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Letter from the **Chairman**



The growth of Charlotte has been both impressive and exciting, each year's progress outdoing the last. As new businesses thrive, the city continues to attract people of all shapes and sizes, showcasing Charlotte as a diverse city with big-town amenities and a home town feel. As one of only three cities in the nation to experience an increase in home values during a real estate downturn, Charlotte has certainly proven its perseverance. Further indicating its tenacity, Charlotte placed in the 10 recession-proof cities listed by *Forbes* and number one on Relocate America's 11th Annual Top 100 Places to Live.

Despite the continued success Charlotte has experienced, there's always room for improvement. For more than 50 years, the Charlotte Chamber has studied other cities in the hope of learning new ways to make the Queen City an even better place to live and work. Starting this year, a different approach has been taken in this comparison research.

In addition to the annual inner-city visit, a benchmarking study was constructed to show how Charlotte measured up against other cities. Using specific indicators, Charlotte was compared against seven other metropolitan areas and ranked 3rd overall. It is the Charlotte Chamber's intent to perform this benchmarking study on an annual basis going forward, changing cities and indicators as needed. It is necessary to conduct this type of comparison research so that Charlotte can continue to survive and thrive in today's economy. Understanding weaknesses and working towards improvement is the first step in becoming a world-class city.

A special thanks to our sponsor Hunton & Williams who made this study possible.

Pat Riley Chairman, Charlotte Chamber



The Charlotte Chamber works to grow the economy, to serve as a voice for business and to deliver value ... in order to ignite success for its members and for Charlotte.

Preface to Benchmark Charlotte

This is the first edition of Benchmark Charlotte. The purpose of this report is to provide decision makers in the private and public sectors with a quick, accessible, comparative overview of the Charlotte metropolitan area. Thirty-two indicators for eight metropolitan statistical areas (MSAs) have been assembled to reflect five broad areas of interest: Employment & Labor Force; Income & Productivity; Livability and Connectivity; New Economy; and Equity & Diversity. Patterned after, but different from, a similar report in Tampa, it is our intention to refine and update this report annually, occasionally changing the metropolitan areas included for comparison.

The data used in these benchmarks are, in every case, the most current available at the time of writing. The methodology of the report is quite simple. Within each of the five categories, data are presented for several indicators. Each indicator is ranked from 1 to 8, with scores of 1 being the most desirable. When two or more MSAs have identical values for an item, they are considered tied and given identical rankings. After all the indicators in a category are presented, the rankings are added together and an overall ranking for that category is determined. Similarly, the overall ranks for each category are added together to produce a single, composite ranking of the metro areas.

The report begins with the overall composite rankings and then details all the individual indicators in each of the five categories. In addition to raw data and rankings, each indicator is accompanied by a brief narrative describing the rationale for its inclusion and a brief analysis of the results. Data sources and notes about the rankings are located in section 7.

The Charlotte-Gastonia-Concord NC, SC MSA is compared to seven other MSAs:

Atlanta-Sandy Springs-Marietta GA; Austin-Round Rock TX; Boston-Cambridge-Quincy MA, NH; Chicago-Naperville-Joliet IL, IN, WI; Philadelphia-Camden-Wilmington PA, NJ, DE, MD; Tampa-St. Petersburg-Clearwater FL; and the combined MSA areas Raleigh-Cary + Durham NC (2 MSAs).

MSA data correspond to the 2006 definitions as reported by the Office of Management and Budget. For the sake of brevity, in both the tables and the text, each metro area is referred to by the name of its principle central city. The combined Raleigh-Cary and Durham MSAs are referred to as the RDU. When reading the report, you are encouraged to consider the following: (1) We have selected indicators for their relevance, currency and breadth of description. However, the choice of indicators directly impacts the rankings that follow. A different set of indicators would, no doubt, produce different overall scores and ranks; (2) Simple rankings do not account for the numerical distance between metro area indicators. Whether the difference between the top and bottom metro areas is large or small makes no difference in the rankings. Though all indicators are ranked 1 through 8, the observed values of some indicators are clustered closely together; the ranking method does not take into account clustering or spread in the data. Consequently, you should examine both the data and ranks when evaluating the indicators; (3) Some of the metro areas in this report are much larger than others. The Charlotte MSA has an estimated 2008 population of just under 1.7 million. However, MSA populations range from a low of 1.5 million in RDU to nearly 9.6 million in the Chicago metro area. Although we refer to the areas by the name of their principal city, the indicators reflect metrowide measurements. In every case, there will be substantial variation within the metro areas that are not examined here.

Metro Area	Population 2008 (Mil.)	Annual Growth Rate 2000-08
Charlotte	1.653	3.0%
Atlanta-Sandy Springs-Marietta GA	5.357	3.3%
Austin-Round Rock TX	1.570	3.2%
Boston-Cambridge-Quincy MA, NH;	4.458	0.2%
Chicago-Naperville-Joliet IL, IN, WI	9.585	0.7%
Philadelphia-Camden- Wilmington PA, NJ, DE, MD	5.855	0.4%
Tampa-St. Petersburg- Clearwater FL	2.747	1.8%
Raleigh-Cary + Durham NC (RDU)	1.520	3.0%

Metropolitan Area Population

Note: Data for Raleigh-Durham combine the Durham, NC metro area with the Raleigh-Cary, NC Metro area.

We hope you enjoy the Benchmark Charlotte 2008 report, find it enlightening and educational, and look forward to future refinements and editions.

Harrison S. Campbell, Jr., Associate Professor of Geography Alfred W. Stuart, Professor Emeritus of Geography University of North Carolina at Charlotte June 2008



Overall Summary



Summary of Composite Rankings: Overall rankings reflect each region's performance in each of the five categories measured. While most regions were ranked highly in some categories and low in others, a few regions — Austin and RDU — consistently ranked high. As a general rule, newer, smaller metro areas of the South tended to receive high marks for Employment & Labor Force and Income & Productivity while scoring lower in the New Economy and Equity & Diversity measures, though there is significant variation within some of these broad categories.

Overall, Charlotte ranked 3rd among the eight metro areas with considerable strength in the categories of Income & Productivity and Livability & Connectivity. This was especially true of measures



	Charlotte	Atlanta	Austin	Boston	Chicago	Phil.	RDU	Tampa
Overall Rank	3	4	1	5	7	6	2	8
Employment & Workforce	4	3	2	5	8	5	1	7
Income & Productivity	1	4	2	4	8	3	4	8
Livability & Connectivity	1	5	3	8	7	5	2	3
New Economy	5	3	1	4	6	8	2	7
Equity & Diversity	8	6	1	2	4	5	3	7



that reflect change over the 2000-2008 period. Likewise, though Charlotte did not score especially high in the categories of Employment & Labor Force or New Economy in 2008, it did score highly on individual components which measure change. Thus, most of Charlotte's indicators are moving in the right direction. However, there are specific indicators that might warrant the attention of the region's leadership and policy makers.

Educational attainment in Charlotte, relative to its competitors, has been and will continue to be a top priority in the region. Charlotte ranked 6th in its proportion of the adult population with at least a college education, 7th in its proportion of population with graduate degrees, 6th in its proportion of college educated women vs. men and 7th in the female-male wage gap. While there are areas of concern raised in these comparisons, Charlotte's regional economy is comparatively healthy.









Employment & **Workforce**

Overview: Growth in employment and labor force are two of the most important indicators of regional economic health. Employment growth reflects both demand for workers and the success of local business, while labor force growth indicates the extent to which area population responds to changing labor market conditions. Based on the data below, Charlotte ranked 4th overall, mostly due its relatively high unemployment rate in March 2008, and its somewhat lower proportion of workforce members with a college education.

Average Annual Job Growth: Average annual job growth is measured over the period 2001-3Q2007. While we might expect larger regions to produce more jobs annually, this was not the case during this time period. Charlotte's annual job growth of 16,961 was surpassed only by Atlanta and RDU, ranking Charlotte 3rd among comparison areas. In some ways, these data reflect the resilience of each regional economy to the recent recession (2001) and its ability to grow in what some called the "jobless recovery" that followed. Generally, job growth in the larger metro areas did not bounce back after recession to the same extent as in the smaller metros. None of these data reflect the more recent impact of job loss associated with the housing slump that began in August 2007.

Job Growth Rate: The job growth rate is an annualized job growth percentage that controls for the size of the job base. While Charlotte ranked 3rd, with jobs growing at an average annual rate of 1.7%, the rank of other cities with a smaller job base moved up in the rankings (e.g. Austin and RDU). Boston was the only metro area to actually lose jobs over the period.

Unemployment Rate: The unemployment rate is a snapshot of labor market conditions as of March 2008. By historical standards, all unemployment rates reported in the table are modest in level. Charlotte's unemployment (5.2%) rank was exceeded only by Chicago (5.6%) which largely reflects relatively large manufacturing sectors in these regions. This indicator is a good example of how metro area statistics can mask sub-metro conditions: Both cities of Charlotte and Chicago have much smaller reliance on manufacturing than their larger metro area.

Labor Force Growth: As the most basic measure of labor supply, growth in the labor force is an extremely important factor when gauging overall economic health. This is especially true



when viewed in concert with overall job growth. With its labor force growing 3.0% annually Charlotte ranked 3rd in overall labor force growth, behind Atlanta and Austin. While overall job growth is always a positive indicator, it is important for labor force growth to keep pace. Labor force growth is also an important consideration to new, expanding and relocating firms who need to know that sufficient supplies of labor are available to their firms.

College Educated Workforce: The availability of skilled labor has become among the most important location factors facing firms. The table shows the percentage of area population, age 25 and above, with a college education or higher in 2008. Typical of regions that contain several research universities and/or host their state's capitol, RDU, Boston and Austin have high levels of educational attainment with one-third or more of the adult population having at least a Bachelor's degree. Charlotte, ranking 6th with 29% of its adult population having a college education, is ahead of only Philadelphia and Tampa. Although Charlotte's educational attainment rate is above the U.S. average, staying competitive will require ever-increasing skills from its workforce.

	Charlotte	Atlanta	Austin	Boston	Chicago	Phil.	RDU	Tampa
Overall Rank	4	3	2	5	8	5	1	7
Ave. Annual Job Growth, 2000-'07	16,961	28,710	15,668	-2,941	10,244	11,332	17,428	10,135
Rank	3	1	4	8	6	5	2	7
Job Growth Rate (Ave. Annual)	1.7%	1.2%	2.2%	-0.1%	0.2%	0.4%	2.2%	0.9%
Rank	3	4	1	8	7	6	1	5
Unemployment Rate, 2008 (March)	5.2%	5.1%	3.6%	4.3%	5.6%	4.9%	4.1%	5.1%
Rank	7	5	1	3	8	4	2	5
Labor Force Growth Rate, 2000-08 (Ave. Annual) Rank	3.0% 3	3.3% 1	3.2% 2	0.2% 8	0.7% 6	0.4% 7	3.0% 3	1.8% 5
Labor Force w/ College+, % , 2008	29.0%	30.6%	36.4%	36.6%	29.1%	28.1%	38.6%	22.2%
Rank	6	4	3	2	5	7	1	8







Income & Productivity

Overview: The Charlotte region ranks high in Income & Productivity. These measures are included together because higher incomes are associated with greater productivity. Generally, household incomes tend to be higher in the larger metros, but income growth is strongest in the newer cities of the South.

Personal Income Growth: Growth in aggregate personal income relates closely to regional growth in high wage sectors, as well growth in other sources of income. Growing 5.2% annually from

2000-2008, Charlotte ranked 2nd (tied with Atlanta) behind RDU. In fact, there is little difference in income growth between the top four regions. Each of the top four regions added a substantial number of high-end, white collar service jobs making the rankings in income growth closely related to the job growth rankings.

Median Household Income: In 2008, larger cities tended to have the highest median household incomes. Boston, Chicago, and Philadelphia ranked 1, 2 and 3 on this measure, while the much smaller Charlotte region ranked 7th. On one hand, median household income is a good measure of wellbeing for the typical household in the region. It also provides firms with a sense of purchasing power among local residents. An important feature of this measure is that it is not heavily skewed by the presence of a few very wealthy households. On

	Charlotte	Atlanta	Austin	Boston	Chicago	Phil.	RDU	Tampa
Overall Rank	1	4	2	4	8	3	4	8
Personal Income Growth, 2000-08 (Ave. Annual) Rank	5.2% 2	5.2% 2	5.0% 4	3.2% 7	2.7% 8	3.4% 6	5.4% 1	4.7% 5
Median Household Income, 2008 Rank	\$52,806 7	\$58,070 4	\$55,339 6	\$66,954 1	\$59,255 2	\$58,240 3	\$57,297 5	\$45,399 8
Average Monthly Wage, 1Q07* Rank	\$4,704 2	\$4,298 4	\$4,463 3	\$4,852 1	\$4,258 5	\$4,240 6	\$3,903 7	\$3,527 8
Wage Growth, 1Q00-1Q07 (Ave. Annual)* Rank	6.1% 1	4.1% 6	5.3% 2	3.8% 7	3.5% 8	4.5% 5	4.7% 4	5.2% 3
Annual Metro GDP Growth, 2001-05 (Ave. Annual) Rank	2.0% 1	1.2% 6	1.4% 3	0.8% 8	1.0% 7	1.4% 3	1.4% 3	1.9% 2
Metro GDP per Worker, 2005 (\$) Rank	\$106,269 1	\$81,335 5	\$71,051 7	\$85,483 3	\$82,608 4	\$86,590 2	\$73,845 6	\$63,771 8

*See data notes for further details.

the other hand, these figures do not account for differences in the cost of living (see Livability & Connectivity for more on this subject) and are only a general indicator of household wealth.

Average Monthly Wage: To a large extent, average monthly wages reflect the region's mix of industries. Obviously, regions that specialize in high-wage, high growth sectors will typically have high wages overall. During 1Q2007, Charlotte ranked 2nd in average wage behind only Boston. At \$4,704, Charlotte's average monthly wage was one-third higher than last ranking Tampa, a regional economy with fewer high-end service professionals.

Wage Growth: Just as important as the average wage is its growth. Strong growth numbers indicate that the region is adding good jobs. From 2000-1Q2007 Charlotte's wage growth far surpassed those of other regions growing 6.1% annually. While Austin ranked 2nd, Tampa's 3rd rank is notable given its relative low average monthly wage. Strong wage growth is a reflection of increasing rates of productivity.

Metro GDP Growth: The gross domestic product of a metro area is a broad measure of the value of goods and services produced in the region. High rates of growth in this measure indicate the region is producing goods and services that are in demand. During the 2001-2005 period (the most recent period for which data are available) Charlotte topped the list for metro GDP growth at 2.0% annually. Closely behind was Tampa (1.9%); Austin, Philadelphia and RDU all tied for third place.



Metro GDP per Worker: Perhaps the most direct measure of productivity is the value of goods and services produced by the region's typical worker. Producing \$106,296 worth of output, the average worker in Charlotte far and away produces more goods and services than any of the comparison areas. Once again, to a large extent this measure reflects the specific mix of industries in the region. Manufacturing and various "producer services" (e.g. financial and legal services) are well known for high levels of output per worker which also helps explain the close clustering of Philadelphia, Boston, Chicago and Atlanta. Tampa's relatively low GDP per worker most likely reflects industry concentrations in lower value consumer-related services.



Livability & Connectivity

Overview: Quality of life has become an increasingly important factor in a region's ability to attract investment, create and hold quality employees, and sustain overall levels of growth. As firms and workers become more mobile and less tied to traditional location factors, a region's ability to thrive is depending more on its quality of life. Part of that quality relates to its affordability; part of it relates to the ease with which workers can commute and physically connect to other parts of the world. Overall, Charlotte ranked 1st in Livability & Connectivity for reasons discussed below.



Housing Permit Growth: The housing slump which began in August 2007 has affected every housing market in the country. Even when measured annually from 2006-2007, the number of housing permits issued in every metro area declined. Some markets suffered more than others — usually when new housing supply far out-stripped the pace of demand. This was especially true in Tampa (ranked 8th), where housing permits declined by nearly 46% in just one year. Other, more balanced markets, such as RDU (ranked 1st) and Charlotte (ranked 2nd) saw much more modest declines. More recently, the national press has reported that the Charlotte housing market was the only market to see an increase in average home prices.

Housing Affordability: The index of affordability relates the median home price to median household income in each metro area. The lower the index, the more affordable is the typical home to the typical household. The most affordable housing market in 2008 was Austin where the typical home value was 2.91 times higher than median household income; Charlotte ranked 2nd at 2.99. Housing affordability has long been a problem in larger metro areas with over-heated housing markets and little room for expansion such as Chicago (ranked 7th) and Boston (ranked 8th).

Average Commute Time: Other things equal, most workers prefer shorter commutes to work. When added up

	Charlotte	Atlanta	Austin	Boston	Chicago	Phil.	RDU	Tampa
Overall Rank	1	5	3	8	7	5	2	3
Housing Permit Growth, 2006-07	-15.8%	-34.4%	-23.7%	-19.2%	-27.4%	-21.7%	-10.0%	-45.9%
Rank	2	7	5	3	6	4	1	8
Housing Affordability Index, 2008*	2.99	3.06	2.91	5.76	4.12	3.79	3.33	4.00
Rank	2	3	1	8	7	5	4	6
Average Commute Time (Min), 2008 Bank	29 3	34 7	29 3	31 5	34 7	31 5	27 1	28 2
Percent Commutes < 30 Min., 2008 Bank	54.7% 4	45.2% 8	55.2% 3	50.8%	46.2% 7	52.2%	58.2% 1	56.8% 2
Number of Air Passengers, 2007 (Mil.)	27.7	71.5	6.9	24.5	73.6	26.0	8.2	15.3
Rank	3	2	8	5	1	4	7	6
Air Passengers per Capita, 2007	16.76	13.35	4.41	5.49	7.68	4.44	5.42	5.57
Rank	1	2	8	5	3	7	6	4
On-Time Arrivals (%), 2007	71.3	74.4	NA	69.7	68.5	66.5	NA	NA
Rank	2	1	NA	3	4	5	NA	NA

*See data notes for further details.

Livability & Connectivity

over all commuters, just a few minutes difference in average commuting time can amount to nearly a week's time lost in traffic. Across all urban areas, the Texas Transportation Institute estimates that the average worker lost about 38 hours due to congestion in 2005. In San Francisco, commuters lost up to 72 hours. Thus, commuting time is an important quality of life factor. In 2008, commuters in RDU faced the shortest average commute (27 minutes) followed closely by Tampa (28 minutes) and Charlotte (29 minutes). The longest average commute is experienced by workers in Atlanta (34 minutes).

Percent Commutes Less Than 30 Minutes: Most commuters are willing to endure a 30 minute commute. Shorter commuting times are clearly preferable, other things being equal. Rankings for the percentage of commuters in 2008 with commuting times less than 30 minutes are very similar to average commuting times. While 54.7% of Charlotte workers commuted less than 30 minutes (ranked 3rd), 58.2% of RDU workers had such commutes. Although Boston dropped in rank on this measure (from 5th to 6th) and Chicago improved relative to average commute time (from 8th to 7th), only in Atlanta did fewer than half (45.2%) of commuters drive less than 30 minutes to work.





Number of Air Passengers: The number of air passengers (origins plus destinations) passing through regional airports is one measure of the volume of air travel and level of access each region has to air transport. Although Atlanta is known to be the nation's busiest airport, the Chicago region with O'Hare and Midway, processed more passengers in 2007 than any other region (73.6 million). Regions with hub operations clearly handle the most passengers as Atlanta ranked 2nd and Charlotte a distant 3rd. Connectivity is one area where RDU (ranked 7th) and Austin (8th) fall behind.

Air Passengers Per Capita: Air Passengers per capita is a rough indicator of a region's access to air travel and connectivity to the rest of the world. While many of the nation's largest airports are also large in relation to regional population (Atlanta ranked 2nd and Chicago 3rd) Charlotte's residents had the greatest access to air transport of all metros studied.

On-Time Arrivals: Access to air transport is great but frequent late arrivals are not only aggravating, they are inefficient. The Bureau of Transportation Statistics publishes data on the

percent on flights that arrive on time which can be critical for the business traveler and those making connecting flights. These data are available only for the 32 largest airports in the country. In 2007, Atlanta ranked 1st in the percentage of flights arriving on time (74.4%) while Charlotte ranked 2nd with 71.3% arriving on time. Because the airports in Austin, RDU and Tampa are not sufficiently large, there are no data for them. This measure was omitted from the overall Livability & Connectivity ranking.











New Economy

Overview: New Economy activities include those that are primarily geared toward knowledge-intensive information processing and high end, value-added business services. Much has been made of the general shift away from manufacturing and toward services. However, "services" are extremely heterogeneous, spanning the spectrum from low skill / low wage to high skill / high wage activities. Many scholars believe that an important characteristic of New Economy activities and functions is their flexibility and adaptability. Thus, regional economies with large endowments of, and the ability to attract, talented New Economy workers are thought to be better positioned to adapt to ever-changing economic conditions. This set of indicators is best viewed in light of Livability & Connectivity measures.

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*See data notes for further details.

Population Age 25-39: Younger working cohorts are at the core of the New Economy. While not all 25-39 year olds are part of the information economy, they are thought to be an important component of creative productivity. They are among the most educated and mobile of all cohorts and, to a large degree, are responsible for innovation and identifying new market niches. As one of the technology-producing regions of the world with a large research university, it comes as no surprise that in 2008 Austin ranks 1st in the proportion of its population between 25 and 39 years old (24.4%). For similar reasons, RDU also ranks high (2nd with 22.9%) while Atlanta is a close 3rd with 22.8%. Charlotte, with 22.4% of its population between 25 and 39, ranked 4th. States and regions known for attracting retirees (e.g. Tampa) clearly rank low on this measure.

Creative Workers: We define creative workers as the proportion of the labor force in a select set of occupations: Computer and Mathematical occupations; Architecture and Engineering occupations; Life, Physical and Social Science occupations; and Art, Design and Entertainment occupations. Many of these Creative Workers are relatively young and well-educated. In 2008, RDU topped the list with 13.0% of its labor force holding these creative occupations; Creative Workers represent 12.5% of labor force in Austin. Likewise, the Boston area with its concentration of colleges, universities and bio-tech firms ranked 3rd on this measure. With few bio-tech, pharmaceutical, systems integration



New Economy

or software development firms, the number of Creative Workers in the Charlotte area is relatively low. With only 7.2% of it labor force in these occupations, Charlotte ranked 7th in this category.

Creative Worker Growth: While Charlotte's endowment of Creative Workers is relatively low, it has been very successful in attracting more of them. Overall, Charlotte ranked 1st in Creative Worker growth from 2000-2008. Growing at annual rate of 4%, Charlotte's Creative Workers are growing about 4 times faster than in Chicago or Philadelphia and 13 times faster than in the technology-rich Boston. Other tech-rich regions like Austin, RDU and Atlanta are also adding substantial numbers of Creative Workers.

Power Workers: Power Workers do not refer to those working for utility companies. Instead, they are typically high-level workers who process and manage information within their organizations. They may, or may not, be "creative" in the New Economy sense, but they facilitate creative activities and are responsible for "getting







things done." Power Workers consist of workers who specialize in Managerial; Business Operations; Financial Specialties and Legal occupations. This measure reflects the proportion of the regional labor force that holds Power occupations in 2008. Once again, we note that many capable regions are those with high concentrations of Power Workers in 2008, especially Boston (1st), Austin and Atlanta (tied for 2nd), and RDU (4th). Charlotte, with its substantial financial sector ranked 5th having 16.4% of its labor force in Power Workers is similar across the regions.

Power Worker Growth: Perhaps because of its sizable growth in financial services, growth in the number of Power Workers was highest in Charlotte, growing 4.0% annually from 2000-2008. Also growing quickly were Power Workers



in Austin and RDU (ranked 2nd and 3rd). Power Worker growth was slowest in the larger cities of the Northeast and Midwest (Chicago 6th, Philadelphia 7th, and Boston 8th).

Self-Employed: The proportion of the labor force that is selfemployed is one measure of entrepreneurship and, thus, risktaking. It also reflects the extent to which to the job market is dominated by large firms. Past research has shown that many innovative practices and entrepreneurial activities come from those self-employed pioneers. Consistent with the notion that many innovative technology-based activities come from smaller knowledge-intensive firms, in 2008 Austin ranked 1st with 6.7% of its labor force self-employed. Boston ranked a somewhat distant 2nd with the self-employed accounting for 6.0% its labor force. Charlotte, on the other hand, had only 5.0% of its labor force in this category, ranking 6th in 2008.

Graduate Degree Workers: Perhaps the best measure of knowledge-based activity is the proportion of the labor force that holds a graduate degree (Master's, Professional, and Doctorate). Clearly, regions with substantial education sectors will score high on this measure. But regions hosting state capitols will also score high as state government agencies are major employers of the most educated. All these factors help explain why Boston, RDU and Austin rank 1st, 2nd and 3rd with 15.1%, 13.9% and 12.1% of their labor force holding advanced degrees. Only 8.0% of Charlotte's labor force holds a graduate degree, which ranks Charlotte 7th among the eight regions.









Equity & Diversity

Overview: For decades, conventional economic wisdom suggested a basic trade-off between equity and efficiency — greater levels of equity could only come at the expense of economic efficiency. More recently, scholars have discovered that such a trade-off does not always exist and that metro areas with greater equity have tended to grow more quickly than those with less social and economic equity. The issues

are thorny, but policy makers are paying more attention to matters of "who gets what" and how it affects growth and quality of life. Future editions of this benchmarking report will refine our equity and diversity measures, but we felt it important to begin addressing matters of equity and diversity, especially as it relates to gender, income and civic engagement.

Female Labor Participation: Labor force participation refers to the proportion of the population age 16+ who are activity participating in the labor force, whether they are employed or unemployed and actively seeking work. Women's participation in the labor market reflects, in part, their expectations about the benefits of work. Women represent a sizable portion of any labor market and their participation in it is an important component of labor supply. As shown in the table, 2008 female labor force participation tends to be high where job growth is strong and wages are growing. Austin, ranking 1st with a female participation rate of 64.4%, and RDU ranking 2nd with a rate of 64.3%, clearly fit this pattern. Ranking 3rd, Charlotte's female participation rate is 63.7%.

Female/Male Education Ratio: This measure is intended to reflect equity in educational attainment in 2008. It is constructed as the ratio of (a) the percent of adult women with at least a college education divided by (b) the percentage of adult men with at least a college education. A ratio of 1.00 indicates identical rates



of educational attainment among women and men; ratios less than 1.00 indicate that women, on average, have less education than men. In most cases, the education ratio is 0.90 or above. In Charlotte, the ratio is 0.92 which ranks our region 6th overall.

	Charlotte	Atlanta	Austin	Boston	Chicago	Phil.	RDU	Tampa
Overall Rank	8	6	1	2	4	5	3	7
Female Labor Force Participation, 2008	63.7%	63.2%	64.4%	61.6%	59.5%	58.6%	64.3%	53.8%
Rank	3	4	1	5	6	7	2	8
Female/Male Education Ratio, 2008	0.92	0.95	0.96	0.93	0.95	0.90	0.97	0.85
Rank	6	3	2	5	3	7	1	8
Female/Male Wage Ratio, 2007* Rank	53.3% 7	58.3% 6	58.6% 5	NA	62.0% 3	64.7% 2	60.1% 4	67.6% 1
Interest Income per Capita, 2008 (\$) Rank	\$1,413 7	\$1,351 8	\$1,667 5	\$2,273 1	\$1,775 3	\$1,764 4	\$1,586 6	\$2,070 2
Poverty Rate, 2006 Rank	11.5% 2	11.9% 5	13.0% 8	9.2% 1	11.9% 5	11.8% 3	11.8% 3	12.1% 7
Transfer Payments per Capita, 2008 (\$)	\$1,868	\$1,778	\$1,750	\$2,568	\$2,113	\$2,809	\$2,007	\$3,808
Rank	3	2	1	6	5	7	4	8
Private Non-Profit Workers, 2008 Rank	4.7% 7	4.6% 8	5.3% 6	10.3% 1	7.5% 3	9.2% 2	6.6% 4	5.5% 5

*See data notes for further details.

Equity & Diversity

Ranking 1st is RDU, again largely due to the presence of both several major universities and the state capitol. Tampa's relatively low education ratio of 0.85 is partly due to its lower rates of educational attainment generally (see Employment & Labor Force) and may also be influenced by a larger elderly population.

Female/Male Wage Ratio: This measure compares women's average monthly wage to those of men. It does not make a "job-for-job" comparison. There are many reasons why the wages of men and women might differ including years of education and work experience, industry or occupation of employment, full-time vs. part-time status, etc. However, in 2007, it is notable that women in Tampa and Philadelphia (ranking 1st and 2nd) had higher earnings relative to men than did women in Atlanta and Charlotte (ranking 6th and 7th). Data for Boston were not available.

Interest Income per Capita: Income from interest, dividends and rent is an increasingly important source of personal income across the nation. Previous research has shown that regions with large quantities of income from these sources tend to grow faster than those without. Thus, high levels of interest income per capita are generally more desirable. In many ways, this income source reflects the presence of somewhat older, affluent individuals with the means to invest in the stock market and other assets. In 2008, this description appears to fit well the Boston and Tampa regions (ranked 1st and 2nd). Conversely, regions with younger populations who earn more of their income from wages tend to have lower levels of interest income which appears to be the case in RDU, Charlotte and Atlanta (ranking 6th, 7th, and 8th).

Poverty Rate: The overall poverty rate reflects the extent to which parts of the resident population do not share in the region's wealth and prosperity. There are many reasons to be





concerned about poverty and higher poverty rates are clearly less desirable than lower rates. This is good news for Boston and Charlotte whose 2006 poverty rates of 9.2% and 11.5%, respectively, were the lowest among the areas compared. Austin, on the other hand, with a large minority population ranked 8th with 13.0% of its population living in poverty during 2006.

Transfer Payments per Capita: Transfer payments consist primarily of payments to individuals for social security, disability and public assistance. Unlike interest income, reliance on transfer payments has been associated with slower economic growth, so lower transfer payments per capita are more desirable than higher levels of transfer payments. Transfer payments tend to be lower in populations that are younger and experience less poverty and unemployment. Consequently, in 2008 Austin, Atlanta and Charlotte ranked 1st, 2nd and 3rd on this measure while Boston, Philadelphia and Tampa ranked 6th, 7th and 8th.

Private Non-Profit Workers: The proportion of the 2008 labor force that work in the private, non-profit sector is intended as a measure of civic engagement. The private, non-profit sector is defined broadly consisting of such diverse activities ranging from community based organizations to private art galleries and museums. In general, workers in this sector contribute to the betterment of their communities, so higher levels of private, nonprofit workers are assumed to contribute to more to equity of access and diversity of civic and cultural amenities in the region. It is important to note that (a) this indicator does not measure charitable giving or the giving of volunteer time and (b) these types of activities tend to be disproportionately concentrated in the central cities and counties of metro areas. Given these caveats, Boston and Philadelphia rank 1st and 2nd with especially high proportions of these workers (10.3% and 9.2%), perhaps due to their historic significance while Charlotte and Atlanta rank 7th and 8th with only 4.7% and 4.6% of their labor force in the private, non-profit sector.



Employment & Vorkorce

Job growth 2001-3Q2007, http://data.bls.gov/cgi-bin/dsrv

Unemployment Rate, March 2008, Bureau of Labor Statistics

Labor Force Growth and Educational Attainment, Claritas PopFacts, 2000, 2008

Income & Productivity

Personal Income Growth, 2000-2008, Claritas PopFacts

Median Household Income, 2008, Claritas PopFacts

Metro GDP Growth 2001-2005, BEA

Metro GDP per Worker, 2005, BEA

Wage Growth, Annualized, U.S. Census, http://lehd.did.census.gov/led/datatools/qwiapp.html

Charlotte, Atlanta, Philadelphia, Raleigh-Durham, Tampa based on 1Q00-1Q07

Chicago based on 2Q00-2Q07

Austin 4Q01-4Q06

Boston 1Q01-1Q07, BLS Quarterly Census of Employment and Wages.

Connectivity

Housing permits 2006-07, http://www.census.gov/const/www/C40/table3.html#annual

Housing Affordability Index: Ratio of median home value to median household income, Claritas PopFacts, 2008

Average Commuting data from Claritas PopFacts, 2008

Air passenger data from 2007, Bureau of Transportation Statistics. See

http://www.bts.gov/programs/airline_information/

- Air Passenger data for Boston include Logan and Manchester Airports; Chicago air passengers include O'Hare and Midway.
- On-Time Arrival data available for 32 largest airports only. Due to missing data, overall rank excludes On-Time Arrival Percentage

Economy

Claritas PopFacts, 2008

- Creative Workers: Computer & Mathematical; Architecture & Engineering; Life, Physical & Social Science; Life, Physical & Social Science; Arts, Design, Entertainment Occupations as percent of labor force.
- Power Occupations: Managerial, Business Operations, Financial Specialties; Legal Occupations as percent of labor force.
- Graduate Degree holders as percent of labor force (Master's, Professional, and Doctorate degrees)

Equity & Diversity

Claritas PopFacts, 2008, unless otherwise noted.

Poverty Rate from US Census, American Community Survey, 2006.

- Wage ratio from US Census Local Employment Dynamics, 2006, 2007see http://lehd.did.census.gov/led/ datatools/qwiapp.html. Data unavailable for Boston.
- Female Labor Force Participation Rate: Percentage of women age 16+ in labor force
- Female-Male Education Ratio: Ratio of Women-to-men; percent age 25+ with college degree or higher.

Private Non-profit workers as percent of labor force.

Overall Score computed differently due to missing data.

Suggested Reading

Campbell, H.S. (2003) "Unearned Income and Local Employment Growth in North Carolina: An Economic Base Analysis," Southeastern Geographer, 43(1): 89-103.

Carlino, G. (2005) "The Economic Role of Cities in the 21st Century," Business Review, Philadelphia Federal Reserve Bank, p. 9-15.

Dissart, J.C. and S. Deller (2000) "Quality of Life in the Planning Literature," Journal of Planning Literature, 15(1): 135-161.

Greenstein, R. and W. Wiewel (2000) Urban-Suburban Interdependencies, Cambridge, MA: The Lincoln Institute of Land Policy.

Katz, B. and R. Lang (2003) Redefining Urban and Suburban America: Evidence from Census 2000, Brookings Institution Press: Washington, DC.

Biographies



Harrison S. Campbell, Jr. is an Economic Geographer and Associate Professor in the Department of Geography and Earth Sciences at the University of North Carolina at Charlotte. His research focuses on patterns of regional development, impact assessment and policy evaluation. He is also the author of Charlotte's Business Growth Index. Dr. Campbell received his Ph.D. from University of Illinois at Urbana-Champaign.



Dr. Al Stuart is a Professor Emeritus of Geography at UNC Charlotte, where he served since 1969. Among his contributions are co-editing *The North Carolina Atlas*, published by the UNC Press in 2000. Subsequent to its release, he developed a web site that provides on-going updates of many parts of the book: ncatlasrevisited.org.

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Best Cities for Black Families

rtners for Livable Communities, 2004

Most Educated Workforce: Cities usiness Facilities, July 2007

Best City for # Entrepreneurs

Entrepreneur Magazine, 2006



America's Best Housing Market Forbes Magazine, May 2007

H5 N. American Cities of the Future *IDI Magazine, April 2007*



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