**UNC Charlotte Urban Institute** 

# Cleveland County Profile 2009

Charlotte Regional Indicators Project **The Charlotte Regional Indicators Project.** The Charlotte Regional Indicators Project compiles objective, reliable, and relevant measures for the 14-county bi-state Charlotte region on indicators important to the region's quality of life. By measuring the indicators over time and comparing them to state or national data, the Indicators Project provides policy-makers, civic leaders, and the public with a solid foundation for engaging in efforts to address the region's challenges.

The indicators are organized in ten theme areas:

- Arts, Recreation, and Cultural Life;
- *Economy*;
- Education;
- Environment;
- Government and Citizen Participation;
- Health;
- Housing;
- Public Safety;
- Social Well-Being; and,
- Transportation.

The Charlotte Regional Indicators Project is an initiative of the UNC Charlotte Urban Institute. It is funded in part by Advantage Carolinas, the Foundation for the Carolinas, and the Z. Smith Reynolds Foundation. Indicators are recommended by consensus of Task Forces of regional experts in each of the ten theme areas, and are evaluated by UNC Charlotte Urban Institute researchers for feasibility before indicator data is gathered, added to the Indicators database and incorporated into Indicators Project reports. Indicator data is updated throughout the year as source agencies release the relevant data sets, and is made available on the Indicators Project website. A comprehensive Indicators Report is produced every two years.

More information about the Indicators Project and the most recent comprehensive Indicators Report are available at <a href="https://www.ui.uncc.edu">www.ui.uncc.edu</a>.

### **Cleveland County Profile 2009**

The County Profile Reports. The County Profile Reports present individual county indicator data in a format intended to make it easy to examine relationships between indicators and across themes for a single county. Each County Profile Report begins with a concise summary of indicator highlights for the county, then presents a quick-reference table of the most recent indicator data, and finally provides more detailed indicator trend data in user-friendly charts. The reports are available for each of the region's fourteen counties, and are produced every two years.

**Summary Highlights.** For the most recent indicator data, Cleveland out-performs the region on nearly all indicators in these two theme areas:

Environment Public Safety

Cleveland lags the region on nearly all indicators in these theme areas:

Arts, Recreation, and Cultural Life

**Economy** 

Education

Health

Social Well-Being

There are mixed results for Cleveland in these theme areas:

Government and Citizen Participation

Housing

Transportation



(Note that for some individual indicators, "lagging the region" means the indicator rates are *higher* than the regional composite rates, and that for other indicators, "lagging the region" means that the indicator rates are *lower* than the regional composite percentage. The same is true for "out-performing the region."))

Looking at trends over time, key Cleveland County indicators demonstrating appreciable change over the most recent available five-year time periods include:

- Giving Per Capita (Private Foundations) (+85.8%, 2006 vs. 2002)
- Percent Individuals Living in Poverty (+66.5%, 2007 vs. 2000)
- Library Funding Per Capita (+66.3%, 2007 vs. 2004)
- Percent Families Living in Poverty (+65.0%, 2007 vs. 2000)
- Grants Expenditures Per Capita (+59.8%, 2007 vs. 2005)
- Minority Infant Mortality Per 1,000 Live Births (+57.2%, 2007 vs. 2003)
- Developed Acreage (+45.8%, 2006 vs. 1996)
- People in Motor Vehicle Accidents, Fatality (+42.2%, 2006 vs. 2001)
- Construction Cost Per Unit Permitted (+39.5%, 2007 vs. 2003)
- Total Infant Mortality Per 1,000 Live Births (+38.0%, 2007 vs. 2003)

## **Quick-Reference Indicator Table** Cleveland County Profile 2009

Indicator by Theme	Year	Region <sup>1</sup>	County	County	
				Percent	From
				Change	Year
Arts, Recreation, and Cultural Life	2007	<b>#</b> 0.04	<b>#</b> 0.00	50.0	2005
Grants Expenditures Per Capita	2007	\$0.84	\$0.30	59.8	2005
Library Funding Per Capita	2007	\$25.66	\$8.69	66.3	2004
Library Print Holdings Per Capita	2006	1.6	1.3	-30.7	2002
Economy					
Unemployment Rate	2007	5.1	5.8	-33.3	2003
Total Employment, All Industries	2007	1,148,937	34,296	3.1	2003
Number of Business Establishments	2007	68,947	2,111	2.4	2003
Average Annual Wage	2007	\$34,995	\$31,876	11.3	2003
Per Capita Income	2006	\$34,958	\$27,058	17.4	2002
Median Household Income	2007	\$44,772	\$37,411	6.3	2003
Education <sup>2</sup>					
Percent Change in Public School Enrollment	2006-07	3.8	0.0	-1.8	2002-03
vs. Prior Year	2000-07	3.0	0.0	-1.0	2002-03
Percent Population with Bachelors Degree	2007	28.2	15.2	14.3	2000
or Higher		20.2	10.2	14.5	2000
Average SAT Score	2007-08	992	986	0.8	2003-04
High School Cohort Graduation Rate	2007-08	71.9	67.9	8.6	2005-06
Percent of Graduates Pursuing Higher	2005-06	82.9	80.7	-3.3	2001-02
Education					
Public School Expenditures Per Pupil	2005-06	\$7,362	\$7,698	21.1	2001-02
Per Pupil Capital Expenditures, 5 Year Avg.	2005-06	\$857	\$241	-15.4	2004-05
Environment					
Vehicle Emissions of Nitrogen Oxides,	2002	82.8	62.4	NA	NA
Pounds Per Capita					
Average Daily Water Consumption, Gallons	2002	160.9	144.9	-18.1	1997
Per Capita	2007	2 100 0	2 426 2	20.4	2004
Solid Waste Disposal, Pounds Per Capita	2007	3,188.0	3,136.2	28.1	2004
Developed Acreage, Per Capita	2006	0.41	0.57	45.8	1996
Government and Citizen Participation	2000	CO F	74.7	7.4	2004
Percent Voter Turnout of Registered Voters	2008	68.5	71.7	7.4	2004 2004
Registered Public Charities Per 1,000	2007	2.5	2.2	16.8	
Public Charities Filing Form 990 Per 1,000	2007	0.9	0.8	-1.2	2004
Private Foundations Filing Form 990 per 1,000	2007	0.21	0.14	-0.4	2004
Giving Per Capita (Public Charities)	2007	\$724.55	\$325.16	1.5	2003
Giving Per Capita (Private Foundations)	2006	\$110.04	\$2.37	85.8	2002
Health		·			
Birth Rate Per 1,000	2007	15.1	12.2	-1.5	2003
Total Infant Mortality Per 1,000 Live Births	2007	6.7	12.5	38.0	2003
White Infant Mortality Per 1,000 Live Births	2007	5.6	9.4	21.0	2003
Minority Infant Mortality Per 1,000 Live Births	2007	9.6	19.8	57.2	2003
Total Mortality Rate Per 100,000	2007	747.5	1059.4	2.2	2003
Heart Disease Mortality Rate Per 100,000	2007	170.7	246.8	-19.9	2003
Cancer Mortality Rate Per 100,000	2007	167.4	236.7	3.7	2003
Suicide Rate Per 100,000	2007	11.0	13.2	-19.3	2003
Chlamydia Rate Per 100,000	2007	241.7	330.1	11.6	2003
Gonorrhea Rate Per 100,000	2007	148.6	211.3	-5.3	2003

#### **Quick-Reference Indicator Table**

Cleveland County Profile 2009

				County	
Indicator by Theme	Year	Region <sup>1</sup>	County	Percent	From
				Change	Year
Housing	2227	400.0	405.7	0.0	2222
Housing Units Per 1,000	2007	430.2	435.7	2.3	2003
Percent Single Family Detached Housing	2000	67.1	68.2	-5.9	1990
Percent Single Family Attached Housing	2000	2.8	1.1	10.4	1990
Percent Multi-family Housing	2000	18.2	8.9	-4.8	1990
Percent Mobile Home or Trailer Housing	2000	11.8	21.7	32.3	1990
Percent Other Housing	2000	0.1	0.1	-92.0	1990
Percent Owner Occupied Housing	2007	69.2	69.9	-4.0	2000
Percent Renter Occupied Housing	2007	30.8	30.1	10.8	2000
Number of Housing Units Permitted Per 1,000	2007	11.4	3.0	-13.6	2003
Construction Cost Per Unit Permitted	2007	\$165,197	\$173,880	39.5	2003
Average Residential Sales Price	NA	NA	NA	NA	NA
Average Apartment Vacancy Rate	NA	NA	NA	NA	NA
Average Apartment Rental Rate	NA	NA	NA	NA	NA
Public Safety					
Calls for Emergency Service (911) Per Capita	2007	0.78	0.70	0.0	2005
Crime Index Per 10,000	2007	531.0	360.8	-28.8	2003
People in Motor Vehicle Accidents, Total	2007	153,726	5,577	-11.0	2001
People in Motor Vehicle Accidents, Property Damage Only	2007	94,140	3,302	-6.2	2001
People in Motor Vehicle Accidents, Fatality	2007	746	64	42.2	2001
People in Motor Vehicle Accidents, Non-fatal Injury	2007	58,840	2,211	-18.2	2001
Investigated Workplace Fatalities	2008	12	0	0.0	2004
Social Well-Being					
Percent Individuals Living in Poverty	2007	11.9	22.1	66.5	2000
Percent Families Living in Poverty	2007	8.6	16.6	65.0	2000
Percent Children Living in Poverty	2007	15.9	28.8	31.4	2003
Percent of Report of Child Abuse or Neglect Substantiated	2005-06	22.2	15.6	2.3	2004-05
Percent Births to Mothers Under Age 18	2007	3.8	6.0	7.1	2003
Elderly Assistance Rate	2007	42.2	51.2	12.6	2000
Transportation					
Percent of Workers 16 or Older Driving to Work Alone	2007	81.7	85.0	4.0	2000
Percent of Workers Commuting More Than 25 Minutes	2007	42.3	30.7	-11.7	2000

For each indicator for which county-level data is available as of January, 2009, this table presents the most recent data for the county and the region, along with a percent change for the county. County percent change represents a five-year trend wherever possible: it is the percent change from a prior year (the "from year" column) to the most recent data; generally, the "from year" is five years prior. Indicator definitions and data sources can be found at the end of this document. Regional data is calculated as a fourteen county average whenever possible, and exceptions to this are detailed in the endnotes. Unless otherwise noted, "Per 1,000" or "per 100,000" refers to population.

Cleveland County Profile 2009

#### **Demographics**

Cleveland County is one of the more rural, least populous counties in the region. Between 2000 and 2007, its population increased 2.2%, with annual population growth rates ranging from -0.2 to 0.9 percent. The population increased 46% from 1960 to 2000 and is projected to continue increasing at a slower rate through 2030. Cleveland County showed little variation in its racial composition from 2000 to 2007, but did show an increase in ethnic diversity, with a slight increase in the Hispanic share of population. Between 2000 and 2007, the county's age distribution represented a shift toward age groups 45 years and older, which increased in share of population 11%, while the 0 to 44 years of age group's share decreased 7%.

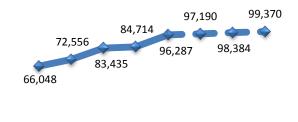
#### **Annual Population Estimates**





Source: US Census: Decennial, Estimates Division

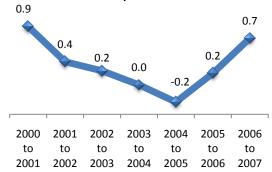
#### **Decennial Population and Projections**



1960 1970 1980 1990 2000 2010 2020 2030

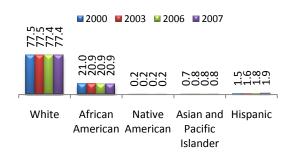
Source: NC Office of State Budget and Management, NC State Demographics; South Carolina State Budget and Control Board Office of Research Statistics, SC Community Profiles

#### **Percent Population Growth**



Source: US Census: Decennial, Estimates Division

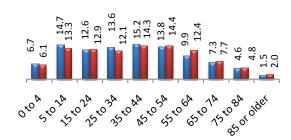
### Race and Ethnicity as Percent of Total Population



Source: US Census: Decennial, Estimates Division

Cleveland County Profile 2009

## Age Distribution as Percent of Total Population ■ 2000 ■ 2007



Source: US Census: Decennial, Estimates Division

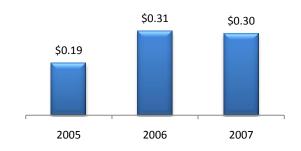
#### Arts, Recreation, and Cultural Life

Arts, recreation and cultural activities are measured by four indicators:

- Grants Expenditures;
- Library Holdings;
- Library Funding; and
- Arts Graduates.

Of these, only the first three have county-level data available. Per capita grant expenditures by arts and cultural organizations increased 59% from 2005 to 2007. Government funding for libraries per capita more than doubled from 2004 to 2006, and then decreased 29% in 2007. Public library print holdings per capita remained stable from 2002 to 2005, and then decreased 35% from 2005 to 2006.

## Grant Expenditures by Arts and Cultural Organizations Per Capita



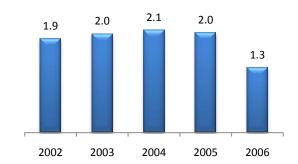
Source: North Carolina Arts Council; South Carolina Arts Commission

## Government Funding for Libraries Per Capita



Source: North Carolina Department of State Treasurer; South Carolina State Budget and Control Board

#### **Public Library Print Holdings Per Capita**



Source: National Center for Education Statistics (Library Research Center)

Cleveland County Profile 2009

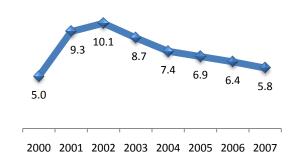
#### **Economy**

The local economy is measured by six indicators:

- Labor Force (Unemployment Rate);
- Industry Employment (Jobs);
- Business Establishments;
- Average Annual Wage;
- Per Capita Income; and
- Median Household Income.

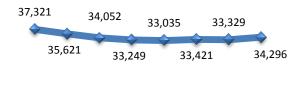
The county's unemployment rate doubled from 2000 to 2002, and then decreased 43% from 2002 to 2007. Total industry employment decreased 8% from 2000 to 2007. The number of business establishments remained stable around 2,000 during this time. Average annual wage increased each year from 2000 to 2007, as did per capita income from 1990 to 2006. The median household income increased 3% from 2000 to 2007.

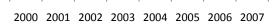
#### **Unemployment Rate**



Source: Bureau of Labor Statistics

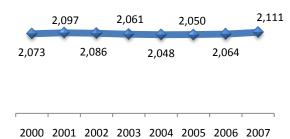
#### **Total Employment, All Industries**





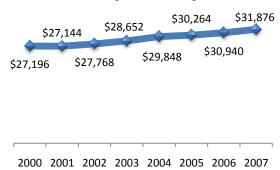
Source: North Carolina Employment Security Commission; South Carolina Employment Security Commission

### Number of Business Establishments, All Industries



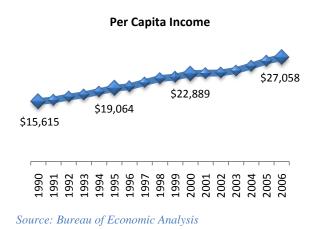
Source: North Carolina Employment Security Commission; South Carolina Employment Security Commission

#### **Average Annual Wage**



Source: North Carolina Employment Security Commission; South Carolina Employment Security Commission

Cleveland County Profile 2009



## \$34,948 \$35,179 \$35,906 \$37,411 \$36,492 \$34,554 \$35,880 \$37,547

2000 2001 2002 2003 2004 2005 2006 2007

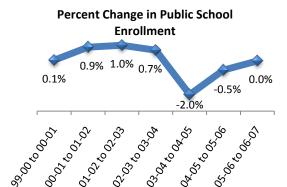
Source: U.S. Census Bureau's Small Area Income and Poverty Division

#### **Education**

Education is measured by seven indicators:

- Public Schools Enrollment;
- Educational Attainment;
- SAT Scores (Math and Verbal);
- Graduation Rate;
- College Plans;
- Expenditures Per Pupil; and
- Capital Expenditures.

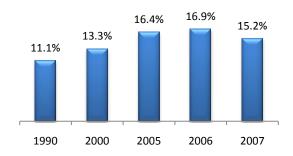
Public school enrollment in Cleveland County increased slightly each year from 2000-01 to 2003-04, and then declined or showed no growth each year from 2004-05 to 2006-07. The percentage of college graduates increased 52% from 1990 to 2006, and then decreased 10% in 2007. Average SAT scores fluctuated around 980 from 2001-02 through 2007-08, with a high of 999 in 2004-05 and low of 951 in 2001-02. High school cohort graduation rates increased 13% from 2005-06 to 2006-07, and then decreased 4% in 2007-08. Percent of high school graduates pursuing higher education was relatively unchanged in 2005-06 compared to 2000-01, although the rate fluctuated as much as 15% below 2000-01 levels. Public school expenditures per pupil increased each year from 2000-01 to 2005-06, with an overall increase of 23%. The five-year average annual per pupil capital expenditure decreased 15% from 2004-05 to 2005-06.



Source: National Center for Education Statistics

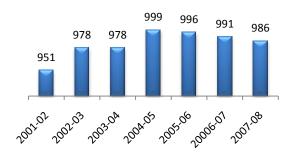
Cleveland County Profile 2009

## Percent of Population 25 and Older with Bachelor's Degree or Higher



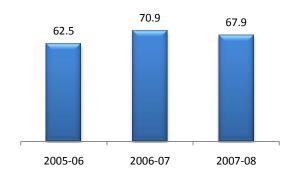
Source: US Census: Decennial, American Community Survey

#### **Average SAT Scores (Math and Verbal)**



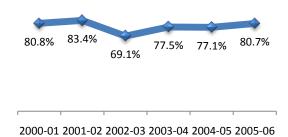
Source: North Carolina Department of Public Instruction; SC Dept. of Education

#### **High School Cohort Graduation Rate**



Source: North Carolina Department of Public Instruction; SC Dept. of Education

## Percent of High School Graduates Pursuing Higher Education



Source: North Carolina Department of Public Instruction; SC Dept. of Education

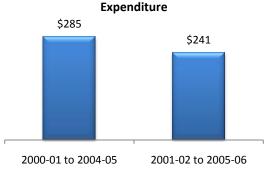
#### **Public School Expenditure Per Pupil**



2000-01 2001-02 2002-03 2003-04 2004-05 2005-06

Source: North Carolina Department of Public Instruction; SC Dept. of Education

### 5 Year Average Annual Per Pupil Capital



Source: North Carolina Department of Public Instruction; SC Dept. of Education

Cleveland County Profile 2009

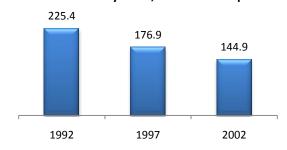
#### **Environment**

The environment is measured by six indicators:

- Air Quality Index ("AQI");
- Vehicular Emissions;
- Water Consumption;
- Impaired Streams;
- Solid Waste Disposal; and
- Developed Acreage.

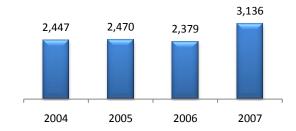
Of these, county-level data are available for all but AQI Days and Impaired Streams, which are available only at larger regional scales. While multi-year trend data are not available for per capita onroad vehicular NOx emissions, the Cleveland County rate (62.4) was below the Charlotte regional average (82.8). Per capita average daily water consumption decreased 36% from 1992 to 2002. The per capita average annual amount of solid waste sent to landfills decreased slightly from 2004 to 2006, and then increased 32% from 2006 to 2007. Developed acres per person in Cleveland County showed an eight-fold increase between 1976 and 2006, while future projections expect a much slower increase from 2010 to 2030.

## Average Daily Water Consumption for Local Water Systems, Gallons Per Capita



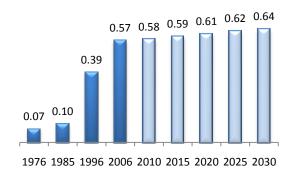
Source: North Carolina Department of Environment and Natural Resources; South Carolina Department of Health and Environmental Control

## Average Annual Solid Waste Disposal Rates, Pounds Per Capita



Source: North Carolina Department of Environment and Natural Resources; South Carolina Department of Health and Environmental Control

#### **Developed Acres Per Person**



Source: UNC Charlotte Center for Applied GIS

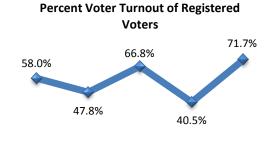
Cleveland County Profile 2009

#### **Government and Citizen Participation**

Indicators of government and citizen participation focus on five measures of voter turnout and charitable giving:

- Voter Turnout;
- Public Charities;
- Private Foundations;
- Giving to Public Charities; and
- Giving to Private Foundations.

Voter turnout was higher in the 2008 presidential election when compared to the 2004 and 2000 presidential elections, but the 2006 mid-term election turnout was lower than that in 2002. The ratio of public charities to population in Cleveland County increased 16% from 2004 to 2007. The corresponding ratios for larger public charities only (those using IRS Form 990 to report income greater than \$25,000) and for larger private foundations (those using IRS Form 990 to report income greater than \$25,000) remained stable. Per capita giving to public charities fluctuated around \$290 from 2001 to 2007, with the highest giving at \$325.16 (in 2007) and the lowest at \$262.54 (in 2004). Per capita giving to private foundations fluctuated around \$1.75 from 2001 to 2006, with the exception of 2005, when it was \$5.28.

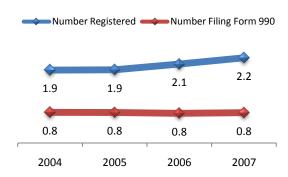


2000 2002 2004 2006 2008

Source: North Carolina State Board of Elections; South

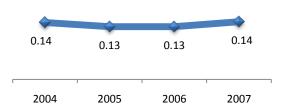
Carolina State Board of Elections

#### **Public Charities Per 1,000 Population**



Source: National Center for Charitable Statistics

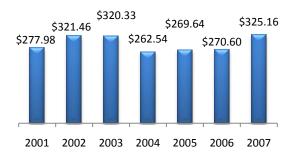
## Number of Private 501(c)(3) Foundations Filing Form 990 Per 1,000 Population



Source: National Center for Charitable Statistics

Cleveland County Profile 2009

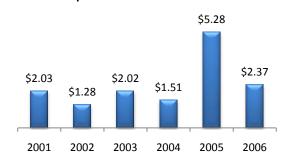
#### Contributions, Gifts, and Grants per Capita for Public Charities



Source: National Center for Charitable Statistics

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#### Contributions, Gifts, and Grants per Capita for Private Foundations



Source: National Center for Charitable Statistics

#### **Health**

Health is measured by five indicators:

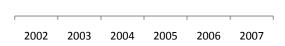
- Birth Rate;
- Infant Mortality;
- Mortality Rate;
- Suicide Rate; and
- Sexually-Transmitted Diseases Rate.

The birth rate remained stable around 12.0 from 2002 to 2007. Total, minority, and

white infant mortality rates increased from 2003 to 2005, and then decreased substantially (by 67%, 72%, and 63% respectively) in 2006, only to increase again in 2007. Minority infant mortality remained higher than white infant mortality for all reported years. Total mortality rates fluctuated around 1,044 from 2003 to 2007. Heart disease mortality rates decreased 20% from 2003 to 2007. Cancer mortality rates decreased 13% from 2003 to 2005, and then increased 19% from 2005 to 2007, returning to 2003 levels. Suicide rates for Cleveland County decreased by 31% from 2003 and 2004, and then increased 17% from 2004 to 2007. Incidence rates for the sexually-transmitted disease, chlamydia, increased 59% from 2002 to 2005, and then decreased 23% from 2005 to 2007. After declining from 2002 to 2004, incidence rates for gonorrhea increased 55% in 2005, and then decreased 29% from 2005 to 2007, to below 2002 levels.

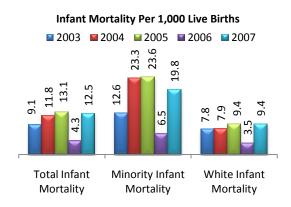
#### Birth Rate per 1,000 Population



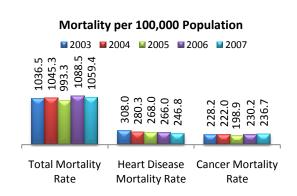


Source: NC Department of Health & Human Services State Center for Health Statistics; SC Department of Health and Environmental Control

Cleveland County Profile 2009

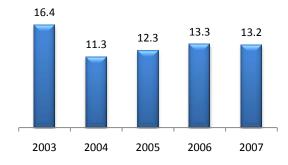


Source: NC Department of Health & Human Services State Center for Health Statistics; SC Department of Health and Environmental Control



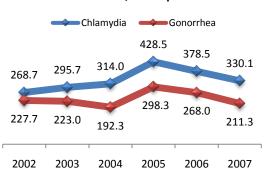
Source: NC Department of Health & Human Services State Center for Health Statistics; SC Department of Health and Environmental Control

#### Suicide Rate per 100,000 Population



Source: NC Department of Health & Human Services State Center for Health Statistics; SC Department of Health and Environmental Control

#### STD's Per 100,000 Population



Source: NC Department of Health & Human Services State Center for Health Statistics; SC Department of Health and Environmental Control

#### **Housing**

Housing is measured by six indicators:

- Housing Units
- Housing Types
- Home Ownership
- Residential Construction
- Sales; and
- Rental and Vacancy Rates.

Of these, only the first four are available for Cleveland County. The ratio of housing units to population increased 3.7% from 2000 to 2007. Housing type from 1990 to 2000 was dominated by single family detached housing, followed by mobile home or trailer housing. Mobile home or trailer housing's share increased 32%, at the expense of single family detached and multi-family housing types. Owner occupied housing fluctuated around 72% from 1990 to 2007, with a high of 74.6% in 2006 and a low of 69.9% in 2007. As measured by housing units permitted per 1,000 persons, residential construction fluctuated from 2000 to 2007

Cleveland County Profile 2009

with noticeable increases in 2002 and 2004. Construction cost per unit permitted showed an overall increase of 52% from 2000 to 2007, although decreases of 23% and 5% occurred in 2002 and 2004, respectively.

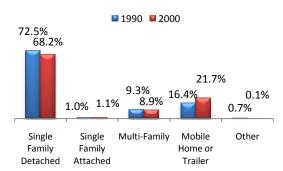
#### **Housing Units Per 1,000 Population**



2000 2001 2002 2003 2004 2005 2006 2007

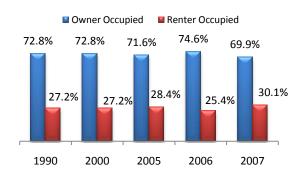
Source: U.S. Census Bureau, Estimates Division

#### **Percent Housing Types**



Source: US Census: Decennial

#### **Percent Occupied Housing**



Source: US Census: Decennial, American Community Survey

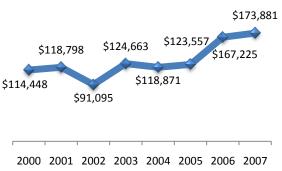
## Number of Housing Units Permitted per 1,000 Population



2000 2001 2002 2003 2004 2005 2006 2007

Source: US Census: Manufacturing, Mining and Construction Statistics

#### **Contruction Cost per Unit Permitted**



Source: US Census: Manufacturing, Mining and Construction Statistics

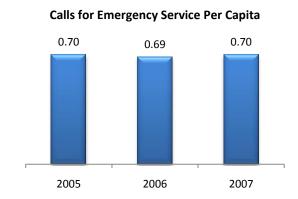
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#### **Public Safety**

Public Safety is measured by six indicators:

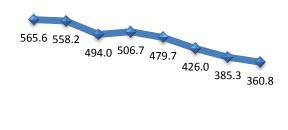
- 911 Calls;
- Crime Index:
- Vehicle Accidents;
- Workplace Fatalities;
- Public Safety Education; and
- Evacuation Plans and Disaster Preparedness.

Of these, county-level data are available for all except Public Safety Education. Per capita calls for emergency service remained stable from 2005 to 2007. The crime rate index decreased 36% from 2000 to 2007, with the exception of a slight increase (2.6%) from 2002 to 2003. The number of people in all motor vehicle accidents in Cleveland County decreased 11% from 2001 to 2007, reflecting declines in people in crashes involving non-fatal injuries and in people in crashes involving property damage only. The number of people in crashes involving fatalities ranged from 33 to 64 during this time period. Investigated workplace fatalities remained low from 2002 to 2008, with zero or one fatality every year except 2003, which had four fatalities. As of early 2009, Cleveland County had in place eight of the nine evacuation planning and disaster preparedness measures, but does not have the means to quickly warn or inform citizens (Reverse 911 System).



Source: Survey Questionnaire Administered by UNC Charlotte Urban Institute

#### Crime Index Per 10,000 Population

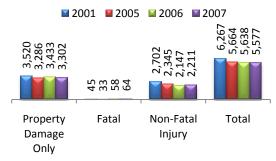


Source: North Carolina Department of Justice, State Bureau of Investigation; South Carolina Law

**Enforcement Division** 

2000 2001 2002 2003 2004 2005 2006 2007

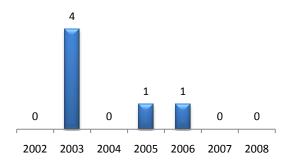
#### **People in Motor Vehicle Crashes**



Source: Highway Safety Research Center at the University of North Carolina at Chapel Hill; South Carolina Department of Public Safety

Cleveland County Profile 2009

#### **Investigated Workplace Fatalities**



Source: North Carolina Department of Labor; South Carolina Department of Labor

#### **Evacuation and Disaster Preparedness, 2009**



Emergency/disaster response plan	<b>✓</b>
Evacuation plan	<b>√</b>
Have had mock disaster drill in the last year	<b>✓</b>
Means to quickly warn citizens about a threat situation (Reverse 911 system)	
Radio interoperability for emergency personnel; full coverage within county	>
Radio interoperability for emergency personnel; with surrounding counties	<b>\</b>
Emergency response team for incidents involving chemical, biological or nuclear weapons	<b>\</b>
Regular training sessions for fire, police, and emergency personnel for disaster preparation	<b>√</b>
Mutual assistance agreement with surrounding counties	<b>✓</b>

Source: Survey Questionnaire Administered by UNC Charlotte Urban Institute

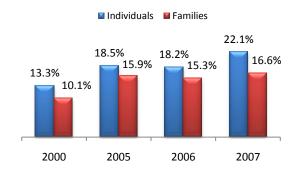
#### **Social Well-being**

Social Well-being indicators include these five measures:

- Poverty Rate
- Child Poverty Rate
- Child Abuse
- Teenage Birth Rate; and
- Elderly Assistance Rate.

The Cleveland County poverty rate for individuals increased 66% and the poverty rate for families increased 64% from 2000 to 2007. The percentage of children in poverty increased 51% from 2000 to 2007. The percentage of substantiated reports of child abuse was stable from 2004-05 to 2005-06. The teenage birth rate decreased 17% from 2001 to 2007, and fluctuated during that time period between a high of 7.2% (2001, 2004) and a low of 5.6% (2003). Cleveland County's percentage of elderly needing assistance with daily activities increased 13% from 2000 to 2007.

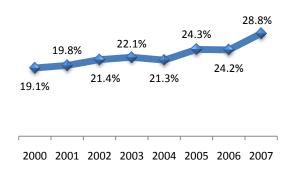
#### **Percent Living in Poverty**



Source: US Census: Decennial, American Community Survey

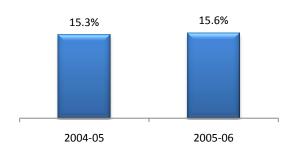
Cleveland County Profile 2009

#### **Percent of Children Living in Poverty**



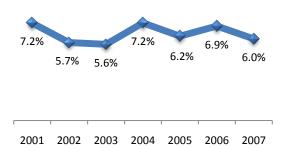
Source: U.S. Census, Small Area Income & Poverty Estimates

#### Percent of Reports of Child Abuse and Neglect Substantiated



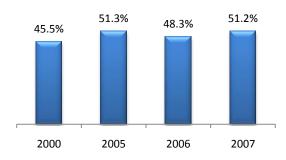
Source: North Carolina Department of Health and Human Services; Prevent Child Abuse South Carolina

#### Percent of Births to Mothers Under Age 18



Source: NC Department of Health & Human Services State Center for Health Statistics; South Carolina State Budget and Control Board Office of Research Statistics

## Percent of Elderly Needing Assistance to Perform Activities of Daily Living



Source: US Census: Decennial, American Community Survey

#### **Transportation**

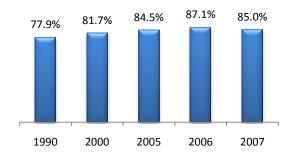
Transportation is measured by four indicators:

- Commuting Alone;
- Average Travel Delay;
- Commute Time; and
- Airport Travelers.

Of these, only two are represented at the county level: Commuting Alone, and Commute Time. Cleveland County's percentage of workers driving to work alone increased 9% from1990 to 2007. The percentage of workers commuting more than 25 minutes increased 39% from 1990 to 2006, and then decreased 16% from 2006 to 2007.

Cleveland County Profile 2009

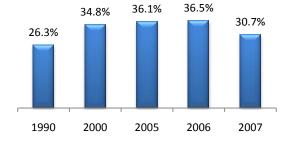
## Percent of Workers 16 or Older Driving to Work Alone



Source: US Census: Decennial, American Community

## Percent of Workers Commuting More than 25 Minutes

Workers 16 or Older who did not work at home



Source: US Census: Decennial, American Community Survey

Cleveland County Profile 2009

A complete definition is given below for each indicator, identifying the specific quantitative measurement the indicator represents. Definitions are listed by theme area, with the indicator's "short name" shown first, followed by the "long name" and/or explanation of how the indicator is calculated.

#### **Demographics**

Annual Population Estimates: Measures the annual estimate of population.

Decennial Population and Projections: The measurement of past population and future population projections on a decennial basis.

Percent Population Growth: This indicator measures the annual percentage growth of the population from the previous year.

Race and Ethnicity: This indicator measures the composition of both race and ethnicity for the population.

Age Distribution: Age Distribution looks at the range of ages for the population.

#### Arts, Recreation, and Cultural Life

Grants Expenditures: Dollars per capita in state and federal appropriations awarded to arts and cultural organizations through the North Carolina Arts Commission and the South Carolina Arts Commission.

Library Holdings: Per capita number of public library print holdings and print serial subscriptions (excluding electronic documents.)

Library Funding: Per capita government funding for public libraries (excluding libraries at state universities or colleges.)

Arts Graduates: Annual number of undergraduate and graduate degree completions in the arts, music and theater from all institutions of higher education in the region, including private and public universities, technical and community colleges and other colleges.

#### **Economy**

Labor Force: The civilian workforce is the number of workers employed or looking for work, including members of the military. The labor force

unemployment rate is the ratio of the number of unemployed to the total civilian workforce.

Industry Employment: Total Employment, All Industries is the total number of jobs across all industry classifications. Employment by Industry is the number of jobs in each industry sector by the North American Industry Classification System's standard two-digit sector codes.

Business Establishments: Business
Establishments, All Industries, is the total number of physical locations of businesses in all industry classifications; note that a business may have more than one physical location, each of which counts as a "business establishment." Business
Establishments by Industry is the number of business establishments in each industry sector by the North American Industry Classification
System's standard two-digit sector codes.

Average Annual Wage: Average Annual Wage, All Industries is the annual total wages across all jobs, divided by total number of jobs in all industry classifications. Average Annual Wage by Industry is the annual total wages in jobs in a given industry sector (defined by the North American Industry Classification System's standard two-digit sector codes) divided by the total number of jobs in that same industry sector.

Per Capita Income: Total personal income divided by total population.

Median Household Income: Median Household Income is the income of the particular household for which there are an equal number of households with more income and of households with less income.

#### **Education**

Public School Enrollment: Public School Enrollment is the percentage change in public school enrollment from the previous school year, by school district and for the region. The enrollment data includes students from prekindergarten through grade 12.

Education Attainment: This indicator measures the percentage of the working-age population (age 25 and older) with a bachelor's degree or higher.

SAT Scores: Examines the average Scholastic Aptitude Test (SAT) score as a percentage of the U.S. average score, for each of the region's 21 school districts and for the region as a whole. Average scores are published both for individual high schools and for school districts, based on

Cleveland County Profile 2009

scores of all students taking the SAT in a given year. Students taking the SAT are mostly juniors in high school, but can include some sophomores and seniors as well.

Graduation Rate: The figures are the four-year cohort graduation rate, which reflects the number of graduating seniors in a given year as a percentage of the number of enrolled ninth graders from three years prior – in effect, it is the percent of ninth graders who graduate four years later.

College Plans: This indicator tracks the highereducation plans of high school seniors for the year after they graduate from public high schools. Percentages are calculated for students planning on attending two-year, four-year or community colleges, and for those with no plans for higher education (this may include military service).

Expenditures Per Pupil: This indicator measures expenditures per pupil in public schools, excluding capital expenditures. A regional figure was estimated for each school year by multiplying expenditures per pupil by enrollment figures for each school district. The sum of total expenditures across all districts was divided by the total regional enrollment to estimate the regional expenditure per pupil.

Capital Expenditures: Public school capital expenditures per pupil are measured both for school districts and the region. A five-year average is calculated because capital spending by school districts fluctuates significantly from year to year. Total capital expenditures were divided by total enrollment to produce an annual per pupil capital expenditure for each school year. Those annual figures were then averaged to produce an average per pupil capital expenditure in public education for the five-year period.

#### **Environment**

Air Quality Index: The percentage of Air Quality Index (AQI) days per year in the "Unhealthy" ranges for the Charlotte-Gastonia-Rock Hill Metropolitan Statistical Area (MSA). The EPA calculates a daily AQI based on the measurement of five major air pollutants regulated by the Clean Air Act, as recorded at approximately 4,000 monitoring stations across the country. The five pollutants are: ground-level ozone, particle pollution (also known as particulate matter), carbon monoxide, sulfur dioxide and nitrogen oxides (NOx). A daily index value is calculated for each air pollutant measured. The highest of those index

values is the AQI value, and the pollutant responsible for the highest index value is the "Main Pollutant."

Vehicle Emissions: This indicator measures onroad vehicular emissions of nitrogen oxides (NOx) in the 14-county region. States are required by the EPA to collect and report emissions data every three years.

Water Consumption: The indicator examines local water system use in average gallons per day per person served by the water systems. This indicator includes only the use of water by local water systems filing reports with the states, and excludes water used for agriculture or power generation, water drawn from individual wells and permitted water intakes by residential or industrial water consumers. These local water systems include municipal, county, and private water systems.

Impaired Streams: This indicator measures looks at impaired stream miles as a percentage of total stream miles in the 11 North Carolina counties in the Charlotte region. It also examines monitoring sites reporting impaired streams in the three South Carolina counties in the region.

Solid Waste Disposal: The Solid Waste Disposal indicator quantifies the disposal of municipal solid waste (MSW) and construction and demolition (C&D) debris. Both states adjust their county-level data to exclude waste "imported" from other places and to include waste "exported" to other places, providing a measure of waste generated from within each county that is disposed at landfills, regardless of where the disposal occurs.

Developed Acreage: This indicator measures developed land in acres per person. Developed acres include both residential and nonresidential development, excluding agriculture, and are assessed using satellite imagery, taken at roughly 10-year intervals from 1976 to 2006.

#### **Government and Citizen Participation**

Private Foundations: Private Foundations are registered 501(c)(3) private foundations that have filed Internal Revenue Service (IRS) Form 990. Foundations designated as 501(c)(3) organizations under the Internal Revenue Code are exempt from federal income taxes because they are operated solely for religious, charitable, scientific, public-safety (testing), literary or educational purposes; amateur sports competition or for the prevention of cruelty to children or animals.

Cleveland County Profile 2009

Public Charities: Public Charities are registered 501(c)(3) public charities in the region, including those that have filed an Internal Revenue Service (IRS) Form 990. Public charities designated as 501(c)(3) organizations under the Internal Revenue Code are exempt from federal income taxes because they are operated solely for religious, charitable, scientific, public safety (testing), literary or educational purposes; amateur sports competition or for the prevention of cruelty to children or animals.

Giving (Public Charities): This indicator measures the amount of contributions, gifts, and grants given to 501(c)(3) public charities located in the region and filing Internal Revenue Service (IRS) Form 990

Giving (Private Foundations): This indicator measures the amount of contributions, gifts and grants received by 501(c)(3) private foundations located in the region and filing Internal Revenue Service (IRS) Form 990.

Voter Turnout: This indicator represents the percentage of registered voters who voted in election years 2000, 2002, 2004 and 2006.

#### Health

Mortality Rate: Mortality Rates are calculated as the number of deaths per 100,000 population. Mortality Rates for heart disease and cancer were also calculated.

STD Rate: These indicators report sexually transmitted disease rates for Gonorrhea and Chlamydia as the number of cases per 100,000 persons.

Infant Mortality Rate: Infant Mortality Rates reflect deaths of infants aged one year or younger per 1,000 live births. The data also compare infant mortality rates for minorities and whites.

Birth Rate: Birth Rate measures the number of live births reported per 1,000 persons.

Suicide Rate: Suicide Rate is reported as deaths by suicide per 100,000 persons.

#### Housing

Housing Units: The indicator represents the number of housing units per capita and includes all types of residential development, encompassing single-family homes, apartments, condos, townhomes and all other housing types.

Housing Types: Housing Types include single-family detached, single-family attached (row houses or townhomes), multi-family units, mobile homes and all other housing (such as boats, RVs and vans).

Home Ownership: Home Ownership measures owner-occupied and renter-occupied housing as a percentage of occupied housing units.

Residential Construction: This indicator measures the number of housing units for which building permits were issued. The indicator is expressed as housing units per 1,000 persons.

Sales: This indicator measures the rate of residential real estate closings (the number of closings per 1,000 persons) and the average price of such home sales for single-family homes, condominiums and townhomes.

Rent and Vacancy Rates: The apartment vacancy rate is the percent of all apartments that are vacant as of the date of the survey call on that certain day. The rental rate is the average rent in dollars per month.

#### **Public Safety**

911 Calls: This indicator measures the annual per capita calls for 911 Emergency Service.

Crime Index: This indicator measures the number of crimes per 10,000 persons. It is the sum of the crime rates per 10,000 persons for seven categories of crimes: murders, rapes, robberies, aggravated assaults, burglaries, larcenies and motor-vehicle thefts

Vehicle Accidents: People in Motor Vehicle Accidents measures the total number of people in motor-vehicle accidents and whether the accidents involved a fatality, non-fatal injuries, or property damage only.

Workplace Fatalities: This indicator examines the number of workplace fatalities in the region that have been investigated or are under investigation.

Public Safety Education: Public Safety Education looks at the number of colleges and universities in the 14-county region with a two- or four-year degree in criminal justice, fire safety or emergency-medical training.

Evacuation Planning: Evacuation Planning addressed evacuation plans and disaster preparedness through a survey designed by the UNC Charlotte Urban Institute. Survey questions concerned reverse 911 systems, radio

Cleveland County Profile 2009

interoperability, disaster training, disaster response and evacuation plans, mutual-assistance agreements, and related topics.

#### Social Well-being

Poverty Rate: This indicator measures the percentage of families and individuals in the region living in poverty. "Living in poverty" is defined by federally-determined income thresholds verifying what is needed to feed, clothe and economically sustain an individual or families of specified sizes (for example, "a family of four".) Any family or individual whose income does not reach the threshold amount is considered to be in poverty.

Child Poverty: Child Poverty measures the percentage of children under the age of 18, living at or below the poverty level. "Living in poverty" is defined using federally-defined poverty thresholds.

Child Abuse: Child Abuse measures substantiated reports of child abuse or neglect per county for the fiscal year. It represents only the percentage of abuse and/or neglect reports made to each county's child protective services that are substantiated by those agencies, based on investigative findings.

Teenage Birth Rate: Teenage Birth Rate measures the number of births to mothers under the age of 18 as a percent of all births.

Elderly Assistance Rate: This indicator measures the percentage of individuals age 65 or older who require assistance in performing Activities of Daily Living (ADL). Activities of Daily Living include eating, dressing, bathing, personal hygiene-related tasks, transfers (the ability to get in and out of a bed or chair), ambulation and communication.

#### **Transportation**

Commuting Alone: This indicator measures the percent of workers 16 or older who drive to work alone by car, truck or van.

Average Travel Delay: This section focuses on travel delays during peak travel times – considered to be from 6 a.m. to 9 a.m. and from 4 p.m. to 7 p.m. The figures are calculated by dividing the number of extra travel hours by the number of peak period travelers in an urban area. The average annual travel delay per peak traveler is the yearly sum of delays per peak trip, divided by the number of travelers who started a trip during the peak period.

Commute Length: Commute Length measures the percentage of workers 16 or older not working at home who commute more than 25 minutes.

Airport Travelers: This indicator measures the number of passengers boarding planes ("enplanements") and disembarking from planes ("deplanements") at Charlotte/Douglas International Airport. Passengers making connecting flights at Charlotte/Douglas are included in these figures.

#### **Data Sources**

Cleveland County Profile 2009

Data Sources for each indicator are listed below. Data for the 2009 County Profiles were compiled using these sources from November, 2008 through January, 2009.

#### **Demographics**

Population Estimates: US Census: Decennial, Estimates Division

Population Projections: NC Office of State Budget and Management, NC State Demographics; South Carolina State

Budget and Control Board Office of Research Statistics, SC Community Profiles

Population Growth: US Census: Decennial, Estimates Division

Race and Ethnicity: US Census: Decennial, Estimates Division

Age and Gender: US Census: Decennial, Estimates Division

#### Arts, Recreation, and Cultural Life

Grants Expenditures: North Carolina Arts Council; South Carolina Arts Commission

Arts Graduates: National Center for Education Statistics (NCES), IPEDS database

Library Funding: North Carolina Department of State Treasurer; South Carolina State Budget and Control Board

Library Holdings: National Center for Education Statistics (Library Research Center)

#### **Economy**

Labor Force: Bureau of Labor Statistics

Industry Employment: North Carolina Employment Security Commission; South Carolina

**Employment Security Commission** 

Business Establishments: North Carolina Employment Security Commission; South Carolina

**Employment Security Commission** 

Average Annual Wage: North Carolina Employment Security Commission; South Carolina Employment Security Commission

Per Capita Income: Bureau of Economic Analysis

Median Household Income: U.S. Census Bureau's Small Area Income and Poverty Division

#### **Education**

Public School Enrollment: National Center for Education Statistics

Educational Attainment: US Census: Decennial, American Community Survey

SAT Scores: North Carolina Department of Public Instruction; SC Dept. of Education

Graduation Rate: North Carolina Department of Public Instruction; SC Dept. of Education

College Plans: North Carolina Department of Public Instruction; SC Dept. of Education

Expenditures Per Pupil: North Carolina Department of Public Instruction; SC Dept. of Education

Capital Expenditures: North Carolina Department of Public Instruction; SC Dept. of Education

#### **Environment**

Air Quality Index: United States Environmental Protection Agency

Vehicle Emissions: North Carolina Department of Environment and Natural Resources; South Carolina Department of Health and Environmental Control

Water Consumption: North Carolina Department of Environment and Natural Resources; South Carolina Department of Health and Environmental Control

Impaired Streams: North Carolina Department of Environment and Natural Resources; South Carolina Department of Health and Environmental Control

Solid Waste Disposal: North Carolina Department of Environment and Natural Resources; South

#### **Data Sources**

Cleveland County Profile 2009

Carolina Department of Health and Environmental Control

Developed Acreage: UNC Charlotte Center for

**Applied GIS** 

**Governmental and Citizen Participation** 

Private Foundations: National Center for

Charitable Statistics

Public Charities: National Center for Charitable

Statistics

Giving (Public Charities): National Center for

Charitable Statistics

Giving (Private Foundations): National Center for

Charitable Statistics

Voter Turnout: North Carolina State Board of Elections: South Carolina State Board of Elections

**Health** 

Mortality Rate: NC Department of Health & Human Services State Center for Health; SC Department of Health and Environmental Control

STD Rate: NC Department of Health & Human Services State Center for Health; SC Department of

Health and Environmental Control

Infant Mortality Rate: NC Department of Health & Human Services State Center for Health; SC Department of Health and Environmental Control

Birth Rate: NC Department of Health & Human Services State Center for Health; SC Department of

Health and Environmental Control

Suicide Rate: NC Department of Health & Human Services State Center for Health; SC Department of

Health and Environmental Control

Housing

Housing Units: U.S. Census Bureau, Estimates

Division

Housing Types: US Census: Decennial

Home Ownership: US Census: Decennial,

American Community Survey

Residential Construction: US Census:

Manufacturing, Mining and Construction Statistics

Sales: Carolina Multiple Listing Services,

Charlotte Regional Realtor

Rent and Vacancy Rates: Carolinas Real Data

**Public Safety** 

911 Calls: Survey Questionnaire Administered by

UNC Charlotte Urban Institute

Crime Index: North Carolina Department of

Justice, State Bureau of Investigation; South

Carolina Law Enforcement Division

Vehicle Accidents: Highway Safety Research Center at the University of North Carolina at Chapel Hill; South Carolina Department of Public

Safety

Workplace Fatalities: North Carolina Department

of Labor; South Carolina Department of Labor

Public Safety Education: National Center for

**Education Statistics** 

Evacuation Planning: Survey Questionnaire

Administered by UNC Charlotte Urban Institute

**Social Well-Being** 

Poverty Rate: US Census: Decennial, American

Community Survey

Child Poverty Rate: U.S. Census, Small Area

Income & Poverty Estimates

Child Abuse: North Carolina Department of Health

and Human Services; Prevent Child Abuse South

Carolina

Teenage Birth Rate: NC Department of Health & Human Services State Center for Health; South

Carolina State Budget and Control Board Office of

Research

Elderly Assistance Rate: US Census: Decennial,

American Community Survey

**Transportation** 

Commuting Alone: US Census: Decennial,

American Community Survey

#### **Data Sources**

Cleveland County Profile 2009

Average Travel Delay: Texas Transportation

Institute (TTI)

Commute Length: US Census: Decennial, American Community Survey

Airport Travelers: Charlotte/Douglas Aviation

**Activity Reports** 

#### **Endnotes**

#### Cleveland County Profile 2009

<sup>1</sup>Indicator data at the regional level was calculated whenever possible as a weighted average of the source data for all 14 counties. However, in the following instances, the regional figure is calculated differently:

Library Funding Per Capita: Region Number represents the 11 North Carolina counties

Library Print Holdings Per Capita: Region Number represents 13 of 14 counties excluding Anson

Median Household Income: Region Number represents North Carolina state average

Percent Population with Bachelors Degree or Higher: Region Number represents 11 of 14 counties excluding Anson, Chester, and Stanly

High School Cohort Graduation Rate: Region Number represents the 11 North Carolina counties

Average Daily Water Consumption, Gallons Per Capita: Region Number represents the 11 North Carolina counties

Solid Waste Disposal, Pounds Per Capita: Region Number represents the 11 North Carolina counties

Percent Voter Turnout of Registered Voter: Region Number represents the 11 North Carolina counties

Birth Rate Per 1,000: Region Number represents the 11 North Carolina counties

Total Infant Mortality Per 1,000 Live Births: Region Number represents the 11 North Carolina counties

White Infant Mortality Per 1,000 Live Births: Region Number represents the 11 North Carolina counties

Minority Infant Mortality Per 1,000 Live Births: Region Number represents the 11 North Carolina counties

Total Mortality Rate Per 100,000: Region Number represents the 11 North Carolina counties

Heart Disease Mortality Rate Per 100,000: Region Number represents the 11 North Carolina counties

Cancer Mortality Rate Per 100,000: Region Number represents the 11 North Carolina counties Suicide Rate Per 100,000: Region Number represents the 11 North Carolina counties

Chlamydia Rate Per 100,000: Region Number represents the 11 North Carolina counties

Gonorrhea Rate Per 100,000: Region Number represents the 11 North Carolina counties

Percent Owner Occupied Housing: Region Number represents 11 of 14 counties excluding Anson, Chester and Stanly

Percent Renter Occupied Housing: Region Number represents 11 of 14 counties excluding Anson, Chester and Stanly

Crime Index Per 10,000: Region Number represents the 11 North Carolina counties

People in Motor Vehicle Accidents, Total: Region Number represents the 11 North Carolina counties

People in Motor Vehicle Accidents, Property Damage Only: Region Number represents the 11 North Carolina counties

People in Motor Vehicle Accidents, Fatality: Region Number represents the 11 North Carolina counties

People in Motor Vehicle Accidents, Non-fatal Injury: Region Number represents the 11 North Carolina counties

Investigated Workplace Fatalities: Region Number represents the 11 North Carolina counties

Percent Individuals Living in Poverty: Regional Number represents 11 of 14 counties excluding Anson, Chester and Stanly

Percent Families Living in Poverty: Regional Number represents 10 of 14 counties excluding Anson, Chester, Lancaster and Stanly

Percent Births to Mothers Under Age 18: Region Number represents the 11 North Carolina counties

Elderly Assistance Rate: Region Number represents 11 of 14 counties excluding Anson, Chester and Stanly

#### **Endnotes**

Cleveland County Profile 2009

Percent of Workers 16 or Older Driving to Work Alone: Region Number represents 11 of 14 counties excluding Anson, Chester and Stanly

Percent of Workers Commuting More Than 25 Minutes: Region Number represents 11 of 14 counties excluding Anson, Chester and Stanly

<sup>2</sup>For the indicator, 'Percent Change in Public School Enrollment vs. Prior Year,' the 'County Percent Change' column contains the five year percent change in enrollment (that is, the most recent year's number of students enrolled is compared to enrollment from four years prior, instead of comparing the most recent annual percent change to the annual percent change of four years ago).

#### Acknowledgements

Cleveland County Profile 2009

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