-MS-AR	8.2
44	Denver-Aurora-Broomfield, CO	8.1
45	New Orleans-Metairie-Kenner, LA	7.1
46	Charlotte-Gastonia-Concord, NC-SC	6.8
47	Louisville-Jefferson County, KY-IN	6.6
48	Riverside-San Bernardino-Ontario, CA	6.0
49	Kansas City, MO-KS	5.6
50	Sacramento-Arden-Arcade-Roseville, CA	5.2
51	Jacksonville, FL	2.7

FOREIGN TRAVEL

Percent of Population Reporting Having Traveled Outside the US, 2008

More and more Americans are traveling outside the country, establishing their own personal experiences and contacts with the rest of the world. Rising incomes, a falling real cost of long distance air travel and an increasingly diverse population have helped fuel foreign travel. The marketing research firm SRDS surveys Americans on a number of subjects, including whether they have engaged in foreign travel in the past three years (SRDS/Equifax, 2008).

Despite big increases over the past several decades, a minority of Americans report recent international travel—slightly fewer than one in six have taken a trip outside the country in the past few years in the typical metropolitan area. San Jose and San Francisco record the highest rate of foreign travel. Nearly a third of their respective populations have traveled abroad recently, as well as more than a quarter of the residents of Miami. More than 20 percent of residents in San Diego, Washington, New York, Los Angeles and Denver have experienced foreign travel. The least well traveled metro areas include Memphis, Pittsburgh, Louisville and Birmingham, where only about one in ten residents has taken a foreign trip recently.

1	San Francisco-Oakland-Fremont, CA	28.2
2	San Jose-Sunnyvale-Santa Clara, CA	28.2
3	Miami-Fort Lauderdale-Pompano Beach, FL	25.8
4	San Diego-Carlsbad-San Marcos, CA	23.9
5	Washington-Arlington-Alexandria, DC-VA-MD-WV	23.3
6	New York-N. New Jersey-Long Island, NY-NJ-PA	22.6
7	Los Angeles-Long Beach-Santa Ana, CA	22.3
8	Denver-Aurora-Broomfield, CO	21.3
9	Seattle-Tacoma-Bellevue, WA	20.8
10	Boston-Cambridge-Quincy, MA-NH	20.1
11	Austin-Round Rock, TX	19.2
12	Las Vegas-Paradise, NV	18.7
13	Sacramento-Arden-Arcade-Roseville, CA	18.7
14	Riverside-San Bernardino-Ontario, CA	18.4
15	Atlanta-Sandy Springs-Marietta, GA	18.2
16	Chicago-Naperville-Joliet, IL-IN-WI	18.0
17	Portland-Vancouver-Beaverton, OR-WA	17.8
18	Houston-Sugar Land-Baytown, TX	17.7
19	Orlando-Kissimmee, FL	17.6
20	Baltimore-Towson, MD	17.5
21	Hartford-West Hartford-East Hartford, CT	17.5
22	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	17.4
23	Salt Lake City, UT	17.1
24	Minneapolis-St. Paul-Bloomington, MN-WI	16.8
25	Phoenix-Mesa-Scottsdale, AZ	16.7
26	Providence-New Bedford-Fall River, RI-MA	16.6
27	Tampa-St. Petersburg-Clearwater, FL	16.6
28	Dallas-Fort Worth-Arlington, TX	16.5
29	San Antonio, TX	16.0
30	Virginia Beach-Norfolk-Newport News, VA-NC	15.7
31	Milwaukee-Waukesha-West Allis, WI	15.0
32	Detroit-Warren-Livonia, MI	14.9
33	Raleigh-Cary, NC	14.9
34	Richmond, VA	14.6
35	Jacksonville, FL	14.0
36	Rochester, NY	13.9
37	Charlotte-Gastonia-Concord, NC-SC	13.7
38	St. Louis, MO-IL	13.1
39	Cincinnati-Middletown, OH-KY-IN	13.0
40	Kansas City, MO-KS	12.9
41	Columbus, OH	12.4
42	New Orleans-Metairie-Kenner, LA	12.4
43	Indianapolis-Carmel, IN	11.9
44	Cleveland-Elyria-Mentor, OH	11.7
45	Nashville-Davidson-Murfreesboro-Franklin, TN	11.7
46	Oklahoma City, OK	11.6
47	Buffalo-Niagara Falls, NY	11.4
48	Memphis, TN-MS-AR	11.1
49	Pittsburgh, PA	11.0
50	Louisville-Jefferson County, KY-IN	10.8
51	Birmingham-Hoover, AL	10.3

INTERNET CONNECTIVITY

Number of Internet Wi-Fi Hotspots per 1,000 population, 2011.

Over the past decade, the Internet has matured from cutting edge technological marvel to fundamental artery of business and personal interaction. Once a novelty, the Internet is now a necessity to stay connected. The Internet carries every imaginable form of data from email communications and phone calls, to music and videos, to every manner of web page and electronic publication, and more uses are popping up daily.

We measure Internet connectivity based on ratio of Wi-Fi hotspots to the metropolitan area's population. We gathered data from the site JiWire.com, which maintains a geocoded directory of free and commercial Wi-Fi hotspots (JiWire, 2011). For each metropolitan area, we counted the number of listed hotspots within 20 miles of the center of the metropolitan area and divided that by the metropolitan area's population.

The density of hotspots, relative to population, is greatest in San Jose, by a significant margin, followed by Seattle and Portland—all recognized high tech industry centers. Relative to population, the number of Wi-Fi hotspots was lowest in Miami, New York and Riverside.

1	San Jose-Sunnyvale-Santa Clara, CA	46.9
2	Seattle-Tacoma-Bellevue, WA	38.5
3	Portland-Vancouver-Beaverton, OR-WA	34.2
4	San Francisco-Oakland-Fremont, CA	32.7
5	Austin-Round Rock, TX	31.5
6	Raleigh-Cary, NC	28.3
7	Kansas City, MO-KS	26.0
8	Denver-Aurora-Broomfield, CO	25.6
9	Oklahoma City, OK	24.9
10	Minneapolis-St. Paul-Bloomington, MN-WI	24.8
11	Orlando-Kissimmee, FL	24.6
12	Sacramento-Arden-Arcade-Roseville, CA	24.0
13	Indianapolis-Carmel, IN	23.9
14	Milwaukee-Waukesha-West Allis, WI	23.2
15	New Orleans-Metairie-Kenner, LA	23.2
16	Las Vegas-Paradise, NV	22.6
17	Salt Lake City, UT	22.5
18	Charlotte-Gastonia-Concord, NC-SC	22.3
19	San Antonio, TX	22.0
20	Hartford-West Hartford-East Hartford, CT	22.0
21	Louisville-Jefferson County, KY-IN	21.0
22	San Diego-Carlsbad-San Marcos, CA	20.5
23	Phoenix-Mesa-Scottsdale, AZ	20.3
24	Washington-Arlington-Alexandria, DC-VA-MD-WV	20.2
25	Buffalo-Niagara Falls, NY	20.0
26	Columbus, OH	18.8
27	Richmond, VA	18.2
28	Baltimore-Towson, MD	18.2
29	Nashville-Davidson-Murfreesboro-Franklin, TN	17.9
30	Jacksonville, FL	17.9
31	Cleveland-Elyria-Mentor, OH	17.6
32	Cincinnati-Middletown, OH-KY-IN	16.9
33	Rochester, NY	16.6
34	Virginia Beach-Norfolk-Newport News, VA-NC	16.2
35	St. Louis, MO-IL	15.9
36	Tampa-St. Petersburg-Clearwater, FL	15.9
37	Atlanta-Sandy Springs-Marietta, GA	15.8
38	Pittsburgh, PA	15.2
39	Birmingham-Hoover, AL	14.7
40	Boston-Cambridge-Quincy, MA-NH	14.3
41	Dallas-Fort Worth-Arlington, TX	12.7
42	Chicago-Naperville-Joliet, IL-IN-WI	12.7
43	Houston-Sugar Land-Baytown, TX	12.2
44	Providence-New Bedford-Fall River, RI-MA	12.1
45	Los Angeles-Long Beach-Santa Ana, CA	11.9
46	Memphis, TN-MS-AR	11.9
47	Detroit-Warren-Livonia, MI	10.2
48	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	9.9
49	Miami-Fort Lauderdale-Pompano Beach, FL	9.9
50	New York-N. New Jersey-Long Island, NY-NJ-PA	9.8
51	Riverside-San Bernardino-Ontario, CA	8.2

The **Innovative** City

As Thomas Edison famously observed, invention is 10 percent inspiration and 90 percent perspiration. Being smart doesn't necessarily translate into being innovative. A thousand years ago China's levels of education and scientific knowledge far exceeded those in Europe, but a society and a culture that was averse to change and innovation meant that this knowledge was not translated into economic progress (Landes, 1998).

The key factor propelling economic growth, according to the latest work in economics (New Growth Theory), is the generation of new ideas. The ability to create new ideas—everything from earth-shaking breakthroughs in genetic engineering and nanotechnology, to better ways to deliver packages or sew a shirt—is what drives prosperity. And despite proclamations by some that the earth is flat, the capability of generating new ideas is not evenly distributed across space. Certain places with strong aggregations of talent, clusters of innovative firms, key research institutions and a business and social climate conducive to change and risk-taking account for a disproportionate share of these valuable new ideas.

A variety of statistical analyses point to the importance of innovation and entrepreneurship. The number of small firms in a city is positively correlated with subsequent employment growth: a 10 percent increase in the number of businesses per worker is associated with a 9 percent increase in employment growth (E. L. Glaeser, Kerr, & Ponzetto, 2010). Likewise, patenting is correlated with economic success. Metro areas with greater concentrations of a variety of high technology patents had both higher wages and faster wage growth than other regions (Huallacháin, 2011).

We measure innovation in several ways: patents, venture capital, new business formation and the number of small businesses.

PATENTS

Number of utility patents issued per 10,000 employees, 2009.

Patent data measures the rate at which a metro area creates economically valuable new ideas. Our data is drawn from tabulations by the U.S. Patent and Trademark Office and represents the number of patents issued to inventors in each metropolitan area in the United States per 1,000 population. We report patent data compiled by Harvard University (Institute for Strategy and Competitiveness, 2012).

Patenting is an important step in the process of securing the intellectual property rights associated with an idea. Of course, not all good ideas are patented, and many ideas that are patented turn out to be worthless, but patent activity is a useful proxy for innovation. Research has shown that concentrations of patents reflect the localized process of knowledge creation (Jaffe, Trachtenberg, & Henderson, 1993).

There is more than a ten-fold variation in patenting (per worker) among the nation's 51 largest metropolitan areas. San Jose ranks number one with more than 80 patents per 10,000 workers followed by Austin and San Francisco averaging more than 25 patents per 10,000 workers. The typical metropolitan area among the top 51 averages about 6.5 patents per 10,000 workers. Las Vegas, Virginia Beach, New Orleans, Louisville and Jacksonville had the lowest levels of patenting, with fewer than two patents per 10,000 workers.

1	San Jose-Sunnyvale-Santa Clara, CA	83.5
2	Austin-Round Rock, TX	31.9
3	San Francisco-Oakland-Fremont, CA	27.7
4	Seattle-Tacoma-Bellevue, WA	24.7
5	Rochester, NY	22.1
6	Raleigh-Cary, NC	20.7
7	Portland-Vancouver-Beaverton, OR-WA	16.9
8	San Diego-Carlsbad-San Marcos, CA	16.7
9	Boston-Cambridge-Quincy, MA-NH	13.7
10	Minneapolis-St. Paul-Bloomington, MN-WI	10.5
11	Detroit-Warren-Livonia, MI	9.1
12	Los Angeles-Long Beach-Santa Ana, CA	7.7
13	Hartford-West Hartford-East Hartford, CT	7.6
14	Phoenix-Mesa-Scottsdale, AZ	7.0
15	Houston-Sugar Land-Baytown, TX	6.8
16	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	6.7
17	Sacramento-Arden-Arcade-Roseville, CA	6.1
18	Pittsburgh, PA	6.1
19	Cincinnati-Middletown, OH-KY-IN	5.9
20	Dallas-Fort Worth-Arlington, TX	5.9
21	Salt Lake City, UT	5.8
22	Atlanta-Sandy Springs-Marietta, GA	5.5
23	New York-N. New Jersey-Long Island, NY-NJ-PA	5.4
24	Chicago-Naperville-Joliet, IL-IN-WI	5.4
25	Milwaukee-Waukesha-West Allis, WI	5.3
26	Cleveland-Elyria-Mentor, OH	5.3
27	Baltimore-Towson, MD	5.2
28	Indianapolis-Carmel, IN	5.2
29	Providence-New Bedford-Fall River, RI-MA	5.1
30	Denver-Aurora-Broomfield, CO	4.6
31	Washington-Arlington-Alexandria, DC-VA-MD-WV	4.6
32	Buffalo-Niagara Falls, NY	4.5
33	St. Louis, MO-IL	4.1
34	Miami-Fort Lauderdale-Pompano Beach, FL	3.7
35	Kansas City, MO-KS	3.6
36	Columbus, OH	3.4
37	Orlando-Kissimmee, FL	3.4
38	Tampa-St. Petersburg-Clearwater, FL	3.0
39	Memphis, TN-MS-AR	2.9
40	Richmond, VA	2.7
41	Charlotte-Gastonia-Concord, NC-SC	2.7
42	Riverside-San Bernardino-Ontario, CA	2.7
43	San Antonio, TX	2.4
44	Birmingham-Hoover, AL	2.2
45	Oklahoma City, OK	2.1
46	Nashville-Davidson-Murfreesboro-Franklin, TN	2.0
47	Las Vegas-Paradise, NV	1.8
48	Virginia Beach-Norfolk-Newport News, VA-NC	1.8
49	New Orleans-Metairie-Kenner, LA	1.8
50	Louisville-Jefferson County, KY-IN	1.7
51	Jacksonville, FL	1.5

VENTURE CAPITAL

Amount of venture capital raised per 1,000 population, 2011.

Venture capital—early stage equity investments in new startups and fast growing companies—play a vital role in promoting the development of new technologies and new industries. Venture capital has driven U.S. leadership in electronics, software and biotechnology. Because venture capitalists hedge the risk of their investments by working closely with the firms they invest in, venture capital turns out to be a very localized business, with most venture capitalists investing their funds in businesses in their region. As a result, the local availability of venture capital is an important determinant—and indicator—of an innovative city.

For each metropolitan area, we tabulate the amount of venture capital investment announced in the past year as part of the quarterly Moneytree survey (National Venture Capital Association & Pricewaterhousecoopers, 2012).

Venture capital is highly concentrated in relatively few metropolitan areas. While the typical (median) metropolitan area receives about $150 per 1,000 workers in venture capital funding, San Jose averages more than 17 times that amount with nearly $2,500 per 1,000 workers. Other leading metropolitan areas include high tech centers like San Francisco, Boston, Austin and San Diego—all with more than $250 of venture capital invested per 1,000 workers. Virginia Beach and Riverside reported the smallest amounts of venture capital investment in the past year with approximately $1 per 1,000 workers.

1	San Jose-Sunnyvale-Santa Clara, CA	2,499
2	San Francisco-Oakland-Fremont, CA	1,641
3	Boston-Cambridge-Quincy, MA-NH	634
4	Austin-Round Rock, TX	371
5	San Diego-Carlsbad-San Marcos, CA	281
6	Raleigh-Cary, NC	249
7	Los Angeles-Long Beach-Santa Ana, CA	142
8	Seattle-Tacoma-Bellevue, WA	142
9	New York-N. New Jersey-Long Island, NY-NJ-PA	139
10	Salt Lake City, UT	137
11	Denver-Aurora-Broomfield, CO	115
12	Washington-Arlington-Alexandria, DC-VA-MD-WV	105
13	Indianapolis-Carmel, IN	101
14	Portland-Vancouver-Beaverton, OR-WA	101
15	Dallas-Fort Worth-Arlington, TX	82
16	Minneapolis-St. Paul-Bloomington, MN-WI	79
17	Chicago-Naperville-Joliet, IL-IN-WI	73
18	Atlanta-Sandy Springs-Marietta, GA	65
19	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	61
20	Pittsburgh, PA	60
21	Cleveland-Elyria-Mentor, OH	59
22	Baltimore-Towson, MD	56
23	Nashville-Davidson-Murfreesboro-Franklin, TN	56
24	Phoenix-Mesa-Scottsdale, AZ	46
25	St. Louis, MO-IL	44
26	Houston-Sugar Land-Baytown, TX	44
27	Kansas City, MO-KS	33
28	Sacramento-Arden-Arcade-Roseville, CA	28
29	Tampa-St. Petersburg-Clearwater, FL	28
30	Richmond, VA	24
31	Providence-New Bedford-Fall River, RI-MA	24
32	Orlando-Kissimmee, FL	24
33	Miami-Fort Lauderdale-Pompano Beach, FL	21
34	Oklahoma City, OK	21
35	Cincinnati-Middletown, OH-KY-IN	21
36	San Antonio, TX	20
37	Jacksonville, FL	20
38	Hartford-West Hartford-East Hartford, CT	17
39	Rochester, NY	15
40	New Orleans-Metairie-Kenner, LA	14
41	Buffalo-Niagara Falls, NY	11
42	Columbus, OH	10
43	Detroit-Warren-Livonia, MI	10
44	Milwaukee-Waukesha-West Allis, WI	9
45	Memphis, TN-MS-AR	7
46	Louisville-Jefferson County, KY-IN	7
47	Charlotte-Gastonia-Concord, NC-SC	5
48	Las Vegas-Paradise, NV	4
49	Birmingham-Hoover, AL	3
50	Riverside-San Bernardino-Ontario, CA	1
51	Virginia Beach-Norfolk-Newport News, VA-NC	1

ENTREPRENEURSHIP

Percent of the adult population who are self-employed, 2010.

A broader measure of the innovative potential of a region is the number of persons who own their own businesses and work for themselves. Only a tiny fraction of firms ever have reason to patent their ideas or need formal venture capital. Communities in which it is relatively easy to start new businesses, or where there is a culture than supports risk-taking, are more likely to give rise to the kinds of innovation that lead to economic growth.

We measure the degree of self-employment in each metropolitan area using Census data on the number of persons who report they were self-employed according to the 2008 through 2010 American Community Surveys (Bureau of the Census, 2008-2010).

Self-employed workers make up more than 10 percent of the workforce in the typical large metropolitan area in the United States. In the leading area, Miami-Fort Lauderdale, about 15 percent are self-employed. Areas with the lowest rates of self-employment include Buffalo and Milwaukee where about 8 percent of all workers were self-employed.

1	Miami-Fort Lauderdale-Pompano Beach, FL	15.6%
2	San Francisco-Oakland-Fremont, CA	13.2%
3	San Diego-Carlsbad-San Marcos, CA	12.6%
4	Portland-Vancouver-Beaverton, OR-WA	12.6%
5	Denver-Aurora-Broomfield, CO	12.1%
6	New Orleans-Metairie-Kenner, LA	11.9%
7	Tampa-St. Petersburg-Clearwater, FL	11.7%
8	Nashville-Davidson-Murfreesboro-Franklin, TN	11.6%
9	Riverside-San Bernardino-Ontario, CA	11.6%
10	Sacramento-Arden-Arcade-Roseville, CA	11.5%
11	Oklahoma City, OK	11.5%
12	Austin-Round Rock, TX	11.5%
13	Los Angeles-Long Beach-Santa Ana, CA	11.3%
14	Seattle-Tacoma-Bellevue, WA	11.2%
15	Orlando-Kissimmee, FL	11.2%
16	Atlanta-Sandy Springs-Marietta, GA	11.1%
17	Phoenix-Mesa-Scottsdale, AZ	11.0%
18	Houston-Sugar Land-Baytown, TX	10.9%
19	New York-N. New Jersey-Long Island, NY-NJ-PA	10.7%
20	Boston-Cambridge-Quincy, MA-NH	10.6%
21	San Jose-Sunnyvale-Santa Clara, CA	10.4%
22	Jacksonville, FL	10.4%
23	Charlotte-Gastonia-Concord, NC-SC	10.1%
24	Dallas-Fort Worth-Arlington, TX	10.1%
25	Minneapolis-St. Paul-Bloomington, MN-WI	10.0%
26	Raleigh-Cary, NC	9.9%
27	Birmingham-Hoover, AL	9.8%
28	San Antonio, TX	9.7%
29	Salt Lake City, UT	9.7%
30	Kansas City, MO-KS	9.6%
31	Washington-Arlington-Alexandria, DC-VA-MD-WV	9.4%
32	Chicago-Naperville-Joliet, IL-IN-WI	9.3%
33	Indianapolis-Carmel, IN	9.1%
34	Cleveland-Elyria-Mentor, OH	9.1%
35	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	9.0%
36	Hartford-West Hartford-East Hartford, CT	9.0%
37	Detroit-Warren-Livonia, MI	9.0%
38	Rochester, NY	8.9%
39	St. Louis, MO-IL	8.9%
40	Baltimore-Towson, MD	8.8%
41	Pittsburgh, PA	8.8%
42	Richmond, VA	8.7%
43	Providence-New Bedford-Fall River, RI-MA	8.7%
44	Columbus, OH	8.7%
45	Louisville-Jefferson County, KY-IN	8.6%
46	Cincinnati-Middletown, OH-KY-IN	8.6%
47	Las Vegas-Paradise, NV	8.6%
48	Memphis, TN-MS-AR	8.2%
49	Virginia Beach-Norfolk-Newport News, VA-NC	8.0%
50	Milwaukee-Waukesha-West Allis, WI	7.9%
51	Buffalo-Niagara Falls, NY	7.9%

SMALL BUSINESSES

Number of firms with fewer than 20 employees per 1,000 population, 2009.

Another indicator of innovation is the number of small businesses in a region. Studies have shown that in many industries, particularly those that are the most innovative and make greatest use of skilled labor, smaller firms tend to be more innovative than their larger counterparts (Acs & Audretsch, 1987). Like self-employment, the number of small businesses is an indicator of entrepreneurship and risk taking in a community. Places with many small businesses may be more nimble and adaptable than economies more dominated by large businesses.

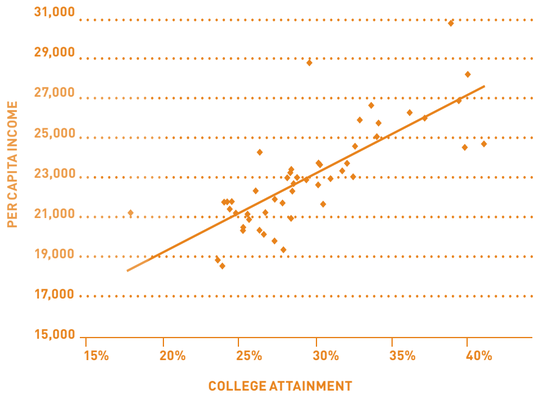
Our measure, drawn from statistics compiled by the Census Bureau, reports the number of businesses with fewer than 20 employees per 1,000 population in 2009 (Bureau of the Census, 2009).

In the typical metropolitan area, there are about 21 businesses with fewer than 20 employees per 1,000 population. Small businesses are proportionately most important in Miami, which has nearly 30 per 1,000 population. Small businesses are relatively scarcer in Riverside, Memphis, and San Antonio where there are between 13 and 17 firms with fewer than 20 employees per 1,000 population.

1	Miami-Fort Lauderdale-Pompano Beach, FL	27.5
2	Denver-Aurora-Broomfield, CO	25.2
3	New York-N. New Jersey-Long Island, NY-NJ-PA	24.9
4	Seattle-Tacoma-Bellevue, WA	24.6
5	Portland-Vancouver-Beaverton, OR-WA	24.3
6	Salt Lake City, UT	24.1
7	San Francisco-Oakland-Fremont, CA	23.5
8	Minneapolis-St. Paul-Bloomington, MN-WI	23.3
9	Boston-Cambridge-Quincy, MA-NH	22.9
10	Oklahoma City, OK	22.5
11	Orlando-Kissimmee, FL	22.4
12	Los Angeles-Long Beach-Santa Ana, CA	22.4
13	Providence-New Bedford-Fall River, RI-MA	22.4
14	Jacksonville, FL	22.1
15	Tampa-St. Petersburg-Clearwater, FL	21.9
16	Raleigh-Cary, NC	21.5
17	Cleveland-Elyria-Mentor, OH	21.5
18	Chicago-Naperville-Joliet, IL-IN-WI	21.5
19	Charlotte-Gastonia-Concord, NC-SC	21.4
20	San Diego-Carlsbad-San Marcos, CA	21.3
21	St. Louis, MO-IL	21.3
22	Pittsburgh, PA	21.3
23	Washington-Arlington-Alexandria, DC-VA-MD-WV	21.3
24	Atlanta-Sandy Springs-Marietta, GA	21.2
25	Richmond, VA	21.2
26	New Orleans-Metairie-Kenner, LA	21.1
27	Kansas City, MO-KS	21.0
28	San Jose-Sunnyvale-Santa Clara, CA	20.9
29	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	20.8
30	Milwaukee-Waukesha-West Allis, WI	20.7
31	Baltimore-Towson, MD	20.6
32	Hartford-West Hartford-East Hartford, CT	20.5
33	Indianapolis-Carmel, IN	20.3
34	Nashville-Davidson-Murfreesboro-Franklin, TN	20.0
35	Austin-Round Rock, TX	19.9
36	Buffalo-Niagara Falls, NY	19.9
37	Detroit-Warren-Livonia, MI	19.6
38	Birmingham-Hoover, AL	19.4
39	Louisville-Jefferson County, KY-IN	19.3
40	Virginia Beach-Norfolk-Newport News, VA-NC	19.2
41	Rochester, NY	19.0
42	Dallas-Fort Worth-Arlington, TX	18.3
43	Cincinnati-Middletown, OH-KY-IN	18.2
44	Sacramento-Arden-Arcade-Roseville, CA	18.1
45	Phoenix-Mesa-Scottsdale, AZ	18.0
46	Columbus, OH	17.7
47	Las Vegas-Paradise, NV	17.3
48	Houston-Sugar Land-Baytown, TX	17.1
49	Memphis, TN-MS-AR	16.1
50	San Antonio, TX	15.8
51	Riverside-San Bernardino-Ontario, CA	13.2

The **Talented** City

In a knowledge-based economy, the skills and abilities of a region's residents have become the decisive factor in shaping economic prosperity. There is a strong and growing correlation between a person's level of income and a person's amount of education. Over the past decade, those with higher levels of educational attainment have, on average, seen their real incomes rise. Those with lower levels of education have seen their incomes fall. What is true for individuals is also true for cities. The most well-educated enjoy the highest levels of income. Statistically, variations in the level of adult college attainment explain 58 percent of the variation in per capita incomes across metropolitan areas. As this chart illustrates, the correlation is very strong.



This data confirms a number of studies that underscore the importance of education to urban success. Paul Gottlieb and Michael Fogarty found that cities with the highest levels of college attainment saw their incomes rise almost twice as much during the 1990s as the cities with the lowest levels of college attainment (Gottlieb & Fogarty, 2003). Bob Weissbourd and his colleagues concluded, after an extensive statistical analysis of urban growth in the past decade, that the percentage of adults with college degrees was highly correlated with population, income and wage growth at the city and metropolitan area level (Weissbourd, 2004).

The Great Recession has underscored the importance of talent to metropolitan economic success. Better-educated metropolitan areas saw smaller increases in unemployment in the depths of the recession, and most of the job growth in the recovery has been among better-educated workeArs. In 2010, metropolitan areas with an above average education had lower unemployment rates not only for those with a college education, but also for those with lower levels of education (E. Glaeser, 2010). As the recovery proceeded in 2011, the number of jobs for persons with a high school diploma or less education continued to decline, and all of the net increase in jobs has been for people with at least some college education. The greatest job growth has been for those with a college degree (Rampell, 2012).

We use a variety of measures to assess the talent level of the local population. These include college attainment, the presence of creative professionals, concentration of young, well-educated workers and the extent to which well-educated workers are in industries that export products from the metropolitan region.

COLLEGE ATTAINMENT

Percentage of the metropolitan population 25 years old or older that have completed a four-year college degree, 2010.

College attainment is an indicator of the level of skill or human capital of an area's population. As the nation's economy has become increasingly knowledge-based, the availability of adequately skilled workers is a key factor in determining economic growth. College attainment is the number of persons 25 years of age and older who have completed a four-year degree. Data on college attainment are taken from the 2010 American Community Survey (Bureau of the Census, 2010).

The fraction of the adult population with a four-year degree or higher level of education varies from more than one-half to less than a fifth, with the typical metropolitan area having an adult college attainment rate of about 34 percent. Boston has the highest rate of college attainment (54.3 percent). In San Jose, San Francisco and Washington, four-year college attainment rates exceed 48 percent. With college attainment rates of approximately 20 percent, the least well-educated large metropolitan areas are Riverside and Las Vegas.

1	Boston-Cambridge-Quincy, MA-NH	54.3%
2	Washington-Arlington-Alexandria, DC-VA-MD-WV	48.6%
3	San Francisco-Oakland-Fremont, CA	48.2%
4	San Jose-Sunnyvale-Santa Clara, CA	48.2%
5	New York-N. New Jersey-Long Island, NY-NJ-PA	44.4%
6	Minneapolis-St. Paul-Bloomington, MN-WI	43.2%
7	Raleigh-Cary, NC	42.5%
8	Pittsburgh, PA	40.5%
9	Chicago-Naperville-Joliet, IL-IN-WI	40.1%
10	Denver-Aurora-Broomfield, CO	40.0%
11	Hartford-West Hartford-East Hartford, CT	39.9%
12	Austin-Round Rock, TX	39.9%
13	Buffalo-Niagara Falls, NY	39.9%
14	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	39.2%
15	Baltimore-Towson, MD	39.2%
16	Seattle-Tacoma-Bellevue, WA	38.5%
17	Columbus, OH	38.0%
18	Rochester, NY	37.3%
19	Kansas City, MO-KS	36.6%
20	Richmond, VA	35.8%
21	Charlotte-Gastonia-Concord, NC-SC	35.8%
22	Milwaukee-Waukesha-West Allis, WI	35.4%
23	St. Louis, MO-IL	35.4%
24	Atlanta-Sandy Springs-Marietta, GA	34.4%
25	Portland-Vancouver-Beaverton, OR-WA	34.1%
26	San Diego-Carlsbad-San Marcos, CA	33.9%
27	Providence-New Bedford-Fall River, RI-MA	33.8%
28	Indianapolis-Carmel, IN	33.7%
29	Cincinnati-Middletown, OH-KY-IN	33.5%
30	Nashville-Davidson-Murfreesboro-Franklin, TN	33.3%
31	Los Angeles-Long Beach-Santa Ana, CA	33.1%
32	Cleveland-Elyria-Mentor, OH	32.9%
33	Birmingham-Hoover, AL	32.4%
34	Louisville-Jefferson County, KY-IN	31.5%
35	New Orleans-Metairie-Kenner, LA	31.1%
36	Dallas-Fort Worth-Arlington, TX	30.5%
37	Detroit-Warren-Livonia, MI	30.2%
38	Orlando-Kissimmee, FL	29.9%
39	Sacramento-Arden-Arcade-Roseville, CA	29.2%
40	Oklahoma City, OK	28.7%
41	Virginia Beach-Norfolk-Newport News, VA-NC	28.7%
42	Tampa-St. Petersburg-Clearwater, FL	28.6%
43	Miami-Fort Lauderdale-Pompano Beach, FL	27.7%
44	Salt Lake City, UT	27.6%
45	Houston-Sugar Land-Baytown, TX	27.6%
46	Jacksonville, FL	26.9%
47	Memphis, TN-MS-AR	26.6%
48	San Antonio, TX	25.7%
49	Phoenix-Mesa-Scottsdale, AZ	25.3%
50	Las Vegas-Paradise, NV	20.1%
51	Riverside-San Bernardino-Ontario, CA	18.1%

CREATIVE PROFESSIONALS

Percentage of workers employed as Mathematicians, Scientists, Artists, Engineers, Architects and Designers, 2010.

Creative professionals are persons who regularly have wide discretion in their jobs to use accumulated knowledge to develop, design and deliver new products and services. They are generally highly educated. As Richard Florida has argued, this group of workers plays a disproportionately important role in driving metropolitan economic growth (R. Florida, 2002)

To gauge the number of creative professionals in each metro area, we tabulate occupational data from the American Community Survey for the years 2008-2010. This measure counts the percentage of all workers in the metropolitan area who are employed in a series of creative professional occupations. These occupational categories are: mathematicians, architects, engineers, life and physical scientists, art and design workers and entertainers (Bureau of the Census, 2008-2010).

In the fifty-one largest metropolitan areas, about 3.9 percent of workers are creative professionals. San Jose has the highest levels of creative professional employment as a fraction of the workforce (7.6 percent). Memphis and Miami have the smallest fraction of creative professionals—less than three percent.

1	San Jose-Sunnyvale-Santa Clara, CA	7.6%
2	San Francisco-Oakland-Fremont, CA	5.6%
3	Washington-Arlington-Alexandria, DC-VA-MD-WV	5.5%
4	San Diego-Carlsbad-San Marcos, CA	5.3%
5	Detroit-Warren-Livonia, MI	5.3%
6	Seattle-Tacoma-Bellevue, WA	5.1%
7	Boston-Cambridge-Quincy, MA-NH	5.1%
8	Raleigh-Cary, NC	4.9%
9	Austin-Round Rock, TX	4.9%
10	Portland-Vancouver-Beaverton, OR-WA	4.6%
11	Denver-Aurora-Broomfield, CO	4.6%
12	Baltimore-Towson, MD	4.5%
13	Houston-Sugar Land-Baytown, TX	4.5%
14	Sacramento-Arden-Arcade-Roseville, CA	4.4%
15	Hartford-West Hartford-East Hartford, CT	4.2%
16	Minneapolis-St. Paul-Bloomington, MN-WI	4.0%
17	Rochester, NY	4.0%
18	Cincinnati-Middletown, OH-KY-IN	4.0%
19	Indianapolis-Carmel, IN	4.0%
20	Virginia Beach-Norfolk-Newport News, VA-NC	3.9%
21	Pittsburgh, PA	3.9%
22	Providence-New Bedford-Fall River, RI-MA	3.8%
23	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	3.8%
24	Los Angeles-Long Beach-Santa Ana, CA	3.7%
25	Orlando-Kissimmee, FL	3.7%
26	Milwaukee-Waukesha-West Allis, WI	3.6%
27	St. Louis, MO-IL	3.6%
28	New Orleans-Metairie-Kenner, LA	3.6%
29	Salt Lake City, UT	3.5%
30	Cleveland-Elyria-Mentor, OH	3.5%
31	Phoenix-Mesa-Scottsdale, AZ	3.5%
32	Atlanta-Sandy Springs-Marietta, GA	3.5%
33	Columbus, OH	3.5%
34	Charlotte-Gastonia-Concord, NC-SC	3.4%
35	Chicago-Naperville-Joliet, IL-IN-WI	3.4%
36	Buffalo-Niagara Falls, NY	3.3%
37	Kansas City, MO-KS	3.3%
38	Oklahoma City, OK	3.3%
39	Richmond, VA	3.3%
40	Dallas-Fort Worth-Arlington, TX	3.3%
41	Jacksonville, FL	3.2%
42	Tampa-St. Petersburg-Clearwater, FL	3.1%
43	New York-N. New Jersey-Long Island, NY-NJ-PA	3.0%
44	Nashville-Davidson-Murfreesboro-Franklin, TN	3.0%
45	Las Vegas-Paradise, NV	3.0%
46	Birmingham-Hoover, AL	2.9%
47	San Antonio, TX	2.8%
48	Louisville-Jefferson County, KY-IN	2.8%
49	Miami-Fort Lauderdale-Pompano Beach, FL	2.7%
50	Riverside-San Bernardino-Ontario, CA	2.6%
51	Memphis, TN-MS-AR	2.4%

YOUNG & RESTLESS

Percentage of the metropolitan population that is 25 to 34 years old and has completed at least a four-year college degree, 2010.

Young, well-educated workers are among the most mobile people in our nation--i.e. most likely to move across state lines. Their mobility makes them an important indicator of trends in workforce education and availability. Places with lots of well-educated young workers today are likely to have lots of well-educated workers in the workforce in the years ahead (Cortright, 2005). Our measure of the young and restless is the percentage of the metropolitan population that is 25 to 34 years old and has completed at least a four-year college degree. These data are drawn from our analysis the American Community Survey for the 2008 through 2010 (Bureau of the Census, 2008-2010).

College-educated 25 to 34 year olds make up about 5 percent of the workforce in the typical large metropolitan area--but there are significant variations across metropolitan areas. Washington, San Francisco, San Jose and Boston all have workforces composed of at least 7% college-educated young adults. A series of Sunbelt cities (Las Vegas, Riverside and San Antonio), have fewer than half as many college-educated young adults as a fraction of their population.

1	Washington-Arlington-Alexandria, DC-VA-MD-WV	7.6%
2	Boston-Cambridge-Quincy, MA-NH	7.3%
3	San Francisco-Oakland-Fremont, CA	7.3%
4	San Jose-Sunnyvale-Santa Clara, CA	7.2%
5	Austin-Round Rock, TX	6.7%
6	Raleigh-Cary, NC	6.6%
7	New York-N. New Jersey-Long Island, NY-NJ-PA	6.3%
8	Minneapolis-St. Paul-Bloomington, MN-WI	6.2%
9	Seattle-Tacoma-Bellevue, WA	5.9%
10	Denver-Aurora-Broomfield, CO	5.9%
11	Columbus, OH	5.8%
12	Chicago-Naperville-Joliet, IL-IN-WI	5.8%
13	Charlotte-Gastonia-Concord, NC-SC	5.4%
14	Baltimore-Towson, MD	5.4%
15	San Diego-Carlsbad-San Marcos, CA	5.3%
16	Portland-Vancouver-Beaverton, OR-WA	5.2%
17	Atlanta-Sandy Springs-Marietta, GA	5.2%
18	Kansas City, MO-KS	5.2%
19	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	5.1%
20	Nashville-Davidson-Murfreesboro-Franklin, TN	5.1%
21	Indianapolis-Carmel, IN	5.0%
22	Salt Lake City, UT	5.0%
23	Los Angeles-Long Beach-Santa Ana, CA	4.8%
24	Milwaukee-Waukesha-West Allis, WI	4.7%
25	St. Louis, MO-IL	4.7%
26	Pittsburgh, PA	4.6%
27	Hartford-West Hartford-East Hartford, CT	4.6%
28	Dallas-Fort Worth-Arlington, TX	4.5%
29	Richmond, VA	4.5%
30	Birmingham-Hoover, AL	4.4%
31	Rochester, NY	4.4%
32	Cincinnati-Middletown, OH-KY-IN	4.3%
33	Buffalo-Niagara Falls, NY	4.3%
34	New Orleans-Metairie-Kenner, LA	4.2%
35	Houston-Sugar Land-Baytown, TX	4.1%
36	Oklahoma City, OK	4.1%
37	Louisville-Jefferson County, KY-IN	4.1%
38	Orlando-Kissimmee, FL	4.0%
39	Sacramento-Arden-Arcade-Roseville, CA	4.0%
40	Providence-New Bedford-Fall River, RI-MA	4.0%
41	Cleveland-Elyria-Mentor, OH	3.9%
42	Phoenix-Mesa-Scottsdale, AZ	3.8%
43	Virginia Beach-Norfolk-Newport News, VA-NC	3.7%
44	Miami-Fort Lauderdale-Pompano Beach, FL	3.7%
45	Detroit-Warren-Livonia, MI	3.6%
46	Memphis, TN-MS-AR	3.6%
47	Jacksonville, FL	3.5%
48	San Antonio, TX	3.5%
49	Tampa-St. Petersburg-Clearwater, FL	3.4%
50	Las Vegas-Paradise, NV	3.2%
51	Riverside-San Bernardino-Ontario, CA	2.4%

TRADED SECTOR TALENT

Percentage of metropolitan workers that have a college degree and are employed in private sector businesses excluding health care and education, 2010.

Traded sector talent is college-educated workers who work in parts of the economy outside the local service and government sectors of the economy. It is defined as the percentage of all workers outside of health services, education and government who have a 4-year degree or higher level of education.

Local sectors of a region's economy are generally insulated from national and international competition, and they exist primarily to serve the needs of the region's residents. In many jobs, a college education is a requirement of employment for regulatory or other reasons--nearly all teachers, most medical professionals and a disproportionate share of government workers have four-year and higher degrees. Examining the share of workers with a college degree excluding those working for government, education and health care show the extent to which the remaining segments of the private economy make use of highly skilled workers. Using public use microsample data from the 2008 through 2010 American Community Surveys, we were able to identify the industry of employment of college-educated workers aged 25 and older (Ruggles et al., 2011).

The college attainment rate of workers in sectors outside health, education and government is about 29.5 percent in the typical large metropolitan area in the United States. The leading areas include Boston, Raleigh, San Francisco, San Jose and Washington, with at least two-fifths of all workers in these sectors having a college degree. The lowest levels of college attainment among traded sector workers are recorded in Las Vegas and Riverside, where college attainment for traded sector workers was 20 percent or less.

1	San Jose-Sunnyvale-Santa Clara, CA	46.6%
2	Washington-Arlington-Alexandria, DC-VA-MD-WV	44.7%
3	Boston-Cambridge-Quincy, MA-NH	44.4%
4	San Francisco-Oakland-Fremont, CA	40.8%
5	Raleigh-Cary, NC	40.2%
6	Austin-Round Rock, TX	38.0%
7	Denver-Aurora-Broomfield, CO	37.7%
8	New York-N. New Jersey-Long Island, NY-NJ-PA	37.3%
9	Minneapolis-St. Paul-Bloomington, MN-WI	37.1%
10	Seattle-Tacoma-Bellevue, WA	35.6%
11	Chicago-Naperville-Joliet, IL-IN-WI	33.7%
12	Hartford-West Hartford-East Hartford, CT	33.4%
13	Atlanta-Sandy Springs-Marietta, GA	33.3%
14	San Diego-Carlsbad-San Marcos, CA	33.2%
15	Columbus, OH	33.1%
16	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	32.4%
17	Kansas City, MO-KS	32.3%
18	Baltimore-Towson, MD	32.2%
19	Portland-Vancouver-Beaverton, OR-WA	31.7%
20	Birmingham-Hoover, AL	31.2%
21	Richmond, VA	30.9%
22	Rochester, NY	29.8%
23	Charlotte-Gastonia-Concord, NC-SC	29.8%
24	Los Angeles-Long Beach-Santa Ana, CA	29.7%
25	Cincinnati-Middletown, OH-KY-IN	29.7%
26	Dallas-Fort Worth-Arlington, TX	29.4%
27	Pittsburgh, PA	29.2%
28	St. Louis, MO-IL	28.9%
29	Indianapolis-Carmel, IN	28.8%
30	Milwaukee-Waukesha-West Allis, WI	28.2%
31	Nashville-Davidson-Murfreesboro-Franklin, TN	28.0%
32	Miami-Fort Lauderdale-Pompano Beach, FL	27.4%
33	Detroit-Warren-Livonia, MI	26.9%
34	Houston-Sugar Land-Baytown, TX	26.2%
35	Phoenix-Mesa-Scottsdale, AZ	26.2%
36	Buffalo-Niagara Falls, NY	26.2%
37	Orlando-Kissimmee, FL	25.8%
38	Sacramento-Arden-Arcade-Roseville, CA	25.7%
39	Cleveland-Elyria-Mentor, OH	25.5%
40	Salt Lake City, UT	25.4%
41	Louisville-Jefferson County, KY-IN	25.0%
42	Oklahoma City, OK	24.4%
43	Jacksonville, FL	24.4%
44	Tampa-St. Petersburg-Clearwater, FL	23.9%
45	Memphis, TN-MS-AR	23.6%
46	Providence-New Bedford-Fall River, RI-MA	23.4%
47	Virginia Beach-Norfolk-Newport News, VA-NC	23.3%
48	San Antonio, TX	22.0%
49	New Orleans-Metairie-Kenner, LA	21.6%
50	Las Vegas-Paradise, NV	18.5%
51	Riverside-San Bernardino-Ontario, CA	15.4%

INTERNATIONAL TALENT

Percentage of metropolitan population 25 years and older that have completed a four year college degree and were born outside the United States, 2010.

International talent is persons with a four-year degree who were born outside the United States. We compute the international talent ratio for each metropolitan area as the percentage of metropolitan population 25 years and older that have completed a college degree and who were born outside the United States. These data are gathered from the decennial census of population (Bureau of the Census, 2010).

In an increasingly global economy, international talent plays an especially important role. The ability to attract the best workers from around the world has historically been an important contributor to United States technological leadership and economic growth. Places that can attract talented workers from other nations can grow their economies more easily than those who draw only from a domestic pool of talent. Moreover, the greater diversity of experience of workers from outside the U.S. may help U.S. firms to be more competitive. This international talent measure picks up both immigration and assimilation: it includes persons who may have moved to the U.S. to get a college education or a job as young adults, as well as those who may have move to the U.S. as children and been educated entirely in the U.S. These data were computed based on data from the public use microsample of the American Community Survey for the years 2008 through 2010 (Ruggles et al., 2011).

Approximately 15 percent of the college-educated workers in the typical large metropolitan area were born outside the United States, but there are large variations among metropolitan areas. In San Jose, nearly half of all college educated workers were born abroad, as were more than 40 percent of those in Miami and about 35 percent of college educated workers in Los Angeles and San Francisco. Larger coastal economies tend to have higher rates of foreign-born talent than smaller more inland cities. The lowest rates foreign-born college educated workers are in Birmingham, Louisville, Kansas City, and Pittsburgh, where nearly 15 of every 16 college educated adults was born in the U.S.

1	San Jose-Sunnyvale-Santa Clara, CA	49.6%
2	Miami-Fort Lauderdale-Pompano Beach, FL	40.5%
3	Los Angeles-Long Beach-Santa Ana, CA	36.6%
4	San Francisco-Oakland-Fremont, CA	31.8%
5	New York-N. New Jersey-Long Island, NY-NJ-PA	30.7%
6	Riverside-San Bernardino-Ontario, CA	26.2%
7	Las Vegas-Paradise, NV	25.3%
8	San Diego-Carlsbad-San Marcos, CA	24.4%
9	Houston-Sugar Land-Baytown, TX	24.1%
10	Washington-Arlington-Alexandria, DC-VA-MD-WV	23.5%
11	Seattle-Tacoma-Bellevue, WA	20.0%
12	Orlando-Kissimmee, FL	19.5%
13	Chicago-Naperville-Joliet, IL-IN-WI	19.2%
14	Sacramento-Arden-Arcade-Roseville, CA	18.8%
15	Boston-Cambridge-Quincy, MA-NH	17.8%
16	Dallas-Fort Worth-Arlington, TX	16.9%
17	Atlanta-Sandy Springs-Marietta, GA	16.4%
18	Tampa-St. Petersburg-Clearwater, FL	15.3%
19	Detroit-Warren-Livonia, MI	14.8%
20	Baltimore-Towson, MD	14.4%
21	Austin-Round Rock, TX	14.1%
22	Hartford-West Hartford-East Hartford, CT	14.0%
23	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	13.8%
24	Phoenix-Mesa-Scottsdale, AZ	13.5%
25	Raleigh-Cary, NC	13.1%
26	Portland-Vancouver-Beaverton, OR-WA	12.8%
27	Jacksonville, FL	12.3%
28	San Antonio, TX	11.5%
29	Charlotte-Gastonia-Concord, NC-SC	11.5%
30	Salt Lake City, UT	10.6%
31	Columbus, OH	10.0%
32	Providence-New Bedford-Fall River, RI-MA	10.0%
33	Cleveland-Elyria-Mentor, OH	9.7%
34	Virginia Beach-Norfolk-Newport News, VA-NC	9.7%
35	Minneapolis-St. Paul-Bloomington, MN-WI	9.7%
36	Denver-Aurora-Broomfield, CO	9.7%
37	Rochester, NY	8.9%
38	Richmond, VA	8.8%
39	Buffalo-Niagara Falls, NY	8.6%
40	Milwaukee-Waukesha-West Allis, WI	8.2%
41	New Orleans-Metairie-Kenner, LA	8.1%
42	Oklahoma City, OK	8.1%
43	Memphis, TN-MS-AR	7.7%
44	St. Louis, MO-IL	7.5%
45	Cincinnati-Middletown, OH-KY-IN	7.5%
46	Nashville-Davidson-Murfreesboro-Franklin, TN	7.5%
47	Indianapolis-Carmel, IN	7.3%
48	Pittsburgh, PA	6.8%
49	Kansas City, MO-KS	6.5%
50	Louisville-Jefferson County, KY-IN	6.5%
51	Birmingham-Hoover, AL	5.6%

Your Distinctive City

One of the paradoxes of globalization is that as the globe has become more closely connected by commerce, communication and entertainment, the distinctive differences that distinguished one place from another have been muted by shared global commodities and multinational brands. Despite, or perhaps because of, the increasing sameness associated with globalization, the remaining local distinctiveness plays an increasingly important economic role. As Jane Jacobs said, “The greatest asset that a city or a city neighborhood can have is something that’s different from every other place” (Jacobs, 2006).

Local differences in tastes can give rise to new ideas and new products. The insatiable fascination of Japanese and Korean consumers for ever smaller, more capable electronic devices (cameras, phones, computers) gave rise to clever and innovative new products that eventually paved the way for worldwide distribution of products with similar capabilities (Porter, 1990).

The insights and original ideas behind many breakthrough business models emerged from practical experience gained in a local marketplace. In the 1960s, at a time when it was rare for most adults to exercise publicly, many people in Eugene, Oregon, took up the hobby of jogging and running. A small company formed to sell them imported sneakers. That company eventually became Nike, the world leader in shoes and sports apparel (Cortright, 2002).

There are many dimensions to distinctiveness, and because each community has its own special strengths and characteristics, no single measure or set of measures can capture this adequately. Effectively measuring a community’s distinctiveness requires different measures for each city. Every city should look to recognize the ways in which their city is “First, best, or only” in some category (Waits & Fulton, 2003). Recognizing this limitation, we’ve compiled a broad set of measures that begins to assess how much metropolitan areas differ from one another, and identify which urban areas differ most from U.S. averages in a series of key behaviors, including consumption, culture, food and Internet searches. These indicators signal the ways in which communities can begin to measure and validate their distinctiveness.

WEIRDNESS INDEX

Average of the extent to which the metropolitan area's ten most distinctive consumer behaviors exceed the national norm for each behavior, 2008.

Americans engage in a wide variety of pastimes and choose to spend their disposable income in a wide variety of ways. Some of these variations reflect pronounced regional and local preferences. Marketing research firms have assembled extensive databases that track the activities and spending patterns of consumers throughout the country. We have assembled a composite of this data on consumption behavior to measure the differences between the residents of a particular metropolitan area and those of the typical American.

SRDS, a market research firm, publishes a summary of market research for the nation's principal metropolitan areas that includes data on 74 different behaviors and activities from sports and fitness to hobbies and interests, appliance ownership and various aspects of home life (SRDS/Equifax, 2008). Using this data for each metropolitan area, we identify the ten behaviors that differ most from the national average for those behaviors, and examine the extent to which they differ. We summarize these differences from the national average by computing the variance, a statistical measure of how much each metro area differs from all others. Places that differ most from the average have a high variance. Those most similar to the nation as a whole have a low variance.

Consumption patterns varied most from the national average in San Jose, San Francisco, Salt Lake City and Denver, where residents were more likely to engage in a wide range of recreational and cultural activities that the typical metropolitan resident. No large metropolitan area's consumption patterns exactly mirrored those of the nation as a whole—every metropolitan area has some pastimes and products that make up a bigger share of its consumption—but a few metro areas are very close to the overall average. Five metropolitan areas in two states, Ohio and Missouri, have consumption patterns that vary least from the U.S. average.

1	San Jose-Sunnyvale-Santa Clara, CA	9.1
2	San Francisco-Oakland-Fremont, CA	7.3
3	Salt Lake City, UT	6.7
4	Denver-Aurora-Broomfield, CO	6.1
5	Miami-Fort Lauderdale-Pompano Beach, FL	6.0
6	San Diego-Carlsbad-San Marcos, CA	6.0
7	Los Angeles-Long Beach-Santa Ana, CA	5.1
8	Riverside-San Bernardino-Ontario, CA	5.1
9	New York-N. New Jersey-Long Island, NY-NJ-PA	5.0
10	Washington-Arlington-Alexandria, DC-VA-MD-WV	4.9
11	Atlanta-Sandy Springs-Marietta, GA	4.8
12	Seattle-Tacoma-Bellevue, WA	4.8
13	Minneapolis-St. Paul-Bloomington, MN-WI	4.6
14	Sacramento-Arden-Arcade-Roseville, CA	4.2
15	Austin-Round Rock, TX	4.1
16	Portland-Vancouver-Beaverton, OR-WA	4.1
17	Las Vegas-Paradise, NV	3.8
18	Dallas-Fort Worth-Arlington, TX	3.7
19	New Orleans-Metairie-Kenner, LA	3.6
20	Phoenix-Mesa-Scottsdale, AZ	3.6
21	Boston-Cambridge-Quincy, MA-NH	3.5
22	Nashville-Davidson-Murfreesboro-Franklin, TN	3.2
23	Oklahoma City, OK	3.2
24	Birmingham-Hoover, AL	3.1
25	Memphis, TN-MS-AR	2.9
26	Orlando-Kissimmee, FL	2.9
27	Buffalo-Niagara Falls, NY	2.8
28	Rochester, NY	2.8
29	Virginia Beach-Norfolk-Newport News, VA-NC	2.8
30	Jacksonville, FL	2.7
31	Houston-Sugar Land-Baytown, TX	2.6
32	Hartford-West Hartford-East Hartford, CT	2.5
33	Milwaukee-Waukesha-West Allis, WI	2.4
34	Tampa-St. Petersburg-Clearwater, FL	2.4
35	Raleigh-Cary, NC	2.2
36	Chicago-Naperville-Joliet, IL-IN-WI	2.2
37	Detroit-Warren-Livonia, MI	2.2
38	Charlotte-Gastonia-Concord, NC-SC	2.1
39	San Antonio, TX	2.1
40	Louisville-Jefferson County, KY-IN	2.0
41	Providence-New Bedford-Fall River, RI-MA	2.0
42	Baltimore-Towson, MD	1.9
43	Richmond, VA	1.9
44	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1.8
45	Pittsburgh, PA	1.6
46	Columbus, OH	1.5
47	Indianapolis-Carmel, IN	1.4
48	Cincinnati-Middletown, OH-KY-IN	1.2
49	Kansas City, MO-KS	1.2
50	Cleveland-Elyria-Mentor, OH	1.0
51	St. Louis, MO-IL	1.0

CULTURE/HDTV RATIO

Ratio of persons that reported attending a cultural event in the past year to the number of households with high definition televisions, 2007.

Individuals have substantial choice over the types of entertainment they enjoy. Residents of every metropolitan area have wide access to mass entertainment, like television, as well as a broad range of cultural events. One aspect of community distinctiveness is the extent to which people participate in local cultural activities (which vary enormously from place to place) as opposed to the passive consumption of electronic media (which offer the same set of choices everywhere).

We measure the relative consumption of mass entertainment and local culture by computing the "culture/HDTV" ratio: the percentage of persons reporting attendance at local cultural events divided by the percentage of households that had a high definition television receiver. These data are drawn from SRDS marketing data (SRDS/Equifax, 2008).

Overall, Americans are much more likely to report that they subscribe to cable television than attend cultural events, such as theatre, concerts and museums exhibits. The ratio of attendance to cultural events to cable subscriptions is highest in San Jose, San Francisco, Rochester and Miami. In each of these cities, about a third as many households have attended cultural events as subscribe to cable television. The metropolitan areas with the lowest patronage of cultural events relative to cable viewing are New Orleans, Las Vegas and Louisville. In these cities, the ratio of households attending cultural events to those subscribing to cable is less than one in four.

1	San Francisco-Oakland-Fremont, CA	129.8
2	San Jose-Sunnyvale-Santa Clara, CA	129.8
3	Rochester, NY	124.0
4	Miami-Fort Lauderdale-Pompano Beach, FL	123.4
5	New York-N. New Jersey-Long Island, NY-NJ-PA	114.4
6	Denver-Aurora-Broomfield, CO	110.8
7	Salt Lake City, UT	109.3
8	Portland-Vancouver-Beaverton, OR-WA	108.0
9	Austin-Round Rock, TX	108.0
10	Hartford-West Hartford-East Hartford, CT	107.3
11	Seattle-Tacoma-Bellevue, WA	106.0
12	Boston-Cambridge-Quincy, MA-NH	105.9
13	Raleigh-Cary, NC	105.9
14	Buffalo-Niagara Falls, NY	105.2
15	San Diego-Carlsbad-San Marcos, CA	101.4
16	Chicago-Naperville-Joliet, IL-IN-WI	101.1
17	Los Angeles-Long Beach-Santa Ana, CA	101.0
18	Washington-Arlington-Alexandria, DC-VA-MD-WV	99.5
19	Atlanta-Sandy Springs-Marietta, GA	98.4
20	Richmond, VA	97.8
21	Detroit-Warren-Livonia, MI	97.1
22	Providence-New Bedford-Fall River, RI-MA	96.6
23	Pittsburgh, PA	96.1
24	Cleveland-Elyria-Mentor, OH	93.9
25	Baltimore-Towson, MD	93.9
26	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	91.8
27	Minneapolis-St. Paul-Bloomington, MN-WI	91.7
28	San Antonio, TX	91.3
29	Virginia Beach-Norfolk-Newport News, VA-NC	90.0
30	Columbus, OH	89.5
31	Dallas-Fort Worth-Arlington, TX	89.4
32	Phoenix-Mesa-Scottsdale, AZ	88.8
33	Sacramento-Arden-Arcade-Roseville, CA	88.0
34	Jacksonville, FL	86.0
35	Memphis, TN-MS-AR	84.6
36	Oklahoma City, OK	83.8
37	Charlotte-Gastonia-Concord, NC-SC	83.7
38	Kansas City, MO-KS	82.2
39	Milwaukee-Waukesha-West Allis, WI	82.2
40	Houston-Sugar Land-Baytown, TX	81.9
41	Birmingham-Hoover, AL	81.3
42	Indianapolis-Carmel, IN	80.4
43	St. Louis, MO-IL	78.9
44	Tampa-St. Petersburg-Clearwater, FL	78.5
45	Riverside-San Bernardino-Ontario, CA	78.2
46	Orlando-Kissimmee, FL	76.9
47	Nashville-Davidson-Murfreesboro-Franklin, TN	76.4
48	Cincinnati-Middletown, OH-KY-IN	75.9
49	Las Vegas-Paradise, NV	73.4
50	Louisville-Jefferson County, KY-IN	72.3
51	New Orleans-Metairie-Kenner, LA	69.5

RESTAURANT VARIETY

Ratio of ethnic restaurants to fast food restaurants in the metropolitan area, 2009.

Americans spend nearly half of their food budgets on meals outside the home. Metropolitan areas offer a wide array of cuisines and restaurant choices. The typical large metropolitan area has thousands of dining options from which to choose, ranging from fast food and quick-service restaurants to seated and more formal dining. Because there are low entry and exit costs and very high turnover in the restaurant business, and because local demand is critical, the composition of the local restaurant industry is a good reflection of the demand of local customers.

We measure the variety of local restaurants by computing the ratio of ethnic restaurants to fast food restaurants in each of the nation's 51 largest metropolitan areas. Cities with the highest scores have the greatest variety of restaurants, and cities with low scores have less variety. Our data are drawn from business directories that list restaurants by format or cuisine. Restaurants self-select the categories in which they are listed (Yahoo, 2009). Our definition of ethnic restaurants excludes the three most common categories---Chinese, Italian and Mexican—and looks instead at all other cuisines. Our list of ethnic cuisines includes: Japanese, Thai, Vietnamese, Indian, French, Middle Eastern, Sushi, Greek, Spanish and Korean.

Most American metropolitan areas have more fast food restaurants than ethnic restaurants (excluding those serving Chinese, Italian and Mexican food). Our highest-ranking city, New York, has more than twice as many ethnic restaurants as fast food restaurants. Boston, Seattle and San Francisco also have more ethnic restaurants than fast food restaurants. The typical metropolitan area has two diverse ethnic restaurants for every five fast food restaurants. The lowest ratios of diverse ethnic restaurants are in Louisville, Memphis, and Birmingham, which have fewer than one diverse ethnic restaurant for every five fast food restaurants.

1	New York-N. New Jersey-Long Island, NY-NJ-PA	2.05
2	Boston-Cambridge-Quincy, MA-NH	1.65
3	San Francisco-Oakland-Fremont, CA	1.63
4	Seattle-Tacoma-Bellevue, WA	1.49
5	Los Angeles-Long Beach-Santa Ana, CA	0.99
6	San Jose-Sunnyvale-Santa Clara, CA	0.97
7	San Diego-Carlsbad-San Marcos, CA	0.95
8	Washington-Arlington-Alexandria, DC-VA-MD-WV	0.91
9	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	0.73
10	Portland-Vancouver-Beaverton, OR-WA	0.72
11	Chicago-Naperville-Joliet, IL-IN-WI	0.68
12	Las Vegas-Paradise, NV	0.67
13	Miami-Fort Lauderdale-Pompano Beach, FL	0.65
14	Denver-Aurora-Broomfield, CO	0.56
15	Tampa-St. Petersburg-Clearwater, FL	0.56
16	Salt Lake City, UT	0.53
17	New Orleans-Metairie-Kenner, LA	0.53
18	Hartford-West Hartford-East Hartford, CT	0.53
19	Rochester, NY	0.50
20	Providence-New Bedford-Fall River, RI-MA	0.49
21	Sacramento-Arden-Arcade-Roseville, CA	0.47
22	Orlando-Kissimmee, FL	0.47
23	Baltimore-Towson, MD	0.44
24	Raleigh-Cary, NC	0.43
25	Atlanta-Sandy Springs-Marietta, GA	0.42
26	Austin-Round Rock, TX	0.42
27	Phoenix-Mesa-Scottsdale, AZ	0.40
28	Buffalo-Niagara Falls, NY	0.39
29	Dallas-Fort Worth-Arlington, TX	0.38
30	Riverside-San Bernardino-Ontario, CA	0.37
31	Detroit-Warren-Livonia, MI	0.35
32	Richmond, VA	0.34
33	Houston-Sugar Land-Baytown, TX	0.32
34	Minneapolis-St. Paul-Bloomington, MN-WI	0.32
35	Nashville-Davidson-Murfreesboro-Franklin, TN	0.32
36	Virginia Beach-Norfolk-Newport News, VA-NC	0.31
37	San Antonio, TX	0.30
38	Charlotte-Gastonia-Concord, NC-SC	0.29
39	Pittsburgh, PA	0.28
40	Columbus, OH	0.26
41	Jacksonville, FL	0.24
42	Cleveland-Elyria-Mentor, OH	0.24
43	Milwaukee-Waukesha-West Allis, WI	0.23
44	St. Louis, MO-IL	0.21
45	Kansas City, MO-KS	0.20
46	Oklahoma City, OK	0.19
47	Cincinnati-Middletown, OH-KY-IN	0.18
48	Indianapolis-Carmel, IN	0.18
49	Louisville-Jefferson County, KY-IN	0.16
50	Memphis, TN-MS-AR	0.16
51	Birmingham-Hoover, AL	0.13

INTERNET SEARCH VARIETY

Variance of Google web-search patterns from national patterns for the most popular search terms, 2011.

The Internet is almost ubiquitously available to residents of the nation's metropolitan areas, but people in different areas have varying interests and search for different information on the web. In theory, everyone has access to exactly the same information on the Internet, but the variation in what people actually search for reveals some of the geographic variation in the pattern of interests among metropolitan areas.

Each year, Google analyzes web searches as part of its Zeitgeist project and identifies the "rising" search terms for that year. These are the searches that were unusual in prior years but grew extremely rapidly and became some of the most widely searched for terms during the past year (Google, 2012). For 2011, rising search terms included "Rebecca Black," "Steve Jobs," "Osama Bin Laden," "iPhone5," and "pinterest." We compute the degree of difference between each local market and the national market by calculating the variance in the local pattern of nine of the ten most popular search terms for 2011 from the average for all large metropolitan areas for those search terms. (We excluded "Hurricane Irene," which produced an expected pattern of searches in affected areas). These data are drawn from Google's geographic analysis of web searches, which relies on geographic information about the Internet address of the requesting computer. We normalize values for individual metropolitan areas to control for population and overall search volume differences between metropolitan areas. Metropolitan areas whose search pattern for these popular terms was most similar to the national search pattern have a low variance. Metropolitan areas whose search pattern varies most from the national pattern have high variances.

Birmingham, Memphis and Oklahoma City had search patterns for the Google Zeitgeist firms that differed the most from the pattern of search for large metropolitan area in the United States. At the other end of the spectrum, three metropolitan areas most closely track overall preferences: Chicago, Detroit and Sacramento.

1	Birmingham-Hoover, AL	1.78
2	Memphis, TN-MS-AR	1.71
3	Oklahoma City, OK	1.62
4	Rochester, NY	1.59
5	New Orleans-Metairie-Kenner, LA	1.46
6	Las Vegas-Paradise, NV	1.45
7	Providence-New Bedford-Fall River, RI-MA	1.44
8	Buffalo-Niagara Falls, NY	1.44
9	Milwaukee-Waukesha-West Allis, WI	1.44
10	Salt Lake City, UT	1.44
11	Richmond, VA	1.43
12	Virginia Beach-Norfolk-Newport News, VA-NC	1.42
13	Jacksonville, FL	1.42
14	Louisville-Jefferson County, KY-IN	1.41
15	Orlando-Kissimmee, FL	1.07
16	San Francisco-Oakland-Fremont, CA	0.81
17	San Jose-Sunnyvale-Santa Clara, CA	0.81
18	Dallas-Fort Worth-Arlington, TX	0.71
19	Tampa-St. Petersburg-Clearwater, FL	0.67
20	Nashville-Davidson-Murfreesboro-Franklin, TN	0.67
21	Miami-Fort Lauderdale-Pompano Beach, FL	0.65
22	Portland-Vancouver-Beaverton, OR-WA	0.59
23	New York-N. New Jersey-Long Island, NY-NJ-PA	0.57
24	Columbus, OH	0.56
25	Charlotte-Gastonia-Concord, NC-SC	0.55
26	Minneapolis-St. Paul-Bloomington, MN-WI	0.54
27	Austin-Round Rock, TX	0.52
28	Atlanta-Sandy Springs-Marietta, GA	0.51
29	Raleigh-Cary, NC	0.50
30	Cincinnati-Middletown, OH-KY-IN	0.49
31	Hartford-West Hartford-East Hartford, CT	0.48
32	Kansas City, MO-KS	0.47
33	San Diego-Carlsbad-San Marcos, CA	0.47
34	Los Angeles-Long Beach-Santa Ana, CA	0.46
35	Riverside-San Bernardino-Ontario, CA	0.46
36	Boston-Cambridge-Quincy, MA-NH	0.45
37	Cleveland-Elyria-Mentor, OH	0.44
38	St. Louis, MO-IL	0.44
39	Denver-Aurora-Broomfield, CO	0.43
40	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	0.43
41	Washington-Arlington-Alexandria, DC-VA-MD-WV	0.42
42	Phoenix-Mesa-Scottsdale, AZ	0.39
43	Baltimore-Towson, MD	0.36
44	Houston-Sugar Land-Baytown, TX	0.35
45	Seattle-Tacoma-Bellevue, WA	0.35
46	Sacramento-Arden-Arcade-Roseville, CA	0.33
47	Indianapolis-Carmel, IN	0.31
48	San Antonio, TX	0.29
49	Pittsburgh, PA	0.27
50	Detroit-Warren-Livonia, MI	0.23
51	Chicago-Naperville-Joliet, IL-IN-WI	0.21

WHAT DO I DO IF MY CITY RANKS LOW?

It has become fashionable to rate and rank cities as most livable or best for business or best for some activity or demographic group. High rankings are a source of celebration and marketing. Low rankings tend to be disputed or ignored.

What should I do if my city ranks low—or lower than I would like—on one of these measures?

First, its important to note that we have not made any attempt to add these various measures together to generate some overall ranking of vitality. Such combinations, in our opinion, are arbitrary and frequently obscure useful information rather than reveal insights. It is natural that some cities will rank high on some indicators and lower on others.

We present City Vitals as a diagnostic and a benchmarking tool cities can use to chart their current strengths and weaknesses and look for ways to improve their performance.

While we have included data for all of the U.S. metropolitan areas with a million or more population, we recognize there is a huge amount of variation in the size and characteristics among these metropolitan areas. For many cities, it makes sense to compare or rank one's performance against a select group of peer regions. Cities ought to look for peers that have a similar size, that are located in the same geographic region or have a similar economic base. Such focused comparisons are a better indication of relative performance and opportunities for change.

A second lesson is that any city, regardless of its current ranking or circumstances, can generate real benefit from improving its performance in the four areas identified by City Vitals. In our City Dividends report, for example, we computed how much income a typical metropolitan area could gain if it increased its overall four-year college attainment rate by just one percentage point. The gains, even for the lower ranking cities, are measured in the hundreds of millions of dollars per year (Cortright, 2008).

As the fourth element of City Vitals makes clear, distinctiveness is a central part of urban success. Every city has its own unique challenges and opportunities. The art of urban economic strategy is developing a city's unique assets.

CORE VITALITY

The measures presented in this report all describe the overall performance of a metropolitan area. But the city is the center and focal point of a metropolitan are, and we know that urban form is critical to a healthy, well-functioning metropolitan area. Vibrant metropolitan areas have strong centers that are hubs of economic, social and cultural activity. Strong urban cores attract and develop talent, make businesses more productive, foster creativity and innovation, are greener and more sustainable and provide more opportunities for all of its residents. And as market demand for vibrant urban neighborhoods continues to grow, strong core cities will be critical to helping achieve key national objectives.

A vital urban core reinforces the success of a regional economy. Cities with dense, economically diverse, close-in urban neighborhoods play key roles in assimilating immigrants, making transit work better, providing affordable housing, promoting economic opportunity, strengthening civic participation and reducing the emission of greenhouse gases. A weak or unattractive core is a liability to the entire metropolitan area.

Consider the key factor of education. The educational attainment of the urban core plays a disproportionate role in determining the educational attainment of the metropolitan area. Richard Florida's analysis shows those metropolitan areas with the biggest education differentials in favor of the urban core have the highest overall levels of metropolitan educational attainment. Conversely, those areas with the weakest cores, relative to their suburbs, have the lowest levels of metropolitan educational attainment (Richard Florida, 2010).

Further, our analysis of variations in urban travel patterns shows that more compact metropolitan areas with better transit service enable their citizens to drive fewer miles each day, saving billions of dollars in fuel and automobile expense. Our City Dividends report shows how much each metropolitan area could gain by reducing travel by just one mile per person per day (Cortright, 2008). Despite the decline in real estate markets nationally, close-in urban neighborhoods have held more of their value, as we examined in Driven to the Brink (Cortright, 2008, April) and consumers place a higher value on walkable neighborhoods (Cortright, 2009).

In short, metropolitan areas are not formless blobs. Having a vital urban core is essential to the effective functioning of metropolitan areas. The geographic shape of a metropolitan economy matters greatly to its success and efficiency. A sprawling "pancake" metropolitan area imposes high costs on its citizens for infrastructure and travel costs and produces greater economic segregation. A "donut" metropolitan area—one with a weak center—can't achieve the critical mass needed to drive economic success.

Core Vitality

To assess the vitality of the urban core in each of the nation's large metropolitan areas, we developed a series of three measures indicating the relative performance of the core in income, educational attainment and poverty. Municipal political boundaries are a poor choice for making comparisons across metropolitan areas because central cities vary substantially across metropolitan areas. Some central municipalities account for a majority of their metropolitan area's residents and include some areas that would be commonly thought of as suburban, while central municipalities are less than 20 percent of a region's population. Consequently, following an approach developed by Ed Glaeser, we define the urban core as the area within three miles of the center of the central business district (Glaeser, Kahn, & Chu, 2001). For each of our indicators, we compute the absolute and relative level of central city performance. Absolute measures reflect per capita income, educational attainment and poverty in the urban core. Relative measures show how the core compares on each of these three indicators relative to the entire metropolitan area.

All of our data for estimating core vitality are taken from the American Community Survey's multi-year estimates for the period 2005-2009. These data are available at the Census Tract level, and we used Geographic Information System (GIS) software to estimate values inside the three-mile ring drawn around the center of the central business district of the most populous city in each metropolitan area. Because the data are drawn from surveys fielded over five years, they do not reflect the values for any particular year, but rather represent the average level of each value over the five-year period. As a result, they are not directly comparable to the 2010 one-year and 2008 to 2010 three-year estimates used in constructing other City Vitals indicators.

PER CAPITA INCOME

Per capita income measures the average economic well being of a metro area's residents. Per capita incomes in urban cores vary from less than $14,000 per capita in San Antonio to more than $72,000 in New York. In about two-thirds of the large metropolitan areas, per capita incomes in the urban core are less than the average for the entire metropolitan area. The median metropolitan area has a core area income about 24 percent lower than in the rest of the metropolitan area. Several metropolitan areas have relatively high levels of per capita income in the core. The core of New York (centered on Manhattan) has average incomes more than double those of the entire metropolitan area. Chicago's core has incomes nearly double those of the region. Fourteen other metropolitan areas—led by San Francisco, Seattle and Portland—have higher average incomes in the urban core than the rest of the metropolitan area. Los Angeles, Las Vegas and San Antonio have the weakest urban cores, with average incomes less than 60 percent of the metro level.

1	New York-N. New Jersey-Long Island, NY-NJ-PA	72,953
2	Chicago-Naperville-Joliet, IL-IN-WI	59,785
3	San Francisco-Oakland-Fremont, CA	52,621
4	Washington-Arlington-Alexandria, DC-VA-MD-WV	50,661
5	Seattle-Tacoma-Bellevue, WA	45,843
6	Portland-Vancouver-Beaverton, OR-WA	37,437
7	Charlotte-Gastonia-Concord, NC-SC	37,409
8	Boston-Cambridge-Quincy, MA-NH	37,383
9	Atlanta-Sandy Springs-Marietta, GA	35,753
10	Denver-Aurora-Broomfield, CO	35,672
11	Houston-Sugar Land-Baytown, TX	34,352
12	San Diego-Carlsbad-San Marcos, CA	32,948
13	Dallas-Fort Worth-Arlington, TX	31,897
14	Orlando-Kissimmee, FL	29,995
15	Sacramento-Arden-Arcade-Roseville, CA	29,907
16	Tampa-St. Petersburg-Clearwater, FL	29,803
17	Austin-Round Rock, TX	28,531
18	San Jose-Sunnyvale-Santa Clara, CA	28,329
19	Minneapolis-St. Paul-Bloomington, MN-WI	24,622
20	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	24,473
21	Birmingham-Hoover, AL	23,769
22	Salt Lake City, UT	23,348
23	Baltimore-Towson, MD	22,312
24	Memphis, TN-MS-AR	22,160
25	Raleigh-Cary, NC	22,147
26	Miami-Fort Lauderdale-Pompano Beach, FL	22,141
27	New Orleans-Metairie-Kenner, LA	22,043
28	Cincinnati-Middletown, OH-KY-IN	21,793
29	Richmond, VA	21,660
30	Providence-New Bedford-Fall River, RI-MA	21,554
31	Columbus, OH	21,263
32	Pittsburgh, PA	21,262
33	Hartford-West Hartford-East Hartford, CT	20,938
34	Virginia Beach-Norfolk-Newport News, VA-NC	20,787
35	Riverside-San Bernardino-Ontario, CA	20,231
36	Jacksonville, FL	19,389
37	Nashville-Davidson-Murfreesboro-Franklin, TN	19,219
38	St. Louis, MO-IL	18,956
39	Buffalo-Niagara Falls, NY	18,942
40	Rochester, NY	18,241
41	Louisville-Jefferson County, KY-IN	17,947
42	Indianapolis-Carmel, IN	17,831
43	Kansas City, MO-KS	17,588
44	Milwaukee-Waukesha-West Allis, WI	17,553
45	Detroit-Warren-Livonia, MI	16,652
46	Phoenix-Mesa-Scottsdale, AZ	16,228
47	Las Vegas-Paradise, NV	15,761
48	Oklahoma City, OK	15,626
49	Cleveland-Elyria-Mentor, OH	15,540
50	Los Angeles-Long Beach-Santa Ana, CA	14,296
51	San Antonio, TX	13,728

COLLEGE ATTAINMENT

The four-year college attainment rate is our key measure of talent. This indicator counts the fraction of the adult population, aged 25 and older, that has completed at least a four-year college degree. There is wide variation in the relative educational attainment of urban cores among the 51 largest metropolitan areas. Fewer than nine percent of urban core residents in Las Vegas have completed a four-year degree, compared to more than 65 percent of those living in New York's urban core. Although the median metropolitan area has a college attainment rate that is about two percentage points lower in the urban core than in the overall metropolitan area, two-fifths of all metropolitan areas have higher education attainment in close-in urban neighborhoods. Again, New York and Chicago are the leaders (85 percent and 98 percent higher in the urban core, respectively). Portland, Seattle and Atlanta also have substantially higher levels of educational attainment in the urban core than in the remainder of the region. Several cities have relatively very low levels of educational attainment in the urban core. Las Vegas and San Antonio have college attainment rates in the urban core that are, on average, less than half those in the greater metro area.

1	New York-N. New Jersey-Long Island, NY-NJ-PA	65.2%
2	Chicago-Naperville-Joliet, IL-IN-WI	64.9%
3	Washington-Arlington-Alexandria, DC-VA-MD-WV	61.5%
4	San Francisco-Oakland-Fremont, CA	57.7%
5	Portland-Vancouver-Beaverton, OR-WA	56.6%
6	Seattle-Tacoma-Bellevue, WA	55.9%
7	Boston-Cambridge-Quincy, MA-NH	50.5%
8	Atlanta-Sandy Springs-Marietta, GA	50.4%
9	Austin-Round Rock, TX	48.6%
10	Denver-Aurora-Broomfield, CO	46.7%
11	Charlotte-Gastonia-Concord, NC-SC	40.9%
12	Minneapolis-St. Paul-Bloomington, MN-WI	39.0%
13	Houston-Sugar Land-Baytown, TX	38.4%
14	San Diego-Carlsbad-San Marcos, CA	37.5%
15	Raleigh-Cary, NC	36.7%
16	Salt Lake City, UT	35.8%
17	Sacramento-Arden-Arcade-Roseville, CA	34.4%
18	Orlando-Kissimmee, FL	33.9%
19	Dallas-Fort Worth-Arlington, TX	33.2%
20	Tampa-St. Petersburg-Clearwater, FL	33.1%
21	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	32.2%
22	Columbus, OH	31.7%
23	Birmingham-Hoover, AL	29.6%
24	Nashville-Davidson-Murfreesboro-Franklin, TN	29.1%
25	San Jose-Sunnyvale-Santa Clara, CA	27.5%
26	New Orleans-Metairie-Kenner, LA	27.4%
27	Providence-New Bedford-Fall River, RI-MA	27.4%
28	Richmond, VA	27.3%
29	Cincinnati-Middletown, OH-KY-IN	27.3%
30	Memphis, TN-MS-AR	27.1%
31	Pittsburgh, PA	26.3%
32	Rochester, NY	25.9%
33	St. Louis, MO-IL	25.7%
34	Baltimore-Towson, MD	25.3%
35	Miami-Fort Lauderdale-Pompano Beach, FL	24.3%
36	Milwaukee-Waukesha-West Allis, WI	24.1%
37	Buffalo-Niagara Falls, NY	23.6%
38	Virginia Beach-Norfolk-Newport News, VA-NC	22.4%
39	Hartford-West Hartford-East Hartford, CT	21.7%
40	Detroit-Warren-Livonia, MI	21.3%
41	Riverside-San Bernardino-Ontario, CA	21.0%
42	Louisville-Jefferson County, KY-IN	20.2%
43	Kansas City, MO-KS	19.1%
44	Indianapolis-Carmel, IN	18.3%
45	Cleveland-Elyria-Mentor, OH	17.5%
46	Phoenix-Mesa-Scottsdale, AZ	16.6%
47	Jacksonville, FL	16.4%
48	Oklahoma City, OK	15.2%
49	Los Angeles-Long Beach-Santa Ana, CA	15.2%
50	San Antonio, TX	9.6%
51	Las Vegas-Paradise, NV	8.8%

POVERTY

The poverty rate measures the fraction of the population living in households with annual incomes below the poverty line and indicates relative economic distress. The poverty rate in urban core neighborhoods varies from less than 12 percent in New York to 42 percent in the urban core of Cleveland. Strikingly, in every metropolitan area except one—New York—the poverty rate in these close-in neighborhoods is higher than the metropolitan average. In the typical metropolitan area, the poverty rate in the urban core is more than double the metropolitan average. Chicago, Portland and Sacramento have among the least elevated relative poverty levels in their urban cores with rates less than 50 percent higher than for the metropolitan area. Cleveland and Minneapolis have core neighborhood poverty rates that are more than three times the average for their respective metropolitan areas, although in the case of Minneapolis, this is by comparison to a metro poverty level that is the third lowest in the nation.

1	Cleveland-Elyria-Mentor, OH	42.4%
2	Detroit-Warren-Livonia, MI	42.0%
3	Memphis, TN-MS-AR	37.6%
4	Phoenix-Mesa-Scottsdale, AZ	36.7%
5	Columbus, OH	35.7%
6	Milwaukee-Waukesha-West Allis, WI	35.5%
7	Buffalo-Niagara Falls, NY	35.0%
8	Indianapolis-Carmel, IN	34.0%
9	Nashville-Davidson-Murfreesboro-Franklin, TN	33.7%
10	Louisville-Jefferson County, KY-IN	33.1%
11	Los Angeles-Long Beach-Santa Ana, CA	33.0%
12	St. Louis, MO-IL	32.9%
13	Oklahoma City, OK	32.0%
14	Kansas City, MO-KS	31.8%
15	San Antonio, TX	31.7%
16	Birmingham-Hoover, AL	30.7%
17	Rochester, NY	30.2%
18	Cincinnati-Middletown, OH-KY-IN	30.1%
19	Minneapolis-St. Paul-Bloomington, MN-WI	29.8%
20	Jacksonville, FL	29.1%
21	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	29.0%
22	New Orleans-Metairie-Kenner, LA	28.0%
23	Austin-Round Rock, TX	28.0%
24	Baltimore-Towson, MD	27.2%
25	Richmond, VA	27.2%
26	Hartford-West Hartford-East Hartford, CT	26.7%
27	Miami-Fort Lauderdale-Pompano Beach, FL	26.7%
28	Pittsburgh, PA	26.1%
29	Dallas-Fort Worth-Arlington, TX	26.0%
30	Raleigh-Cary, NC	25.9%
31	Virginia Beach-Norfolk-Newport News, VA-NC	25.5%
32	Las Vegas-Paradise, NV	25.0%
33	Atlanta-Sandy Springs-Marietta, GA	24.9%
34	Houston-Sugar Land-Baytown, TX	24.5%
35	Tampa-St. Petersburg-Clearwater, FL	23.2%
36	Providence-New Bedford-Fall River, RI-MA	22.4%
37	Charlotte-Gastonia-Concord, NC-SC	22.0%
38	Salt Lake City, UT	20.2%
39	Boston-Cambridge-Quincy, MA-NH	19.9%
40	Denver-Aurora-Broomfield, CO	19.8%
41	San Diego-Carlsbad-San Marcos, CA	19.3%
42	San Jose-Sunnyvale-Santa Clara, CA	17.7%
43	Riverside-San Bernardino-Ontario, CA	17.5%
44	Orlando-Kissimmee, FL	17.0%
45	Portland-Vancouver-Beaverton, OR-WA	16.9%
46	Chicago-Naperville-Joliet, IL-IN-WI	16.3%
47	Sacramento-Arden-Arcade-Roseville, CA	15.7%
48	Washington-Arlington-Alexandria, DC-VA-MD-WV	15.3%
49	Seattle-Tacoma-Bellevue, WA	14.9%
50	San Francisco-Oakland-Fremont, CA	12.8%
51	New York-N. New Jersey-Long Island, NY-NJ-PA	11.9%

Metropolitan Performance

Ultimately, the four dimensions of success we have outlined in the City Vitals--connections, innovation, talent and your distinctiveness—are reflected in the measurable performance of metropolitan economies. In CEOs for Cities work with urban leaders, there are several key indicators frequently used to assess metropolitan performance. For comparative purposes, we present data on five common performance measures: population, per capita income, poverty rates, vehicle miles traveled and greenhouse gas emissions.

POPULATION, 2010

City Vitals examines the characteristics and performance of the nation's largest metropolitan areas, those with a population of one million or more. For reference, we've listed the 2010 population of each metropolitan area as reported by the 2010 Decennial Census. Several indicators use the population of the metropolitan area as the basis for normalizing data to enable easy comparisons. In 2010, 51 U.S. metropolitan areas had a population of one million or more.

1	New York-N. New Jersey-Long Island, NY-NJ-PA	18,897,109
2	Los Angeles-Long Beach-Santa Ana, CA	12,828,837
3	Chicago-Naperville-Joliet, IL-IN-WI	9,461,105
4	Dallas-Fort Worth-Arlington, TX	6,371,773
5	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	5,965,343
6	Houston-Sugar Land-Baytown, TX	5,946,800
7	Washington-Arlington-Alexandria, DC-VA-MD-WV	5,582,170
8	Miami-Fort Lauderdale-Pompano Beach, FL	5,564,635
9	Atlanta-Sandy Springs-Marietta, GA	5,268,860
10	Boston-Cambridge-Quincy, MA-NH	4,552,402
11	San Francisco-Oakland-Fremont, CA	4,335,391
12	Detroit-Warren-Livonia, MI	4,296,250
13	Riverside-San Bernardino-Ontario, CA	4,224,851
14	Phoenix-Mesa-Scottsdale, AZ	4,192,887
15	Seattle-Tacoma-Bellevue, WA	3,439,809
16	Minneapolis-St. Paul-Bloomington, MN-WI	3,279,833
17	San Diego-Carlsbad-San Marcos, CA	3,095,313
18	St. Louis, MO-IL	2,812,896
19	Tampa-St. Petersburg-Clearwater, FL	2,783,243
20	Baltimore-Towson, MD	2,710,489
21	Denver-Aurora-Broomfield, CO	2,543,482
22	Pittsburgh, PA	2,356,285
23	Portland-Vancouver-Beaverton, OR-WA	2,226,009
24	Sacramento-Arden-Arcade-Roseville, CA	2,149,127
25	San Antonio, TX	2,142,508
26	Orlando-Kissimmee, FL	2,134,411
27	Cincinnati-Middletown, OH-KY-IN	2,130,151
28	Cleveland-Elyria-Mentor, OH	2,077,240
29	Kansas City, MO-KS	2,035,334
30	Las Vegas-Paradise, NV	1,951,269
31	San Jose-Sunnyvale-Santa Clara, CA	1,836,911
32	Columbus, OH	1,836,536
33	Charlotte-Gastonia-Concord, NC-SC	1,758,038
34	Indianapolis-Carmel, IN	1,756,241
35	Austin-Round Rock, TX	1,716,289
36	Virginia Beach-Norfolk-Newport News, VA-NC	1,671,683
37	Providence-New Bedford-Fall River, RI-MA	1,600,852
38	Nashville-Davidson-Murfreesboro-Franklin, TN	1,589,934
39	Milwaukee-Waukesha-West Allis, WI	1,555,908
40	Jacksonville, FL	1,345,596
41	Memphis, TN-MS-AR	1,316,100
42	Louisville-Jefferson County, KY-IN	1,283,566
43	Richmond, VA	1,258,251
44	Oklahoma City, OK	1,252,987
45	Hartford-West Hartford-East Hartford, CT	1,212,381
46	New Orleans-Metairie-Kenner, LA	1,167,764
47	Buffalo-Niagara Falls, NY	1,135,509
48	Raleigh-Cary, NC	1,130,490
49	Birmingham-Hoover, AL	1,128,047
50	Salt Lake City, UT	1,124,197
51	Rochester, NY	1,054,323

PER CAPITA INCOME, 2010

Per capita income measures the average economic well-being of a metro area's residents. Per capita income is computed by dividing a metro area's total personal income (all income received by individuals) by the total population. Per capita income data is collected as part of the decennial census. The most recent data on per capita income for metropolitan areas is available from the Bureau of Economic Analysis (Bureau of Economic Analysis, 2011)

In 2010, the average per capita income for the 51 largest U.S. metropolitan areas was approximately $43,000. The highest level of per capita income was about $60,000 in San Francisco. Other metropolitan areas with per capita incomes of greater than $50,000 were Boston, San Jose, Seattle, New York, Hartford and Washington. Per capita incomes were lowest in Riverside, Orlando and Las Vegas.

1	San Francisco-Oakland-Fremont, CA	61,348
2	San Jose-Sunnyvale-Santa Clara, CA	58,947
3	Washington-Arlington-Alexandria, DC-VA-MD-WV	57,959
4	Boston-Cambridge-Quincy, MA-NH	55,677
5	New York-N. New Jersey-Long Island, NY-NJ-PA	54,407
6	Hartford-West Hartford-East Hartford, CT	51,315
7	Seattle-Tacoma-Bellevue, WA	51,190
8	Baltimore-Towson, MD	49,285
9	Denver-Aurora-Broomfield, CO	47,927
10	Houston-Sugar Land-Baytown, TX	47,394
11	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	47,192
12	Minneapolis-St. Paul-Bloomington, MN-WI	47,100
13	San Diego-Carlsbad-San Marcos, CA	46,234
14	Chicago-Naperville-Joliet, IL-IN-WI	46,021
15	New Orleans-Metairie-Kenner, LA	44,944
16	Los Angeles-Long Beach-Santa Ana, CA	44,070
17	Pittsburgh, PA	43,729
18	Milwaukee-Waukesha-West Allis, WI	43,555
19	Dallas-Fort Worth-Arlington, TX	43,554
20	Miami-Fort Lauderdale-Pompano Beach, FL	43,539
21	Providence-New Bedford-Fall River, RI-MA	41,942
22	Kansas City, MO-KS	41,869
23	St. Louis, MO-IL	41,744
24	Richmond, VA	41,511
25	Cleveland-Elyria-Mentor, OH	40,849
26	Portland-Vancouver-Beaverton, OR-WA	40,725
27	Sacramento-Arden-Arcade-Roseville, CA	40,455
28	Virginia Beach-Norfolk-Newport News, VA-NC	40,362
29	Nashville-Davidson-Murfreesboro-Franklin, TN	40,108
30	Jacksonville, FL	39,947
31	Cincinnati-Middletown, OH-KY-IN	39,721
32	Detroit-Warren-Livonia, MI	39,713
33	Atlanta-Sandy Springs-Marietta, GA	39,498
34	Rochester, NY	39,459
35	Indianapolis-Carmel, IN	39,418
36	Birmingham-Hoover, AL	39,400
37	Charlotte-Gastonia-Concord, NC-SC	39,376
38	Raleigh-Cary, NC	39,334
39	Oklahoma City, OK	39,288
40	Austin-Round Rock, TX	39,001
41	Salt Lake City, UT	38,778
42	Memphis, TN-MS-AR	38,457
43	Columbus, OH	38,447
44	Buffalo-Niagara Falls, NY	38,249
45	Louisville-Jefferson County, KY-IN	38,150
46	Tampa-St. Petersburg-Clearwater, FL	37,940
47	San Antonio, TX	36,600
48	Phoenix-Mesa-Scottsdale, AZ	36,445
49	Las Vegas-Paradise, NV	35,524
50	Orlando-Kissimmee, FL	35,274
51	Riverside-San Bernardino-Ontario, CA	29,766

POVERTY, 2010

The poverty level is a useful, if imperfect, indicator of the extent to which metropolitan areas provide for the least well off. Using data collected as part of the annual American Community Survey, the Census Bureau estimates the fraction of the population of each metropolitan area that lives in households in which total household income is less than the federally established poverty level for that year (Bureau of the Census, 2011). Poverty thresholds vary based on the size and composition of each household. For 2010, the poverty threshold for a family of four consisting of two adults and two children under 18 was $22,113 per year.

The typical large metropolitan area has a poverty rate of 14.6 percent. For forty of the largest 51 metropolitan areas, the 2010 poverty rate was between 12.2 and 15.9 percent. Memphis had the highest poverty rate at 19 percent. Washington had the nation's lowest poverty rate (8.4 percent) followed by Boston and Hartford, which had poverty rates of slightly more than 10 percent.

1	Memphis, TN-MS-AR	19.1%
2	New Orleans-Metairie-Kenner, LA	17.4%
3	Miami-Fort Lauderdale-Pompano Beach, FL	17.1%
4	Riverside-San Bernardino-Ontario, CA	17.1%
5	Birmingham-Hoover, AL	17.0%
6	Detroit-Warren-Livonia, MI	16.6%
7	Houston-Sugar Land-Baytown, TX	16.5%
8	Los Angeles-Long Beach-Santa Ana, CA	16.3%
9	Phoenix-Mesa-Scottsdale, AZ	16.3%
10	San Antonio, TX	16.3%
11	Austin-Round Rock, TX	15.9%
12	Oklahoma City, OK	15.9%
13	Columbus, OH	15.7%
14	Milwaukee-Waukesha-West Allis, WI	15.5%
15	Nashville-Davidson-Murfreesboro-Franklin, TN	15.4%
16	Tampa-St. Petersburg-Clearwater, FL	15.4%
17	Jacksonville, FL	15.3%
18	Louisville-Jefferson County, KY-IN	15.3%
19	Cleveland-Elyria-Mentor, OH	15.1%
20	Las Vegas-Paradise, NV	15.1%
21	Sacramento-Arden-Arcade-Roseville, CA	15.1%
22	Atlanta-Sandy Springs-Marietta, GA	14.8%
23	Indianapolis-Carmel, IN	14.8%
24	San Diego-Carlsbad-San Marcos, CA	14.8%
25	Orlando-Kissimmee, FL	14.7%
26	Dallas-Fort Worth-Arlington, TX	14.6%
27	Charlotte-Gastonia-Concord, NC-SC	14.5%
28	Buffalo-Niagara Falls, NY	14.4%
29	Rochester, NY	14.2%
30	Cincinnati-Middletown, OH-KY-IN	14.0%
31	New York-N. New Jersey-Long Island, NY-NJ-PA	13.8%
32	Providence-New Bedford-Fall River, RI-MA	13.7%
33	Chicago-Naperville-Joliet, IL-IN-WI	13.6%
34	Portland-Vancouver-Beaverton, OR-WA	13.4%
35	St. Louis, MO-IL	13.3%
36	Salt Lake City, UT	13.1%
37	Raleigh-Cary, NC	12.9%
38	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	12.7%
39	Denver-Aurora-Broomfield, CO	12.5%
40	Kansas City, MO-KS	12.4%
41	Pittsburgh, PA	12.2%
42	Seattle-Tacoma-Bellevue, WA	11.7%
43	Richmond, VA	11.6%
44	Baltimore-Towson, MD	11.0%
45	Minneapolis-St. Paul-Bloomington, MN-WI	10.9%
46	San Francisco-Oakland-Fremont, CA	10.9%
47	San Jose-Sunnyvale-Santa Clara, CA	10.6%
48	Virginia Beach-Norfolk-Newport News, VA-NC	10.6%
49	Boston-Cambridge-Quincy, MA-NH	10.3%
50	Hartford-West Hartford-East Hartford, CT	10.1%
51	Washington-Arlington-Alexandria, DC-VA-MD-WV	8.4%

VEHICLE MILES TRAVELED, 2008

A key determinant of household travel costs, energy use and air pollution is the amount of driving by each resident in a metropolitan area. We report the average number of vehicle miles of travel per person for each large metropolitan area in the United States. In the typical large metropolitan area, the average resident drove about 25 miles per day in 2008. New Orleans and New York had the lowest rates of vehicle travel—14 and 16 miles per person per day, respectively. Raleigh and Birmingham had the highest rates of travel with more than 35 miles per person per day.

The U.S. Department of Transportation prepares estimates of the total number of vehicle miles traveled annually in each U.S. metropolitan area based on traffic data gathered by state transportation agencies. This data covers the urbanized portions of the nation's metropolitan areas, including the denser, highly developed areas and excluding the more rural and outlying areas (Bureau of Transportation Statistics, 2009).

1	Raleigh-Cary, NC	35.3
2	Birmingham-Hoover, AL	35.0
3	Oklahoma City, OK	33.9
4	Houston-Sugar Land-Baytown, TX	33.3
5	Charlotte-Gastonia-Concord, NC-SC	32.9
6	Nashville-Davidson-Murfreesboro-Franklin, TN	32.3
7	Las Vegas-Paradise, NV	31.7
8	Jacksonville, FL	31.2
9	Orlando-Kissimmee, FL	30.9
10	St. Louis, MO-IL	29.7
11	Austin-Round Rock, TX	28.7
12	Richmond, VA	28.2
13	Atlanta-Sandy Springs-Marietta, GA	27.9
14	Kansas City, MO-KS	27.5
15	Tampa-St. Petersburg-Clearwater, FL	27.0
16	Indianapolis-Carmel, IN	26.6
17	Louisville-Jefferson County, KY-IN	26.0
18	Detroit-Warren-Livonia, MI	25.6
19	San Antonio, TX	25.2
20	Hartford-West Hartford-East Hartford, CT	25.1
21	Dallas-Fort Worth-Arlington, TX	24.9
22	Memphis, TN-MS-AR	24.9
23	Columbus, OH	24.7
24	Minneapolis-St. Paul-Bloomington, MN-WI	24.5
25	Baltimore-Towson, MD	23.9
26	Miami-Fort Lauderdale-Pompano Beach, FL	23.9
27	Virginia Beach-Norfolk-Newport News, VA-NC	23.8
28	Cincinnati-Middletown, OH-KY-IN	23.3
29	Milwaukee-Waukesha-West Allis, WI	23.0
30	Denver-Aurora-Broomfield, CO	22.9
31	Washington-Arlington-Alexandria, DC-VA-MD-WV	22.6
32	San Diego-Carlsbad-San Marcos, CA	22.6
33	Boston-Cambridge-Quincy, MA-NH	22.5
34	Phoenix-Mesa-Scottsdale, AZ	22.4
35	Cleveland-Elyria-Mentor, OH	22.4
36	Salt Lake City, UT	22.2
37	Los Angeles-Long Beach-Santa Ana, CA	22.1
38	Seattle-Tacoma-Bellevue, WA	22.1
39	Rochester, NY	21.9
40	Riverside-San Bernardino-Ontario, CA	21.8
41	Pittsburgh, PA	21.7
42	San Francisco-Oakland-Fremont, CA	21.3
43	Providence-New Bedford-Fall River, RI-MA	21.2
44	San Jose-Sunnyvale-Santa Clara, CA	21.0
45	Buffalo-Niagara Falls, NY	20.2
46	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	20.0
47	Chicago-Naperville-Joliet, IL-IN-WI	19.1
48	Portland-Vancouver-Beaverton, OR-WA	18.7
49	Sacramento-Arden-Arcade-Roseville, CA	18.4
50	New York-N. New Jersey-Long Island, NY-NJ-PA	16.0
51	New Orleans-Metairie-Kenner, LA	13.7

GREENHOUSE GASES, 2008

A major global challenge going forward is working to minimize and reverse climate change. How we live in cities has a major impact on our carbon footprint. Along with differences in climate and regional variations in energy supplies, the density and settlement patterns of urban areas shape energy consumption and carbon emissions, chiefly through travel and home heating and cooling. Together, residential and commercial buildings and transportation account for nearly 70 percent of US greenhouse gas emissions (Sarzynski, Brown, & Southworth, 2008).

Greenhouse gas emissions vary considerably across U.S. metropolitan areas. Denser cities, those with mild climates and those that rely less on coal for the generation of electricity have smaller carbon footprints. A recent study prepared for the Brookings Institution estimates per capita carbon emissions from residential structures and personal transportation in each of the nation's 100 most populous metropolitan areas (Sarzynski, Brown, & Southworth, 2008). Among the nation's largest metro areas, per capita carbon emissions are lowest in Los Angeles and Portland (less than 1.5 tons per person per year) and highest in a number of Midwestern cities (Cincinnati, Indianapolis, Louisville, Nashville, Oklahoma City and St. Louis), all of which average at least 3.2 tons of carbon emissions per person per year.

1	Indianapolis-Carmel, IN	3.36
2	Cincinnati-Middletown, OH-KY-IN	3.28
3	Louisville-Jefferson County, KY-IN	3.23
4	Nashville-Davidson-Murfreesboro-Franklin, TN	3.22
5	St. Louis, MO-IL	3.22
6	Oklahoma City, OK	3.20
7	Washington-Arlington-Alexandria, DC-VA-MD-WV	3.12
8	Richmond, VA	3.04
9	Kansas City, MO-KS	2.97
10	Columbus, OH	2.95
11	Jacksonville, FL	2.91
12	Birmingham-Hoover, AL	2.90
13	Memphis, TN-MS-AR	2.87
14	Raleigh-Cary, NC	2.80
15	Charlotte-Gastonia-Concord, NC-SC	2.76
16	Baltimore-Towson, MD	2.71
17	Atlanta-Sandy Springs-Marietta, GA	2.68
18	Dallas-Fort Worth-Arlington, TX	2.58
19	Austin-Round Rock, TX	2.57
20	Orlando-Kissimmee, FL	2.55
21	Salt Lake City, UT	2.52
22	Tampa-St. Petersburg-Clearwater, FL	2.50
23	Minneapolis-St. Paul-Bloomington, MN-WI	2.44
24	Milwaukee-Waukesha-West Allis, WI	2.44
25	Denver-Aurora-Broomfield, CO	2.39
26	Hartford-West Hartford-East Hartford, CT	2.38
27	Providence-New Bedford-Fall River, RI-MA	2.37
28	Detroit-Warren-Livonia, MI	2.35
29	Virginia Beach-Norfolk-Newport News, VA-NC	2.34
30	Houston-Sugar Land-Baytown, TX	2.29
31	Pittsburgh, PA	2.28
32	San Antonio, TX	2.27
33	Riverside-San Bernardino-Ontario, CA	2.26
34	Cleveland-Elyria-Mentor, OH	2.24
35	New Orleans-Metairie-Kenner, LA	2.16
36	Miami-Fort Lauderdale-Pompano Beach, FL	2.16
37	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	2.14
38	Phoenix-Mesa-Scottsdale, AZ	2.07
39	Boston-Cambridge-Quincy, MA-NH	2.02
40	Las Vegas-Paradise, NV	2.01
41	Buffalo-Niagara Falls, NY	2.00
42	Chicago-Naperville-Joliet, IL-IN-WI	1.97
43	Rochester, NY	1.91
44	Sacramento-Arden-Arcade-Roseville, CA	1.77
45	San Diego-Carlsbad-San Marcos, CA	1.63
46	San Francisco-Oakland-Fremont, CA	1.59
47	San Jose-Sunnyvale-Santa Clara, CA	1.57
48	Seattle-Tacoma-Bellevue, WA	1.56
49	New York-N. New Jersey-Long Island, NY-NJ-PA	1.50
50	Portland-Vancouver-Beaverton, OR-WA	1.45
51	Los Angeles-Long Beach-Santa Ana, CA	1.41

APPENDIX

For the reader's convenience, this appendix provides all of the data in each of our City Vitals indicators grouped according to each of the four dimensions—talent, innovation, connections and distinctiveness—plus core vitality. Cities are listed alphabetically so the reader can easily identify data for individual cities. Ranks for each indicator are shown in parentheses.

The **Connected** City

METROPOLITAN AREA	VOTING	COMMUNITY INVOLVEMENT	ECONOMIC INTEGRATION	TRANSIT USE	WALKABILITY	INTERNATIONAL STUDENTS	FOREIGN TRAVELDENTS	INTERNET CONNECTIVITY
Atlanta-Sandy Springs-Marietta, GA	58.2% (22)	31.9% (8)	71.2% (22)	9.7% (21)	52.9 (28)	15.7 (24)	18.2 (14)	15.8 (25)
Austin-Round Rock, TX	55.5% (39)	29.9% (14)	61.8% (44)	7.3% (30)	46.7 (36)	42.5 (4)	19.2 (11)	31.5 (5)
Baltimore-Towson, MD	62.3% (23)	31.4% (10)	70.9% (23)	18.6% (7)	63.9 (14)	25.0 (13)	17.5 (20)	18.2 (28)
Birmingham-Hoover, AL	62.5% (22)	24.6% (40)	64.4% (43)	3.8% (48)	40.0 (42)	10.6 (37)	10.3 (51)	14.7 (39)
Boston-Cambridge-Quincy, MA-NH	61.7% (26)	27.2% (26)	70.5% (25)	19.5% (4)	79.2 (3)	52.4 (2)	20.1 (10)	14.3 (40)
Buffalo-Niagara Falls, NY	60.9% (28)	25.3% (35)	74.4% (16)	13.7% (11)	60.1 (19)	55.5 (1)	11.4 (47)	20.0 (25)
Charlotte-Gastonia-Concord, NC-SC	62.7% (19)	28.0% (22)	70.4% (26)	5.1% (42)	34.3 (49)	6.8 (46)	13.7 (37)	22.3 (18)
Chicago-Naperville-Joliet, IL-IN-WI	56.2% (37)	23.6% (46)	70.5% (24)	19.8% (3)	74.3 (4)	13.7 (28)	18.0 (16)	12.7 (42)
Cincinnati-Middletown, OH-KY-IN	64.9% (13)	28.7% (19)	76.1% (11)	9.9% (21)	58.9 (20)	12.1 (34)	13.0 (39)	16.9 (32)
Cleveland-Elyria-Mentor, OH	67.5% (9)	28.2% (21)	68.0% (35)	11.6% (15)	58.3 (21)	13.6 (29)	11.7 (44)	17.6 (31)
Columbus, OH	68.2% (6)	27.9% (23)	67.9% (36)	5.9% (37)	47.4 (33)	30.0 (8)	12.4 (41)	18.8 (26)
Dallas-Fort Worth-Arlington, TX	49.2% (45)	26.8% (29)	58.9% (47)	4.4% (47)	46.9 (35)	24.2 (15)	16.5 (28)	12.7 (41)
Denver-Aurora-Broomfield, CO	65.6% (12)	29.4% (16)	65.8% (37)	10.4% (18)	60.4 (18)	8.1 (44)	21.3 (8)	25.6 (8)
Detroit-Warren-Livonia, MI	65.7% (11)	28.8% (18)	68.3% (34)	6.5% (33)	49.9 (29)	12.4 (32)	14.9 (32)	10.2 (47)
Hartford-West Hartford-East Hartford, CT	62.6% (21)	24.1% (43)	77.4% (8)	11.7% (14)	72.7 (7)	22.3 (17)	17.5 (20)	22.0 (20)
Houston-Sugar Land-Baytown, TX	44.9% (50)	25.1% (38)	53.9% (50)	5.7% (38)	49.8 (30)	16.0 (24)	17.7 (18)	12.2 (43)
Indianapolis-Carmel, IN	61.3% (27)	34.0% (5)	69.7% (30)	2.8% (49)	37.4 (46)	8.5 (42)	11.9 (43)	23.9 (13)
Jacksonville, FL	68.4% (5)	25.2% (36)	79.3% (4)	5.1% (41)	32.6 (50)	2.7 (51)	14.0 (35)	17.9 (30)
Kansas City, MO-KS	68.1% (7)	29.2% (17)	73.8% (19)	4.6% (45)	38.1 (45)	5.6 (49)	12.9 (40)	26.0 (7)
Las Vegas-Paradise, NV	48.2% (47)	22.6% (48)	80.4% (3)	9.2% (25)	49.2 (32)	12.5 (31)	18.7 (12)	22.6 (16)
Los Angeles-Long Beach-Santa Ana, CA	46.9% (49)	23.7% (45)	56.9% (48)	16.2% (8)	65.9 (12)	26.7 (10)	22.3 (7)	11.9 (45)
Louisville-Jefferson County, KY-IN	63.9% (15)	25.1% (38)	75.7% (13)	9.7% (23)	39.7 (43)	6.6 (47)	10.8 (50)	21.0 (21)
Memphis, TN-MS-AR	60.8% (29)	26.4% (32)	56.5% (49)	5.7% (39)	39.4 (44)	8.2 (43)	11.1 (48)	11.9 (46)
Miami-Fort Lauderdale-Pompano Beach, FL	52.4% (41)	20.7% (51)	65.1% (41)	10.9% (17)	72.5 (9)	20.3 (19)	25.8 (3)	9.9 (49)
Milwaukee-Waukesha-West Allis, WI	72.3% (2)	33.3% (6)	70.0% (28)	14.0% (10)	60.6 (17)	12.1 (33)	15.0 (31)	23.2 (14)
Minneapolis-St. Paul-Bloomington, MN-WI	76.4% (1)	37.5% (2)	84.3% (1)	11.4% (16)	69.3 (10)	15.6 (26)	16.8 (24)	24.8 (10)
Nashville-Davidson-Murfreesboro-Franklin, TN	59.0% (32)	24.6% (40)	71.9% (21)	2.3% (50)	36.4 (47)	10.4 (39)	11.7 (44)	17.9 (29)
New Orleans-Metairie-Kenner, LA	64.4% (14)	22.8% (47)	69.8% (29)	9.6% (24)	55.6 (24)	7.1 (45)	12.4 (41)	23.2 (15)
New York-N. New Jersey-Long Island, NY-NJ-PA	50.7% (43)	24.1% (43)	59.7% (46)	45.1% (1)	85.3 (1)	26.1 (11)	22.6 (6)	9.8 (50)
Oklahoma City, OK	56.0% (38)	25.2% (36)	68.8% (33)	0.9% (51)	35.6 (48)	34.2 (7)	11.6 (46)	24.9 (9)
Orlando-Kissimmee, FL	59.5% (31)	26.5% (31)	77.3% (9)	6.3% (34)	47.1 (34)	16.5 (23)	17.6 (19)	24.6 (11)
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	66.8% (10)	28.6% (20)	65.5% (40)	19.3% (5)	74.1 (5)	19.9 (30)	17.4 (22)	9.9 (48)
Phoenix-Mesa-Scottsdale, AZ	48.6% (46)	26.6% (30)	65.6% (39)	6.2% (36)	45.4 (38)	13.1 (30)	16.7 (25)	20.3 (23)
Pittsburgh, PA	63.6% (17)	25.9% (34)	76.6% (10)	14.4% (9)	64.1 (13)	22.5 (16)	11.0 (49)	15.2 (38)
Portland-Vancouver-Beaverton, OR-WA	63.9% (16)	35.2% (4)	81.0% (2)	13.3% (12)	66.3 (11)	12.0 (36)	17.8 (17)	34.2 (3)
Providence-New Bedford-Fall River, RI-MA	57.2% (35)	22.0% (50)	72.6% (20)	6.7% (32)	72.7 (7)	24.4 (14)	16.6 (26)	12.1 (44)
Raleigh-Cary, NC	69.7% (3)	30.8% (11)	75.1% (15)	5.3% (40)	41.4 (39)	18.6 (22)	14.9 (32)	28.3 (6)
Richmond, VA	67.8% (8)	27.2% (26)	74.4% (16)	10.1% (19)	51.1 (27)	12.0 (35)	14.6 (34)	18.2 (27)
Riverside-San Bernardino-Ontario, CA	43.2% (51)	24.6% (40)	69.1% (32)	4.5% (46)	46.7 (36)	6.0 (48)	18.4 (14)	8.2 (51)
Rochester, NY	62.2% (25)	29.6% (15)	77.6% (7)	10.0% (20)	63.1 (15)	28.3 (9)	13.9 (36)	16.6 (33)
Sacramento-Arden-Arcade-Roseville, CA	56.6% (36)	27.2% (26)	70.1% (27)	4.7% (43)	49.3 (31)	5.2 (50)	18.7 (12)	24.0 (12)
St. Louis, MO-IL	68.7% (4)	27.5% (25)	74.2% (18)	8.1% (27)	61.4 (16)	13.8 (27)	13.1 (38)	15.9 (35)
Salt Lake City, UT	52.0% (42)	42.8% (1)	75.9% (12)	8.4% (26)	57.6 (22)	19.0 (21)	17.1 (23)	22.5 (17)
San Antonio, TX	47.9% (48)	30.1% (13)	60.8% (45)	7.2% (31)	40.8 (40)	9.0 (41)	16.0 (29)	22.0 (19)
San Diego-Carlsbad-San Marcos, CA	55.1% (40)	27.7% (24)	65.8% (37)	8.0% (28)	55.7 (23)	20.9 (18)	23.9 (4)	20.5 (22)
San Francisco-Oakland-Fremont, CA	57.8% (34)	32.5% (7)	64.5% (42)	18.8% (6)	84.9 (2)	37.4 (5)	28.2 (1)	32.7 (4)
San Jose-Sunnyvale-Santa Clara, CA	50.1% (44)	35.8% (3)	69.6% (33)	7.5% (29)	54.5 (25)	48.0 (3)	28.2 (1)	46.9 (1)
Seattle-Tacoma-Bellevue, WA	62.2% (24)	31.7% (9)	79.2% (5)	12.8% (13)	73.7 (6)	25.6 (12)	20.8 (9)	38.5 (2)
Tampa-St. Petersburg-Clearwater, FL	60.3% (30)	22.6% (48)	75.7% (13)	4.7% (44)	51.1 (27)	10.2 (40)	16.6 (26)	15.9 (36)
Virginia Beach-Norfolk-Newport News, VA-NC	62.7% (20)	26.4% (32)	78.5% (6)	6.3% (35)	40.8 (40)	10.4 (38)	15.7 (30)	16.2 (34)
Washington-Arlington-Alexandria, DC-VA-MD-WV	63.4% (18)	30.4% (12)	70.5% (25)	20.9% (2)	73.0 (7)	35.7 (6)	23.3 (5)	20.2 (24)

The **Innovative** City

METROPOLITAN AREA	PATENTS	VENTURE CAPITAL	ENTREPRENEURSHIP	SMALL BUSINESSES
Atlanta-Sandy Springs-Marietta, GA	5.5 22	65 17	11.1% 16	21.2 23
Austin-Round Rock, TX	31.9 2	371 4	11.5% 12	19.9 35
Baltimore-Towson, MD	5.2 27	56 22	8.8% 40	20.6 31
Birmingham-Hoover, AL	2.2 44	3 49	9.8% 27	19.4 38
Boston-Cambridge-Quincy, MA-NH	13.7 9	634 3	10.6% 20	22.9 9
Buffalo-Niagara Falls, NY	4.5 32	11 41	7.9% 51	19.9 36
Charlotte-Gastonia-Concord, NC-SC	2.7 41	5 47	10.1% 23	21.4 19
Chicago-Naperville-Joliet, IL-IN-WI	5.4 24	73 17	9.3% 32	21.5 18
Cincinnati-Middletown, OH-KY-IN	5.9 19	21 35	8.6% 46	18.2 43
Cleveland-Elyria-Mentor, OH	5.3 26	59 21	9.1% 34	21.5 17
Columbus, OH	3.4 36	10 42	8.7% 44	17.7 46
Dallas-Fort Worth-Arlington, TX	5.9 20	82 15	10.1% 24	18.3 42
Denver-Aurora-Broomfield, CO	4.6 30	115 11	12.1% 5	25.2 2
Detroit-Warren-Livonia, MI	9.1 11	10 43	9.0% 37	19.6 37
Hartford-West Hartford-East Hartford, CT	7.6 13	17 38	9.0% 36	20.5 32
Houston-Sugar Land-Baytown, TX	6.8 15	44 26	10.9% 18	17.1 48
Indianapolis-Carmel, IN	5.2 28	101 13	9.1% 33	20.3 33
Jacksonville, FL	1.5 51	20 37	10.4% 22	22.1 14
Kansas City, MO-KS	3.6 35	33 27	9.6% 30	21.0 27
Las Vegas-Paradise, NV	1.8 47	4 48	8.6% 47	17.3 47
Los Angeles-Long Beach-Santa Ana, CA	7.7 12	142 7	11.3% 13	22.4 12
Louisville-Jefferson County, KY-IN	1.7 50	7 46	8.6% 45	19.3 39
Memphis, TN-MS-AR	2.9 39	7 45	8.2% 48	16.1 49
Miami-Fort Lauderdale-Pompano Beach, FL	3.7 34	21 33	15.6% 1	27.5 1
Milwaukee-Waukesha-West Allis, WI	5.3 25	9 44	7.9% 50	20.7 30
Minneapolis-St. Paul-Bloomington, MN-WI	10.5 10	79 16	10.0% 25	23.3 8
Nashville-Davidson-Murfreesboro-Franklin, TN	2.0 46	56 23	11.6% 8	20.0 34
New Orleans-Metairie-Kenner, LA	1.8 49	14 40	11.9% 6	21.1 26
New York-N. New Jersey-Long Island, NY-NJ-PA	5.4 23	139 9	10.7% 19	24.9 3
Oklahoma City, OK	2.1 45	21 34	11.5% 11	22.5 10
Orlando-Kissimmee, FL	3.4 37	24 32	11.2% 15	22.4 11
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	6.7 16	61 19	9.0% 35	20.8 29
Phoenix-Mesa-Scottsdale, AZ	7.0 14	46 24	11.0% 17	18.0 45
Pittsburgh, PA	6.1 18	60 20	8.8% 41	21.3 22
Portland-Vancouver-Beaverton, OR-WA	16.9 7	101 14	12.6% 4	24.3 5
Providence-New Bedford-Fall River, RI-MA	5.1 29	24 31	8.7% 43	22.4 13
Raleigh-Cary, NC	20.7 6	249 6	9.9% 26	21.5 16
Richmond, VA	2.7 40	24 30	8.7% 42	21.2 25
Riverside-San Bernardino-Ontario, CA	2.7 41	1 50	11.6% 9	13.2 51
Rochester, NY	22.1 5	15 39	8.9% 38	19.0 41
Sacramento-Arden-Arcade-Roseville, CA	6.1 17	28 28	11.5% 10	18.1 44
St. Louis, MO-IL	4.1 33	44 25	8.9% 39	21.3 21
Salt Lake City, UT	5.8 21	137 10	9.7% 29	24.1 6
San Antonio, TX	2.4 43	20 36	9.7% 28	15.8 50
San Diego-Carlsbad-San Marcos, CA	16.7 8	281 5	12.6% 3	21.3 20
San Francisco-Oakland-Fremont, CA	27.7 3	1,641 2	13.2% 2	23.5 7
San Jose-Sunnyvale-Santa Clara, CA	83.5 1	2,499 1	10.4% 21	20.9 28
Seattle-Tacoma-Bellevue, WA	24.7 4	142 8	11.2% 14	24.6 4
Tampa-St. Petersburg-Clearwater, FL	3.0 38	28 29	11.7% 7	21.9 15
Virginia Beach-Norfolk-Newport News, VA-NC	1.8 48	1 51	8.0% 49	19.2 40
Washington-Arlington-Alexandria, DC-VA-MD-WV	4.6 31	105 12	9.4% 31	21.3 23

The **Talented** City

METROPOLITAN AREA	COLLEGE ATTAINMENT	CREATIVE PROFESSIONALS	YOUNG & RESTLESS	TRADED SECTOR TALENT	INTERNATIONAL TALENT
Atlanta-Sandy Springs-Marietta, GA	34.4% 23	3.5% 31	5.2% 16	33.3% 12	16.4% 16
Austin-Round Rock, TX	39.9% 12	4.9% 9	6.7% 5	38.0% 6	14.1% 21
Baltimore-Towson, MD	39.2% 15	4.5% 12	5.4% 14	32.2% 18	14.4% 20
Birmingham-Hoover, AL	32.4% 33	2.9% 46	4.4% 30	31.2% 20	5.6% 51
Boston-Cambridge-Quincy, MA-NH	54.3% 1	5.1% 7	7.3% 2	44.4% 3	17.8% 15
Buffalo-Niagara Falls, NY	39.9% 13	3.3% 36	4.3% 33	26.2% 36	8.6% 39
Charlotte-Gastonia-Concord, NC-SC	35.8% 21	3.4% 34	5.4% 13	29.8% 23	11.5% 29
Chicago-Naperville-Joliet, IL-IN-WI	40.1% 9	3.4% 35	5.8% 12	33.7% 11	19.2% 13
Cincinnati-Middletown, OH-KY-IN	33.5% 29	4.0% 18	4.3% 32	29.7% 25	7.5% 45
Cleveland-Elyria-Mentor, OH	32.9% 32	3.5% 30	3.9% 41	25.5% 39	9.7% 33
Columbus, OH	38.0% 17	3.5% 33	5.8% 11	33.1% 15	10.0% 31
Dallas-Fort Worth-Arlington, TX	30.5% 36	3.3% 40	4.5% 28	29.4% 26	16.9% 16
Denver-Aurora-Broomfield, CO	40.0% 10	4.6% 11	5.9% 10	37.7% 7	9.7% 36
Detroit-Warren-Livonia, MI	30.2% 37	5.3% 5	3.6% 45	26.9% 33	14.8% 19
Hartford-West Hartford-East Hartford, CT	39.9% 11	4.2% 15	4.6% 27	33.4% 12	14.0% 22
Houston-Sugar Land-Baytown, TX	27.6% 45	4.5% 13	4.1% 35	26.2% 34	24.1% 9
Indianapolis-Carmel, IN	33.7% 28	4.0% 19	5.0% 21	28.8% 29	7.3% 47
Jacksonville, FL	26.9% 46	3.2% 41	3.5% 47	24.4% 43	12.3% 27
Kansas City, MO-KS	36.6% 19	3.3% 37	5.2% 18	32.3% 17	6.5% 49
Las Vegas-Paradise, NV	20.1% 50	3.0% 45	3.2% 50	18.5% 50	25.3% 7
Los Angeles-Long Beach-Santa Ana, CA	33.1% 31	3.7% 24	4.8% 23	29.7% 24	36.6% 3
Louisville-Jefferson County, KY-IN	31.5% 34	2.8% 48	4.1% 37	25.0% 41	6.5% 50
Memphis, TN-MS-AR	26.6% 47	2.4% 51	3.6% 46	23.6% 45	7.7% 43
Miami-Fort Lauderdale-Pompano Beach, FL	27.7% 43	2.7% 49	3.7% 44	27.4% 32	40.5% 2
Milwaukee-Waukesha-West Allis, WI	35.4% 22	3.6% 26	4.7% 24	28.2% 30	8.2% 40
Minneapolis-St. Paul-Bloomington, MN-WI	43.2% 6	4.0% 16	6.2% 8	37.1% 9	9.7% 35
Nashville-Davidson-Murfreesboro-Franklin, TN	33.3% 30	3.0% 44	5.1% 20	28.0% 31	7.5% 46
New Orleans-Metairie-Kenner, LA	31.1% 35	3.6% 28	4.2% 34	21.6% 49	8.1% 41
New York-N. New Jersey-Long Island, NY-NJ-PA	44.4% 5	3.0% 43	6.3% 7	37.3% 8	30.7% 5
Oklahoma City, OK	28.7% 40	3.3% 38	4.1% 36	24.4% 42	8.1% 42
Orlando-Kissimmee, FL	29.9% 38	3.7% 25	4.0% 38	25.8% 37	19.5% 12
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	39.2% 14	3.8% 23	5.1% 19	32.4% 16	13.8% 23
Phoenix-Mesa-Scottsdale, AZ	25.3% 49	3.5% 31	3.8% 42	26.2% 35	13.5% 24
Pittsburgh, PA	40.5% 8	3.9% 21	4.6% 26	29.2% 27	6.8% 48
Portland-Vancouver-Beaverton, OR-WA	34.1% 25	4.6% 10	5.2% 16	31.7% 19	12.8% 26
Providence-New Bedford-Fall River, RI-MA	33.8% 27	3.8% 22	4.0% 40	23.4% 46	10.0% 32
Raleigh-Cary, NC	42.5% 7	4.9% 8	6.6% 6	40.2% 5	13.1% 25
Richmond, VA	35.8% 20	3.3% 39	4.5% 29	30.9% 21	8.8% 38
Riverside-San Bernardino-Ontario, CA	18.1% 51	2.6% 50	2.4% 51	15.4% 51	26.2% 6
Rochester, NY	37.3% 18	4.0% 17	4.4% 31	29.8% 22	8.9% 37
Sacramento-Arden-Arcade-Roseville, CA	29.2% 39	4.4% 14	4.0% 39	25.7% 38	18.8% 14
St. Louis, MO-IL	35.4% 23	3.6% 27	4.7% 25	28.9% 28	7.5% 44
Salt Lake City, UT	27.6% 44	3.5% 29	5.0% 22	25.4% 40	10.6% 30
San Antonio, TX	25.7% 48	2.8% 47	3.5% 48	22.0% 48	11.5% 28
San Diego-Carlsbad-San Marcos, CA	33.9% 26	5.3% 4	5.3% 15	33.2% 14	24.4% 8
San Francisco-Oakland-Fremont, CA	48.2% 3	5.6% 2	7.3% 3	40.8% 4	31.8% 4
San Jose-Sunnyvale-Santa Clara, CA	48.2% 4	7.6% 1	7.2% 4	46.6% 1	49.6% 1
Seattle-Tacoma-Bellevue, WA	38.5% 16	5.1% 6	5.9% 9	35.6% 10	20.0% 11
Tampa-St. Petersburg-Clearwater, FL	28.6% 42	3.1% 42	3.4% 49	23.9% 44	15.3% 18
Virginia Beach-Norfolk-Newport News, VA-NC	28.7% 41	3.9% 20	3.7% 43	23.3% 47	9.7% 34
Washington-Arlington-Alexandria, DC-VA-MD-WV	48.6% 2	5.5% 3	7.6% 1	44.7% 2	23.5% 10

Your Distinctive City

METROPOLITAN AREA	WEIRDNESS INDEX	CULTURE/HDTV RATIO	RESTAURANT VARIETY	INTERNET SEARCH VARIETY
Atlanta-Sandy Springs-Marietta, GA	4.8 10	98.4 18	0.42 24	0.51 28
Austin-Round Rock, TX	4.1 15	108.0 9	0.42 26	0.52 27
Baltimore-Towson, MD	1.9 42	93.9 25	0.44 23	0.36 43
Birmingham-Hoover, AL	3.1 24	81.3 41	0.13 51	1.78 1
Boston-Cambridge-Quincy, MA-NH	3.5 21	105.9 12	1.65 2	0.45 36
Buffalo-Niagara Falls, NY	2.8 27	105.2 14	0.39 28	1.44 8
Charlotte-Gastonia-Concord, NC-SC	2.1 38	83.7 37	0.29 38	0.55 25
Chicago-Naperville-Joliet, IL-IN-WI	2.2 36	101.1 16	0.68 11	0.21 51
Cincinnati-Middletown, OH-KY-IN	1.2 48	75.9 48	0.18 47	0.49 30
Cleveland-Elyria-Mentor, OH	1.0 50	93.9 24	0.24 42	0.44 37
Columbus, OH	1.5 46	89.5 30	0.26 40	0.56 24
Dallas-Fort Worth-Arlington, TX	3.7 18	89.4 31	0.38 29	0.71 18
Denver-Aurora-Broomfield, CO	6.1 4	110.8 6	0.56 14	0.43 39
Detroit-Warren-Livonia, MI	2.2 36	97.1 21	0.35 31	0.23 50
Hartford-West Hartford-East Hartford, CT	2.5 32	107.3 10	0.53 18	0.48 31
Houston-Sugar Land-Baytown, TX	2.6 31	81.9 40	0.32 33	0.35 44
Indianapolis-Carmel, IN	1.4 47	80.4 42	0.18 48	0.31 47
Jacksonville, FL	2.7 30	86.0 34	0.24 41	1.42 13
Kansas City, MO-KS	1.2 49	82.2 38	0.20 45	0.47 32
Las Vegas-Paradise, NV	3.8 17	73.4 49	0.67 12	1.45 6
Los Angeles-Long Beach-Santa Ana, CA	5.1 7	101.0 17	0.99 5	0.46 34
Louisville-Jefferson County, KY-IN	2.0 40	72.3 50	0.16 49	1.41 14
Memphis, TN-MS-AR	2.9 25	84.6 35	0.16 50	1.71 2
Miami-Fort Lauderdale-Pompano Beach, FL	6.0 5	123.4 4	0.65 13	0.65 21
Milwaukee-Waukesha-West Allis, WI	2.4 33	82.2 39	0.23 43	1.44 9
Minneapolis-St. Paul-Bloomington, MN-WI	4.6 13	91.7 27	0.32 34	0.54 26
Nashville-Davidson-Murfreesboro-Franklin, TN	3.2 22	76.4 47	0.32 35	0.67 20
New Orleans-Metairie-Kenner, LA	3.6 19	69.5 51	0.53 17	1.46 5
New York-N. New Jersey-Long Island, NY-NJ-PA	5.0 9	114.4 5	2.05 1	0.57 23
Oklahoma City, OK	3.2 23	83.8 36	0.19 46	1.62 3
Orlando-Kissimmee, FL	2.9 25	76.9 46	0.47 22	1.07 15
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1.8 44	91.8 26	0.73 9	0.43 40
Phoenix-Mesa-Scottsdale, AZ	3.6 19	88.8 32	0.40 27	0.39 42
Pittsburgh, PA	1.6 45	96.1 23	0.28 39	0.27 49
Portland-Vancouver-Beaverton, OR-WA	4.1 15	108.0 8	0.72 10	0.59 22
Providence-New Bedford-Fall River, RI-MA	2.0 40	96.6 22	0.49 20	1.44 7
Raleigh-Cary, NC	2.2 35	105.9 13	0.43 24	0.50 29
Richmond, VA	1.9 42	97.8 20	0.34 32	1.43 11
Riverside-San Bernardino-Ontario, CA	5.1 7	78.2 45	0.37 30	0.46 34
Rochester, NY	2.8 27	124.0 3	0.50 19	1.59 4
Sacramento-Arden-Arcade-Roseville, CA	4.2 14	88.0 33	0.47 21	0.33 46
St. Louis, MO-IL	1.0 50	78.9 43	0.21 44	0.44 38
Salt Lake City, UT	6.7 3	109.3 7	0.53 16	1.44 10
San Antonio, TX	2.1 38	91.3 28	0.30 37	0.29 48
San Diego-Carlsbad-San Marcos, CA	6.0 5	101.4 15	0.95 7	0.47 33
San Francisco-Oakland-Fremont, CA	7.3 2	129.8 1	1.63 3	0.81 16
San Jose-Sunnyvale-Santa Clara, CA	9.1 1	129.8 1	0.97 6	0.81 16
Seattle-Tacoma-Bellevue, WA	4.8 11	106.0 11	1.49 4	0.35 45
Tampa-St. Petersburg-Clearwater, FL	2.4 33	78.5 44	0.56 15	0.67 19
Virginia Beach-Norfolk-Newport News, VA-NC	2.8 29	90.0 29	0.31 36	1.42 12
Washington-Arlington-Alexandria, DC-VA-MD-WV	4.9 10	99.5 18	0.91 8	0.42 41

Core Vitality

Metropolitan Performance

METROPOLITAN AREA	PER CAPITA INCOME	COLLEGE ATTAINMENT	POVERTY	POPULATION, 2010	PER CAPITA INCOME, 2010	POVERTY, 2010	VEHICLE MILES TRAVELED, 2008	GREENHOUSE GASES, 2008
Atlanta-Sandy Springs-Marietta, GA	35,753 9	50.4% 8	24.9% 19	5,268,860 9	39,498 32	14.8% 22	27.9 13	2.68 16
Austin-Round Rock, TX	28,531 17	48.6% 9	28.0% 29	1,716,289 35	39,001 40	15.9% 11	28.7 11	2.57 19
Baltimore-Towson, MD	22,312 23	25.3% 34	27.2% 28	2,710,489 20	49,285 9	11.0% 44	23.9 35	2.71 16
Birmingham-Hoover, AL	23,769 21	29.6% 23	30.7% 36	1,128,047 49	39,400 36	17.0% 5	35.0 2	2.90 12
Boston-Cambridge-Quincy, MA-NH	37,383 8	50.5% 7	19.9% 13	4,552,402 10	55,677 4	10.3% 49	22.5 33	2.02 39
Buffalo-Niagara Falls, NY	18,942 38	23.6% 37	35.0% 45	1,135,509 47	38,249 44	14.4% 28	20.2 45	2.00 41
Charlotte-Gastonia-Concord, NC-SC	37,409 7	40.9% 11	22.0% 15	1,758,038 33	39,376 37	14.5% 27	32.9 5	2.76 15
Chicago-Naperville-Joliet, IL-IN-WI	59,785 2	64.9% 2	16.3% 6	9,461,105 3	46,021 14	13.6% 33	19.1 47	1.97 42
Cincinnati-Middletown, OH-KY-IN	21,793 28	27.3% 29	30.1% 34	2,130,151 27	39,721 31	14.0% 30	23.3 28	3.28 2
Cleveland-Elyria-Mentor, OH	15,540 49	17.5% 45	42.4% 51	2,077,240 28	40,849 25	15.1% 19	22.4 35	2.24 34
Columbus, OH	21,263 31	31.7% 22	35.7% 47	1,836,536 22	38,447 43	15.7% 13	24.7 23	2.95 10
Dallas-Fort Worth-Arlington, TX	31,897 13	33.2% 19	26.0% 23	6,371,773 4	43,554 19	14.6% 26	24.9 21	2.58 18
Denver-Aurora-Broomfield, CO	35,672 10	46.7% 10	19.8% 12	2,543,482 21	47,927 9	12.5% 39	22.9 30	2.39 25
Detroit-Warren-Livonia, MI	16,652 45	21.3% 40	42.0% 50	4,296,250 12	39,713 32	16.6% 6	25.6 18	2.35 28
Hartford-West Hartford-East Hartford, CT	20,938 33	21.7% 38	26.7% 26	1,212,381 45	51,315 6	10.1% 50	25.1 20	2.38 26
Houston-Sugar Land-Baytown, TX	34,352 11	38.4% 13	24.5% 18	5,946,800 6	47,394 10	16.5% 7	33.3 4	2.29 30
Indianapolis-Carmel, IN	17,831 42	18.3% 44	34.0% 44	1,756,241 34	39,418 35	14.8% 22	26.6 16	3.36 1
Jacksonville, FL	19,389 36	16.4% 47	29.1% 32	1,345,596 40	39,947 30	15.3% 17	31.2 8	2.91 11
Kansas City, MO-KS	17,588 43	19.1% 43	31.8% 37	2,035,334 29	41,869 22	12.4% 40	27.5 14	2.97 9
Las Vegas-Paradise, NV	15,761 47	8.8% 51	25.0% 20	1,951,269 30	35,524 49	15.1% 19	31.7 7	2.01 40
Los Angeles-Long Beach-Santa Ana, CA	14,296 50	15.2% 49	33.0% 41	12,828,837 2	44,070 16	16.3% 8	22.1 37	1.41 51
Louisville-Jefferson County, KY-IN	17,947 41	20.2% 42	33.1% 42	1,283,566 42	38,150 45	15.3% 17	26.0 17	3.23 3
Memphis, TN-MS-AR	22,160 24	27.1% 30	37.6% 49	1,316,100 41	38,457 42	19.1% 1	24.9 22	2.87 13
Miami-Fort Lauderdale-Pompano Beach, FL	22,141 26	24.3% 35	26.7% 25	5,564,635 8	43,539 20	17.1% 3	23.9 26	2.16 36
Milwaukee-Waukesha-West Allis, WI	17,553 44	24.1% 36	35.5% 46	1,555,908 39	43,555 18	15.5% 14	23.0 29	2.44 24
Minneapolis-St. Paul-Bloomington, MN-WI	24,622 19	39.0% 12	29.8% 33	3,279,833 16	47,100 12	10.9% 45	24.5 24	2.44 23
Nashville-Davidson-Murfreesboro-Franklin, TN	19,219 37	29.1% 24	33.7% 43	1,589,934 38	40,108 29	15.4% 15	32.3 6	3.22 4
New Orleans-Metairie-Kenner, LA	22,043 27	27.4% 26	28.0% 30	1,167,764 46	44,944 15	17.4% 2	13.7 51	2.16 35
New York-N. New Jersey-Long Island, NY-NJ-PA	72,953 1	65.2% 1	11.9% 1	18,897,109 1	54,407 5	13.8% 31	16.0 50	1.50 49
Oklahoma City, OK	15,626 48	15.2% 48	32.0% 38	1,252,987 44	39,288 39	15.9% 11	33.9 3	3.20 6
Orlando-Kissimmee, FL	29,995 14	33.9% 18	17.0% 8	2,134,411 26	35,274 50	14.7% 25	30.9 9	2.55 20
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	24,473 20	32.2% 21	29.0% 31	5,965,343 5	47,192 11	12.7% 38	20.0 46	2.14 37
Phoenix-Mesa-Scottsdale, AZ	16,228 46	16.6% 46	36.7% 48	4,192,887 14	36,445 48	16.3% 9	22.4 34	2.07 38
Pittsburgh, PA	21,262 32	26.3% 31	26.1% 24	2,356,285 22	43,729 17	12.2% 41	21.7 41	2.28 31
Portland-Vancouver-Beaverton, OR-WA	37,437 6	56.6% 5	16.9% 7	2,226,009 23	40,725 26	13.4% 34	18.7 48	1.45 50
Providence-New Bedford-Fall River, RI-MA	21,554 30	27.4% 27	22.4% 16	1,600,852 37	41,942 21	13.7% 32	21.2 43	2.37 27
Raleigh-Cary, NC	22,147 25	36.7% 15	25.9% 22	1,130,490 48	39,334 38	12.9% 37	35.3 1	2.80 14
Richmond, VA	21,660 29	27.3% 28	27.2% 27	1,258,251 43	41,511 24	11.6% 43	28.2 12	3.04 8
Riverside-San Bernardino-Ontario, CA	20,231 35	21.0% 41	17.5% 9	4,224,851 13	29,766 51	17.1% 3	21.8 40	2.26 33
Rochester, NY	18,241 40	25.9% 32	30.2% 35	1,054,323 51	39,459 34	14.2% 29	21.9 39	1.91 43
Sacramento-Arden-Arcade-Roseville, CA	29,907 15	34.4% 17	15.7% 5	2,149,127 24	40,455 27	15.1% 19	18.4 49	1.77 44
St. Louis, MO-IL	23,348 22	35.8% 16	32.9% 40	2,812,896 18	41,744 23	13.3% 35	29.7 10	3.22 5
Salt Lake City, UT	13,728 51	9.6% 50	20.2% 14	1,124,197 50	38,778 41	13.1% 36	22.2 36	2.52 21
San Antonio, TX	32,948 12	37.5% 14	31.7% 37	2,142,508 25	36,600 47	16.3% 8	25.2 19	2.27 32
San Diego-Carlsbad-San Marcos, CA	52,621 3	57.7% 4	19.3% 11	3,095,313 17	46,234 13	14.8% 23	22.6 32	1.63 45
San Francisco-Oakland-Fremont, CA	28,329 18	27.5% 25	12.8% 2	4,335,391 11	61,348 1	10.9% 45	21.3 42	1.59 46
San Jose-Sunnyvale-Santa Clara, CA	45,843 5	55.9% 6	17.7% 10	1,836,911 31	58,947 2	10.6% 47	21.0 44	1.57 47
Seattle-Tacoma-Bellevue, WA	18,956 39	25.7% 33	14.9% 3	3,439,809 15	51,190 7	11.7% 42	22.1 38	1.56 48
Tampa-St. Petersburg-Clearwater, FL	29,803 16	33.1% 20	23.2% 17	2,783,243 19	37,940 46	15.4% 15	27.0 15	2.50 22
Virginia Beach-Norfolk-Newport News, VA-NC	20,787 34	22.4% 37	25.5% 21	1,671,683 36	40,362 28	10.6% 47	23.8 27	2.34 29
Washington-Arlington-Alexandria, DC-VA-MD-WV	50,661 4	61.5% 3	15.3% 4	5,582,170 7	57,959 3	8.4% 51	22.6 31	3.12 7

CHANGES FROM CITY VITALS 1.0

The original version of this report, City Vitals, was published in 2006 (Cortright, 2006). This report incorporates changes in data and metropolitan area definitions that have transpired over the past five years. As a result of these changes, data values from the original report are not directly comparable to the values presented in this report. This section provides a summary of these changes.

DATA SET

Much of the data for the original City Vitals report was drawn from Census 2000. Wherever possible, we have updated this data with newer estimates from the 2010 Decennial Census and the American Community Survey. To obtain the greatest statistical reliability for key variables, we have used the three-year pooled data estimates for 2008-2010 developed by the Census Bureau.

GEOGRAPHY

The geographical definitions that federal statistical agencies routinely use to describe metropolitan areas have changed since we first developed City Vitals. The federal government now uses its "core based statistical area" (CBSA) definitions to identify the boundaries of the nations metropolitan areas. For the most part, these metropolitan areas are similar to those used earlier.

However, there are important boundary changes. The previous metropolitan area ranking classified some adjacent metropolitan areas as "consolidated metropolitan statistical areas"—CMSAs. The new classification now treats many of these former consolidated areas as separate metropolitan areas. For example, Boulder is now separate from Denver, Ann Arbor and Flint from Detroit, Salem from Portland and Raleigh from Durham. In each of these cases, the populations of the smaller metropolitan areas (Boulder, Ann Arbor, Flint, Salem and Durham) are no longer counted as part of a metropolitan area with 1 million or more population.

In three cases, metropolitan areas that were previously combined as part of a CMSA have been divided into separate CBSA metropolitan areas and have a population of 1 million or more. Baltimore has been separated from Washington, San Jose from San Francisco-Oakland, and Riverside from Los Angeles-Orange County.

In one case, two previously freestanding metropolitan areas have been combined and are now treated as a single metropolitan area. West Palm Beach, previously its own metropolitan area, is now combined with Miami-Fort Lauderdale.

Further, population changes have changed the roster of the nation's largest metropolitan areas. We use a metropolitan population of 1 million as our threshold for inclusion in City Vitals. In the first City Vitals, 50 metropolitan areas had at least this many residents. Based on 2007 population estimates, 51 metropolitan areas now exceed one million population. Birmingham, which had a population of under 1 million in 2000, has now grown to exceed 1 million and has been added to our list.

Two metropolitan areas previously included in our sample no longer have a population of one million in both cases due to the redefinition of metropolitan boundaries. Grand Rapids--Muskegon--Holland, Michigan, and Greensboro-Winston Salem, North Carolina, have been divided into two (or more) separate metropolitan areas in the new classification.

For some measures, data were only available for the older metropolitan area designations or for designated market areas (DMAs), a set of geographic definitions used in media and marketing. In these cases, we have applied data from the most closely related MSA or DMA to estimate values for our 51 CBSA metropolitan areas.

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