Benchmark Charlotte 2009

LETTER FROM THE CHAIRMAN



For more than 50 years the Chamber has sponsored Inter City Visits in order that we may study what other communities have found works well for them and on occasion what does not. These visits have brought back to Charlotte some great ideas that have been put in place to help put Charlotte where it is today.

This year's visit is a bit different. It gives each of us the opportunity to look inward at what we have accomplished but more importantly view what still needs to be accomplished.

Last year we began the addition of a benchmarking study to give our members a better understanding of how Charlotte compares to other communities. This year's study compares Charlotte with eight other southern metropolitan areas that we would typically compete with for economic development projects. Charlotte ranked third overall in this year's analysis. Dr. Campbell's research can help us better understand Charlotte and provide an insight into areas we need to focus on. Each of us knows the greatness of Charlotte; however, left unattended even the best of cities will crumble.

The current economic crisis is having untold impact on most sectors of the community. The weaker sectors will have the biggest impact during the slowdown. Based on the current benchmark analysis, it is clear Charlotte needs to focus on our employment and workforce, equity and diversity as well as our future industries.

Few can argue that CLT International Airport or the LYNX are not phenomenal. Without proper attention and care they could, however, become less of an asset. It's appropriate we visit these and other regional assets to ensure our next generation of residents continue to have a strong local community.

When our Inter City Visit is complete, we should all have a broader knowledge of not only the strengths of Charlotte but also its weaknesses, thus giving us a better understanding of our community. I trust we will have revealed to each of you a better vision of our future as well as some tasks that are still ahead.

A special thanks to our sponsor, The Shaw Group Inc., who made this study possible.

Tom Bell

Tim Belk Chair, 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.

BENCHMARK CHARLOTTE

This is the second 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-one indicators for nine 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. This year, we have made two changes to the report. First, we changed the metropolitan areas used for comparison. Second we have refined our indicators of Equity & Diversity. However, most indicators are the same as those used in last year's report. The data used in these benchmarks are, in most cases, 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 one to nine, with scores of one being the most desirable. When two or more MSAs have identical values for an item, they are considered tied and given identical rankings. Within each category, rankings are added together to produce an overall score for the category which is also ranked. The overall ranks for each category are then 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 seven.

The Charlotte-Gastonia-Concord NC, SC MSA is compared to eight other MSAs: Atlanta-Sandy Springs-Marietta GA; Austin-Round Rock TX; Dallas-Fort Worth-Arlington TX; Jacksonville, FL; Nashville-Davidson-Murfreesboro-Franklin, TN; Richmond, VA; Tampa-St. Petersburg-Clearwater FL; and the combined MSA areas of Raleigh-Cary + Durham-Chapel Hill NC (Two MSAs). MSA data correspond to the 2007 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 principal central city. The combined Raleigh-Cary and Durham-Chapel Hill MSAs are referred to as the RDU.

When reading the report, you are encouraged to consider the following: (1) Indicators have been selected 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 area is large or small makes no difference in the rankings. All indicators are ranked one through nine, but 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 are encouraged to examine both the data and ranks when evaluating the indicators; (3) Some 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 1.2 million in Richmond to nearly 6.2 million in Dallas. Although we refer to the areas by the name of their principal city, the indicators reflect metro-wide measurements. In every case, there will be substantial variation within each metro area that is not examined here; (4) In many ways, the regions presented here represent the cream of the American metropolitan crop. Whether they are ranked high or low, they typically perform better than the U.S. average. Each is among the nation's most exciting and desirable places to live and do business.

We hope you find Benchmark Charlotte 2009 to be both educational and thought-provoking. We welcome your feedback as we consider refinements for future editions.

Harrison S. Campbell, Jr., Associate Professor of Geography University of North Carolina at Charlotte, May 2009

Metro Area	Population 2008 (Mil.)	Annual Growth Rate2000-08	Metro Area
Charlotte	1.653	3.0%	Charlotte-Gastonia-Concord, NC-SC
Atlanta	5.357	3.3%	Atlanta-Sandy Springs-Marietta, GA
Austin	1.570	3.2%	Austin-Round Rock, TX
Dallas	6.164	2.4%	Dallas-Fort Worth-Arlington, TX
Jacksonville (JAX)	1.328	2.3%	Jacksonville, FL Metro
Nashville	1.495	1.7%	Nashville-Davidson-Murfreesboro-Franklin, TN
RDU	1.520	3.0%	Durham-Chapel Hill + Raleigh-Cary, NC
Richmond	1.211	1.3%	Richmond, VA
Tampa	2.747	1.8%	Tampa-St. Petersburg-Clearwater, FL
Note: Raleigh-Cary and Durh	am-Chapel Hill MSAs are combined	l to produce Raleigh-Durha	am (RDU). Source: Claritas Pop Facts

Metropolitan Area Population



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 (e.g., RDU) consistently ranked high. In general, technology-rich areas also hosting the state capitol tended to receive high marks for Employment & Labor Force, New Economy, and Equity & Diversity measures, while scoring lower in the areas of Income & Productivity and Livability & Connectivity, though there is significant variation within some of these broad categories.

Overall, Charlotte ranked third among the nine metro areas with considerable strength in the categories of Income & Productivity and Livability & Connectivity. This was especially true of measures 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, it did score highly on individual components



	Charlotte	Atlanta	Austin	Dallas	JAX	Nashville	RDU	Richmond	Tampa
Overall Rank	3	4	2	5	9	7	1	6	8
Employment & Workforce	5	4	1	3	7	7	2	6	9
Income & Productivity	1	4	6	5	3	9	2	7	8
Livability & Connectivity	2	6	6	4	9	3	1	5	6
New Economy	5	4	1	3	9	6	2	7	8
Equity & Diversity	6	4	1	8	7	8	2	4	3



measuring change. Thus, most of Charlotte's indicators continue to move 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 sixth in its proportion adults with at least a college education and ninth in its proportion of the labor force with graduate degrees. More immediately, however, recent turmoil in the housing and banking sectors, coupled with a sizable manufacturing presence in the region, has pushed the area's unemployment rate higher than many of its competitors. While there are areas of concern raised in these comparisons, Charlotte's regional economy is comparatively healthy.







EMPLOYMENT & WORKFORCE

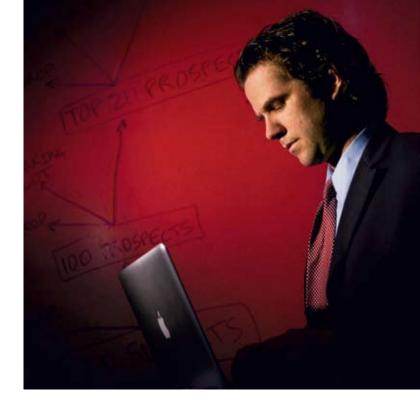
Overview: Employment and labor force growth are two salient indicators of regional economic health. Employment growth reflects both demand for workers and the success of local business, while labor force growth indicates the extent to which area population responds to changing labor market conditions.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

Average Annual Job Growth: Average annual job growth is measured over the 2000-2008 period. Generally, larger metro areas added more jobs over the eight-year period. Charlotte's annual job growth of 13,086 placed it fourth behind Dallas, Atlanta and RDU. This period of time has been particularly difficult. The resilience of all regional economies was tested during the "jobless recovery" from the 2001 recession, and then, more recently, as the more severe current recession set in. Of course, the pace of job growth in 2009 has been less than robust and next year's report will reveal just how each region responded to these challenging conditions.

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 third with jobs growing at an average annual rate of 1.7 percent per year, the rank of other cities with larger job bases (Atlanta and Dallas) fell, though all regions registered positive job growth over the period.

Unemployment Rate: Though measured monthly, the unemployment rate shown is the annual average for 2008, an especially crucial period given the current recession which began in December 2007. Charlotte's unemployment (6.4 percent) ties for seventh with Atlanta, surpassed only by Tampa, a region hard hit by the housing crisis of 2007. Metro areas with the lowest 2008 unemployment rate were Richmond and Austin.

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 3.2 percent annually, Charlotte ranked third in overall labor force growth, behind Atlanta and Austin who tied for first. 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. In spite of its



relatively high unemployment rate, labor force growth suggests that the Charlotte region is still viewed as a desirable place for workers.

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 labor force with a college education or higher in 2008. Typical of regions that contain several research universities and/or host their state's capitol, RDU, Austin, Atlanta and Richmond have high levels of educational attainment with more than 35 percent of the labor force having at least a Bachelor's degree. Charlotte, ranking sixth with 34.7 percent of its labor force having a college education, is ahead of only Tampa, Nashville and Jacksonville. Although Charlotte's labor force is more educated than the U.S. average, staying competitive will require ever-increasing skills from its workforce.

	Charlotte	Atlanta	Austin	Dallas	JAX	Nashville	RDU	Richmond	Tampa
Overall Rank	5	4	1	3	7	7	2	6	9
Ave. Annual Job Growth 2000-08	13,086	20,473	12,578	28,981	7,785	8,343	15,513	6,051	12,310
Rank	4	2	5	1	8	7	3	9	6
Job Growth Rate (Ave. Annual, %)	1.7	0.9	1.9	1.0	1.4	1.2	2.2	1.0	1.0
Rank	3	9	2	6	4	5	1	6	6
Unemployment Rate, 2008 (%)	6.4	6.4	4.4	5.0	5.8	5.5	6.0	4.3	6.5
Rank	7	7	2	3	5	4	6	1	9
Labor Force Growth Rate, 2000-08 (Ave. Annual, %)	3.2	3.4	3.4	2.7	2.7	2.0	3.1	1.7	2.0
Rank	3	1	1	5	5	7	4	9	7
Labor Force w/ College+ 2008 (%)	34.7	36.9	41.7	35.1	30.1	31.8	45.5	35.1	32.3
Rank	6	3	2	4	9	8	1	4	7



PRODUCTIVITY

Overview: The Charlotte region ranks high in Income & Productivity. These measures are included together because higher incomes are associated with greater productivity. Generally, regions with higher household incomes faced slightly slower rates of income growth. Regional productivity was related to each region's specific mix of industries.

Personal Income Growth: Growth in aggregate personal income relates closely to a region's growth in high wage sectors as well as growth in other sources of income. Growing 4.6 percent annually

from 2000-2008, Charlotte ranked fourth behind Jacksonville, RDU and Atlanta. The top five metros areas were, in fact, fairly closely clustered with only 0.5 percentage points separating them.

Median Household Income: In 2008, the highest median household incomes were found in Atlanta, Richmond and Austin, all of which host a state capitol (RDU ranked fifth). Charlotte, with a median household income of \$52,806, ranked sixth. On one hand, median household income is a good measure of well-being 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 skewed by the presence of a few very wealthy households. On 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.

	Charlotte	Atlanta	Austin	Dallas	JAX	Nashville	RDU	Richmond	Tampa
Overall Rank	1	4	6	5	3	9	2	7	8
Personal Income Growth, 2000-08 (Ave. Annual, %)	4.6	4.7	4.5	3.9	5.0	3.8	4.8	4.1	4.2
Rank	4	3	5	8	1	9	2	7	6
Median Household Income, 2008	\$52,806	\$58,070	\$55,339	\$54,957	\$51,085	\$50,159	\$53,471	\$56,706	\$45,399
Rank	6	1	3	4	7	8	5	2	9
Average Monthly Wage, 2007	\$4,254	\$4,109	\$4,136	\$4,378	\$3,517	\$3,767	\$4,213	\$3,859	\$3,491
Rank	2	5	4	1	8	7	3	6	9
Annual Wage Growth, 2000-07 (%)	4.2	2.8	2.3	3.0	4.6	4.3	4.0	4.0	4.7
Rank	4	8	9	7	2	3	5	5	1
Annual GRP Growth, 2001-06 (%)	8.2	5.4	6.6	6.5	9.7	7.5	6.6	5.0	8.1
Rank	2	8	5	7	1	4	5	9	3
GRP per Worker, 2006	\$109,096	\$83,387	\$73,308	\$90,250	\$71,359	\$72,409	\$76,857	\$75,108	\$66,384
Rank	1	3	6	2	8	7	4	5	9

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. In 2008, Charlotte ranked second in average wage behind only Dallas with its energy-rich economy. At \$4,254, Charlotte's average monthly wage was one-fifth 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 annual growth rate. Strong growth numbers indicate that the region is upgrading the composition of its job base. From 2000-2008 Charlotte experienced a 4.2 percent increase in wages (ranked fourth). Interestingly, while Tampa and Jacksonville had the lowest average wage, they experienced the fastest wage growth over the seven year period. It is generally accepted that 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 2001-2006 period (the most recent period for which data are available) Charlotte's annual GDP growth of 8.2 percent ranked second behind Jacksonville's remarkable pace of 9.7 percent per year.

Metro GDP per Worker: Perhaps the most direct measure of productivity is the value of goods and service produced by the region's typical worker. Producing \$109,096 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., banking, legal services, management consulting along with utilities/ energy) are well known for high levels of output per worker. On the

other hand, the market value of government, retail and other services are relatively low, especially in those sectors utilizing a large number of parttime workers. This helps explain the close clustering of metro areas ranked four through eight. Tampa's relatively low GDP per worker most likely reflects industry concentrations in lower value consumer-related services.





CONNECTIVITY

Overview: Quality of life has become an important factor affecting 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 depends more heavily 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 second 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 ninth), where housing permits declined by nearly 46 percent in just one year. Other, more balanced markets, such as RDU (ranked first) and Charlotte (ranked fourth) saw much more modest declines. While trends in 2008 were more dire still, it has been recently reported that home prices, and the housing market generally, has held up better in Charlotte than most metro areas.

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





	Charlotte	Atlanta	Austin	Dallas	JAX	Nashville	RDU	Richmond	Tampa
Overall Rank	2	6	6	4	9	3	1	5	6
Housing Permit Growth, 2006-07 (%)	-15.8	-34.4	-23.7	-22.9	-35.6	-11.5	-10.0	-10.8	-45.9
Rank	4	7	6	5	8	3	1	2	9
Housing Affordability Index, 2008	2.99	3.06	2.91	2.39	3.60	3.22	3.33	3.56	4.00
Rank	3	4	2	1	8	5	6	7	9
Ave. Commute Time, 2008 (min.)	29	34	29	30	29	28	27	27	28
Rank	5	9	5	8	5	3	1	1	3
Commutes < 30 min., 2008 (%)	60.3	49.9	60.5	56.9	59.5	60.9	63.8	64.8	62.6
Rank	6	9	5	8	7	4	2	1	3
Air Passengers, 2008 (mil.)	25.5	64.3	7.1	48.1	5.0	7.7	7.8	2.8	14.7
Rank	3	1	7	2	8	6	5	9	4
Air Passengers Per Capita	15.42	12.01	4.53	7.80	3.74	5.16	5.11	2.31	5.36
Rank	1	2	7	3	8	5	6	9	4
On-Time Arrivals (%)	78	76	NA	75	NA	NA	NA	NA	78
Rank	1	2		3					1

LIVABILITY & CONNECTIVITY

to the typical household. The most affordable housing market in 2008 was Dallas where the typical home value was only 2.39 times higher than median household income; Charlotte ranked third at 2.99. Housing affordability has long been a problem in metro areas with over-heated housing markets and the Florida markets of Jacksonville (ranked eighth) and Tampa (ranked ninth) have been especially susceptible to the housing crisis.

Average Commute Time: Other things equal, most workers prefer shorter commutes to work. When added up 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 and Richmond faced the shortest





average commute (27 minutes) followed closely by Jacksonville and Tampa (28 minutes) and Charlotte and Austin (29 minutes). The longest average commute is experienced by workers in Atlanta (34 minutes).

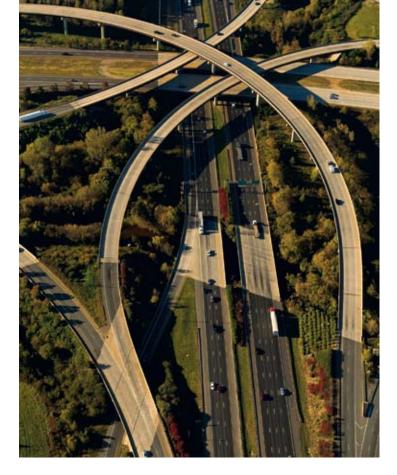
Percent Commutes Less Than 30 Minutes: Most commuters are willing to endure a 30 minute commute, though shorter commuting times are clearly preferable. Rankings for the percentage of commuters in 2008 with commuting times less than 30 minutes are very similar to average commuting times. While more than 60 percent of Charlotte workers commuted less than 30 minutes (ranked sixth), Richmond topped the list with the greatest percentage of commuters traveling less than 30 minutes to work (64.8 percent). In fact, in all of the top six metro areas, at least 60 percent of commuters faced travel times less than 30 minutes. Only in Atlanta did fewer than half (49.9 percent) 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 transportation. Although Atlanta is known to be the nation's busiest airport, processing 64.3 million passengers in 2008, regions with hub

operations also handle a large number of travelers. Thus, Dallas with 48.1 million and Charlotte with 25.5 million passengers ranked second and third. Other than Tampa, all other metro areas have only a small fraction of the connectivity offered in the top three areas studied.

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 second), 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 of 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 2008, Charlotte and Tampa ranked first in the percentage of flights arriving on time (78 percent) while approximately three-fourths of flights arrived on-time in Atlanta and Dallas. Because the airports in all other comparison areas are not sufficiently large, there are no data for them. This measure was omitted from the overall Livability & Connectivity ranking.







ECONOMY

Overview: New Economy activities include those that are primarily geared toward innovation, knowledge-intensive business services and high end, value-added pursuits. 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.

	Charlotte	Atlanta	Austin	Dallas	JAX	Nashville	RDU	Richmond	Tampa
Overall Rank	5	4	1	3	9	б	2	7	7
Pop. Age 25-39, 2008 (%)	22.4	22.8	24.4	23.4	20.3	21.7	22.9	20.5	18.9
Rank	5	4	1	2	8	6	3	7	9
Creative Workers, 2008 (%)	7.2	8.2	12.5	8.9	6.0	6.9	13.0	7.5	6.3
Rank	6	4	2	3	9	7	1	5	8
Creative Worker Growth, 2000-08 (Annual %)	4.0	3.2	3.4	3.3	3.0	2.1	3.6	1.9	2.3
Rank	1	5	3	4	6	8	2	9	7
Power Workers, 2008	16.4	17.3	17.3	17.0	14.5	14.8	16.6	16.0	14.4
Rank	5	1	1	3	8	7	4	6	9
Power Worker Growth, 2000-08 (Annual %)	4.0	3.4	3.8	3.4	3.1	2.4	3.7	2.0	2.4
Rank	1	4	2	4	6	7	3	9	7
Self-Employed, 2008 (%)	5.0	5.3	6.7	5.9	5.0	7.3	5.5	4.9	5.6
Rank	7	6	2	3	7	1	5	9	4
Graduate Degress, 2008 (%)	9.6	11.9	13.8	10.7	9.7	10.1	16.4	11.6	10.9
Rank	9	3	2	6	8	7	1	4	5

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 ranked first in the proportion of its population between 25 and 39 years old (24.4 percent). For similar reasons, Dallas (23.4 percent) and RDU (22.9 percent) ranked second and third while Atlanta was a close fourth with 22.8 percent. Charlotte, with 22.4 percent of its population between 25 and 39, ranked fifth. States and regions known for attracting retirees (e.g., Florida) tend to rank low on this measure.

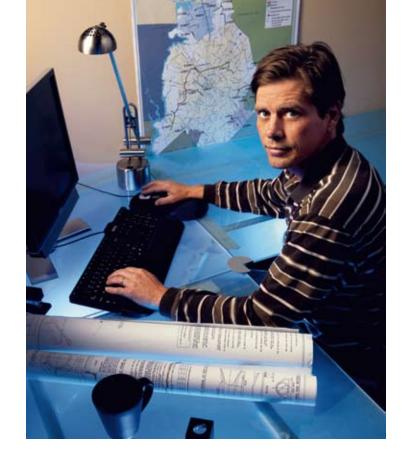
Creative Workers: We define creative workers as the proportion of the labor force in a select set of occupations: Computer and Mathematical occupations; Architecture and Engineering occupations; Life, Physical and Social Science occupations; and Art, Design and Entertainment occupations. Many of these Creative Workers are relatively young and well-educated. In 2008, RDU topped the list with 13.0 percent of its labor force holding these creative occupations; Creative Workers represent 12.5 percent of labor force in Austin. With few bio-tech, pharmaceutical, systems integration or software development firms, the number of Creative Workers in the Charlotte area is relatively low. With only 7.2 percent of it labor force in these occupations, Charlotte ranked sixth in this category, though this might change dramatically as the North Carolina Research Campus continues to develop.



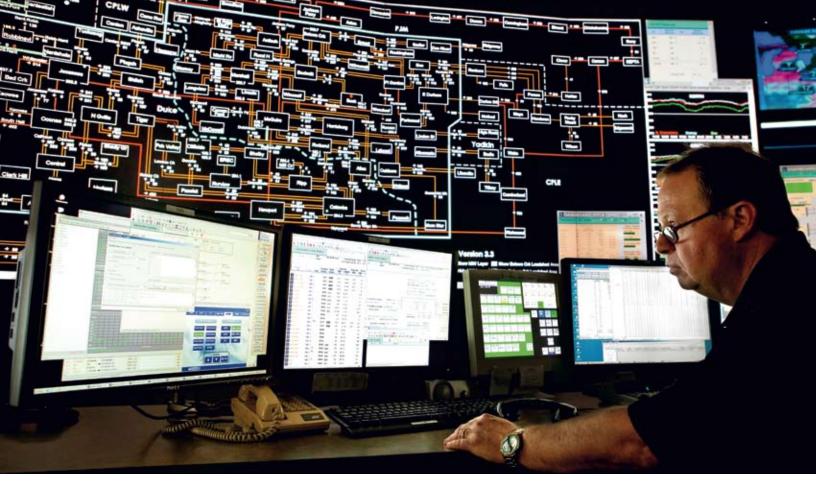
ECONOMY

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 first in Creative Worker growth from 2000-2008. Growing at annual rate of 4 percent, Charlotte's Creative Workers are growing noticeable faster than Tampa, Jacksonville or even Dallas or Atlanta. Technology-rich regions like Austin and RDU continue to add 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 allocating resources and "getting things done." Power Workers consist of those 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: Atlanta and Austin tied for first, and Dallas was third. Charlotte, with its substantial financial sector ranked fifth having 16.4 percent of its labor force in Power Worker occupations. Overall, however, the proportion of 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 percent annually from 2000-2008. Also growing



quickly were Power Workers in Austin and RDU (ranked second and third). Power Worker growth was slowest in Jacksonville, Nashville and Tampa.

Self-Employed: The proportion of the labor force that is selfemployed is one measure of entrepreneurship and, thus, risk-taking. It also (inversely) 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. Nashville, perhaps because of its sizable music and entertainment sector ranked first in the proportion of selfemployed with 7.3 percent. Consistent with the notion that many innovative technology-based activities come from smaller knowledgeintensive firms, Austin (also with a notable music scene) ranked second with 5.3 percent of its labor force self-employed. Charlotte, with 5.0 percent, tied for seventh but, in fact, barely one-half percentage point separated fifth ranked RDU from ninth ranked Richmond in 2008.

Graduate Degree Workers: Perhaps the best measure of knowledgebased 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 highly educated. All these factors help explain why RDU, Austin and Atlanta rank first, second and third with 16.4 percent, 13.8 percent and 11.9 percent of their labor forces holding advanced degrees. Only 9.6 percent of Charlotte's labor force holds a graduate degree, which ranks Charlotte ninth among the nine regions.





EQUITY & DIVERSITY

Overview: For decades, conventional 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 (and diversity) have tended to grow more quickly than those with less social, economic and geographic 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. This year's benchmark report presents a refinement of our equity and diversity measures, directly addressing demographic diversity and geographic equity. These measures are best considered in relation to New Economy indicators.

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 a great many factors but in any labor market they represent a sizable portion of available labor; their participation in the labor market 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 first with a female participation rate of 64.4 percent and RDU ranking second with a rate of 64.3 percent, clearly fit this pattern. Ranking third, Charlotte's female participation rate is 63.7 percent.

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 Jacksonville (ranked first and second) had higher earnings relative to men than women in Dallas or Charlotte (ranked eighth and ninth). To a large extent, these patterns are related to the prevalence of part-time work where there are literally no gender-based differences in wages. Thus, regional economies with relatively large retail sectors, for example, are apt to score high on this measure. Conversely, regions with a higher proportion of full-time workers will not score so well, which might explain the patterns shown in Dallas and Charlotte.

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



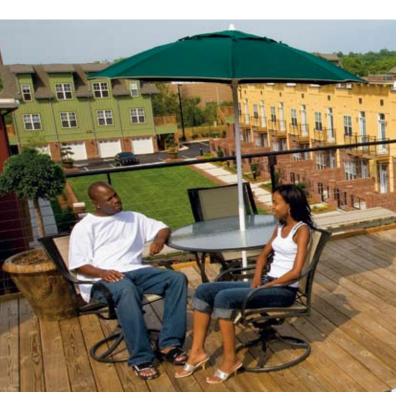
prosperity. There are many reasons to be concerned about poverty and higher poverty rates are clearly less desirable than lower rates. This is good news for most regions in the study. In 2007, the U.S. poverty rate was 12.5 percent and only Dallas and Austin exceeded this rate with 12.9 percent and 13.1 percent, respectively. Charlotte ranked fourth on this measure, with an overall poverty rate of 11.6 percent in 2007.

	Charlotte	Atlanta	Austin	Dallas	JAX	Nashville	RDU	Richmond	Tampa
Overall Rank	6	4	1	8	7	8	2	4	3
Femal Labor Force Participation, 2008 (%)	63.7	63.2	64.4	62.1	59.7	61.9	64.3	61.9	53.8
Rank	3	4	1	5	8	6	2	6	9
Female/Male Wage Ratio, 2007	0.58	0.60	0.64	0.59	0.65	0.63	0.64	0.61	0.66
Rank	9	7	3	8	2	5	3	6	1
Poverty Rate, 2007	11.6	11.5	13.1	12.9	11.2	12.2	11.6	10.2	11.9
Rank	4	3	9	8	2	7	4	1	6
Interest Income per Capita, 2008	\$1,413	\$1,351	\$1,667	\$1,355	\$1,618	\$1,424	\$1,586	\$1,792	\$2,070
Rank	7	9	3	8	4	6	5	2	1
Diversity Index, 2008	53.7	61.8	72.7	71.2	52.1	41.0	57.6	54.0	52.1
Rank	6	3	1	2	7	9	4	5	7
City-Suburb per Capita Income Ratio, 2008	1.15	1.13	0.97	0.87	0.82	0.95	0.93	0.83	0.98
Rank	1	2	4	7	9	5	6	8	3

DIVERSITY

Interest Income per Capita: Despite recent losses in the stock market, income from interest, dividends and rent is still an 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 the experience of Tampa, Richmond and Jacksonville (ranked first, second and fourth). 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 Charlotte, Dallas and Atlanta (ranking seventh, eighth and ninth).

Racial and Ethnic Diversity: It is no secret that the U.S. is getting more demographically diverse every day. Less well-known is the fact more integrated and more racially and ethically diverse metro areas also tend to grow faster than more homogeneous regions. Whether cause or effect, the correlations are undeniable and many younger, Creative Workers purposely seek diversity in choosing places to live and work. Thus, greater demographic diversity has become a desirable characteristic. This year, we directly address this issue through the inclusion of a Diversity Index. The Diversity Index measures the likelihood that two people, chosen at random from the same area, belong to different racial or ethnic groups. The index ranges from 0 (i.e. a completely homogeneous population) to 100 (i.e. everyone in a region is of a different race/ ethnicity). In 2008, the Diversity Index among comparison metro areas ranged from 72.7 in Austin (ranked first) to 41.0 in Nashville (ranked





ninth). Dallas and Atlanta, with index values of 71.2 and 61.8 ranked second and third, while Charlotte ranked sixth with an index of 53.7.

City-Suburb Per Capita Income Ratio: Diversity and equity are not just social and economic considerations. Equally important to the economic health of metro areas is geographic equity — that is, similarities in the economic and social well-being of residents reg ardless of where they live in the metro area. For decades, poverty, for example, was considered a problem of the central city while wealth was associated with suburban prosperity. However, cities and suburbs are intimately connected through economic development and the workings of the labor market. Several research papers have demonstrated that the economic health and performance of cities and their suburbs are closely connected; furthermore, the correlation between the two has grown stronger over time. In short, cities and suburbs are interdependent and suburbs that surround healthy cities are more likely to be healthy too, thus producing healthy metro areas. To measure this relationship, we present the ratio of city-to-suburb per capita income in 2008. In this case, per capita income ratios well below 1.00 indicate that cities are less affluent relative to their suburbs which correlate with lower levels of equity and lower levels of long-term metropolitan growth. In general, city-suburb income levels are in line with each other, which is good news for areas presented. Charlotte and Atlanta, with city-suburb ratios of 1.15 and 1.13 top the list, ranked first and second, while all other metro areas had ratios less than one. The most geographically inequitable are Richmond (ranked eighth) and Jacksonville (ranked ninth) with city-suburb income ratios of 0.83 and 0.82, respectively.

ATA, SOURCES

EMPLOYMENT & WORKORCE

Job growth 2000-2008, www.bls.gov/data/#employment

- Unemployment Rate, 2008 Annual Average, Bureau of Labor Statistics, www.bls.gov/data/#unemployment
- Labor Force Growth and Educational Attainment, Claritas PopFacts, 2000, 2008

- Personal Income Growth, 2000-2008, Claritas PopFacts
- Median Household Income, 2008, Claritas PopFacts
- Metro GDP Growth 2001-2006, BEA
- Metro GDP per Worker, 2006, BEA
- Monthly Wages and Wage Growth, Annualized, U.S. Census, http://lehd.did.census.gov/led/datatools/qwiapp.html

LIVABILITY & CONNECTIVITY

- Housing permits 2006-07, 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 are through October 2008, Bureau of Transportation Statistics. See www. bts.gov/programs/airline_information/
- 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)

DIVERSITY

Claritas PopFacts, 2008, unless otherwise noted.

- Poverty Status from US Census, American Community Survey, 2007. www.census.gov/acs/www/Products/;Table B17001
- Wage ratio from U.S. Census Local Employment Dynamics, 2007 see http://lehd.did.census.gov/led/datatools/qwiapp.html.
- Female Labor Force Participation Rate: Percentage of women age 16+ in labor force

Diversity Index: ESRI.



ABOUT THE **AUTHOR**



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.

THANKS TO OUR SPONSOR



ABOUT THE PHOTOGRAPHER



Patrick Schneider and his team at PatrickSchneiderPhoto.com bring a photojournalistic style to corporate, event and architectural photography. He can be reached at pschneider@ PatrickSchneiderPhoto.com or 704-655-2661.



Burube, A. (2003) *Racial and Ethnic Change in the Nation's Largest Cities,* in Redefining Urban and Suburban America, B. Katz and R. Lang Eds., Washington, DC: Brookings Institution Press, pp. 137-153.

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

Chinitz, B. (1961) *Contrasts in Agglomeration: New York and Pittsburgh*, American Economic Review, Papers and Proceedings, Vol. 51, pp. 279-289.

Gleaser, E. and J. Shapiro (2003). *City Growth: Which Places Grew and Why*, in Redefining Urban and Suburban America, B. Katz and R. Lang Eds., Washington, DC: Brookings Institution Press, pp. 13-32.

Gottlieb, P. (2000) *The Effects of Poverty on Metropolitan Area Economic Performance*, in Urban- Suburban Interdependencies, R. Greenstein and W. Wiewel, Eds., Cambridge: The Lincoln Institute of Land Policy, pp. 21-48.

Voith, R. (1998) *Do Suburbs Need Cities?* Journal of Regional Science, 38(3): 445-464.

Voith, R. (2000) *The Determinants of Metropolitan Development Patterns,* in Urban Suburban-Interdependencies, R. Greenstein and W. Wiewel, Eds., Cambridge: The Lincoln Institute of Land Policy, pp. 71-82.



Published by Charlotte Chamber of Commerce 330 S. Tryon St., Charlotte, NC 28202 (704) 378-1300. www.charlottechamber.com/economicdevelopment www.twitter.com/cltecondev

Copyright 2009 by Charlotte Chamber of Commerce. All rights reserved. No part of the publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage or retrieval system, without permission in writing from the Charlotte Chamber. The information in this publication is carefully gathered and compiled in such a way as to ensure maximum accuracy. The Charlotte Chamber cannot, and does not, guarantee either the correctness of all information furnished them nor the complete absence of errors and omissions. Hence, responsibility for same neither can be, nor is, assumed.

All photography ©PatrickSchneiderPhoto.com

THE SHAW GROUP, INC.

128 South Tryon Street Suite 600 Charlotte, NC 28202 704-343-7500 www.shawgrp.com

Throughout Shaw's rapid growth, our core values have remained constant-honesty in decision-making, personal responsibility and accountability, and leadership by example. These principles are at the heart of our ability to create and respond to market opportunities and have fueled our dramatic growth.

Thank you to our sponsor



How will your business survive and thrive in a changing economy?

Change can cause anxiety, but it can also present opportunities.

The Charlotte Chamber and its partners created the "Survive and Thrive!" initiative to provide tools and resources you need to grow your business in a changing business climate.



Visit www.surviveandthrivecharlotte.com for more information.



Charlotte is one of the fastest-growing cities in the nation. With our great location, professional sports, low energy costs, diverse and talented labor, and a nationally ranked education system, it's easy to see why more businesses are flocking here every year.

Visit charlottechamber.com/economicdevelopment.

