



A County-Level Analysis
of South Carolina's Pee
Dee Region

Informal Economic Activity

A County-Level Analysis of South Carolina

Rebecca M. Gunnlaugsson

Abstract

The informal—black, shadow, or underground—economy, is commonly known for encompassing illegal activities. More generally, the informal economy covers all economic activity that occurs “off the books,” thus unrecorded and unreported to governmental taxing authorities. Research on the informal economy in the U.S. points to its prevalence in low-wage, service-based local economies. This study investigates the presence of informal economic activity in the Pee Dee region of South Carolina, comprising the counties of Chesterfield, Darlington, Dillon, Florence, Marion, and Marlboro. Results provide strong evidence of a sizeable underground economy. Furthermore, the results point to the same condition existing throughout many regions of the state. Utilizing the labor market discrepancy method, the size of the informal economy was estimated at 9.6% in the Pee Dee region in 2005, with estimates ranging as high as 16.6% and as low as 3.4% for the counties within. Furthermore, results point to a steadily increasing informal sector in all counties from 2000 to 2006.

Key Words: Informal Economy; Underground Economy, Formal and Informal Sectors

JEL Classification Numbers: E26; O17

This document is authorized for internal use only. Do not quote or cite without express permission of the author and the South Carolina Department of Commerce.

South Carolina Department of Commerce
1201 Main Street, Suite 1600
Columbia, SC 29201
www.sccommerce.com

TABLE OF CONTENTS

1. Introduction	1
2. Literature Review.....	1
2.1 Ethnographic studies	1
2.2 Economic Studies.....	2
2.2.1 Macroeconomic Approaches.....	2
2.2.2 Microeconomic Approaches	3
2.2.3 Informal Economy Estimates	4
3. Empirical Methods	5
4. Results	7
4.1 Pee Dee Region Overview.....	7
4.2 Availability of Labor	11
4.3 Informal Economy Estimates	13
4.3.1 Self-Reported Employment Versus Employer-Reported Employment.....	14
4.3.3 Wage and Salary Employment Versus Total Private Employment.....	14
4.3.4 Income Tax Filers Versus Population.....	16
4.3.4 Industry Concentration	17
4.3.5 Compilation of Estimates	21
5. Conclusion and Recommendations	22
References.....	24
Appendix.....	26

1. Introduction

The informal—black, shadow, or underground—economy, is commonly known for encompassing illegal activities (including drugs, gambling, or prostitution) and illegal trade in legal goods (such as tobacco, alcohol, or prescription drugs). More generally, the informal economy covers all economic activity that occurs “off the books,” thus unrecorded and unreported to governmental taxing authorities. This type of activity can include babysitting, housecleaning, yard work, handyman services, agricultural services, construction services, and so on. Much research on the informal economy in the U.S. points to its prevalence in low-wage, service-based local economies. Unfortunately, because informal economies are, by definition, unrecorded, they are also exceptionally hard to quantify for exactly the same reason. This study will examine existing methods for approximating the size of local informal economic activity and apply those methodologies to determine the size of the informal economy in South Carolina. Because South Carolina’s demography is so diverse—varying greatly in population density, education, and income across geographic regions—this paper seeks to quantify informality at the local county level. In particular, the study will focus the majority of local analysis on the Pee Dee region, comprising the counties of Chesterfield, Darlington, Dillon, Florence, Marion, and Marlboro. Section 2 describes past research undertaken in quantifying and describing the informal economy. Section 3 presents the methodology employed in this study to quantify the size of the informal economy at the county level. Section 4 presents the results of the implemented methodology. Finally, Section 5 concludes with possible policy implications and avenues for further research.

2. Literature Review

Previous studies focusing on informal economic activity have typically fallen into one of the following two categories: 1.) ethnographic studies which interview and observe the actions and interactions of a small group of individuals, and 2.) economic studies which apply data to empirical models to quantify activity.

2.1 Ethnographic studies

Ethnographic studies typically involve the use of specifically designed household surveys which include extensive interviews with the members of the household. Cohen and Stephens (2005) focus interviews in Fayette County, Pennsylvania, a community that was largely dependent upon manufacturing and extractive industries (coal and steel) until the 1970’s when these industries declined. The county has persistently high unemployment, poverty, public assistance recipients, and low post-secondary school attendance. They note the absence of jobs that pay well for both the unskilled and low-skilled workers who inhabit the region. They find many of the subjects “co-exist between two worlds, low wage subsistence in the formal economy and some involvement in

informal economic activity ‘as it comes up.’” (Cohen and Stephens, 2005) These activities included many “off the books” jobs at local establishments or homes as well as actual illegal activities, such as growing or selling marijuana. It is also, they determined, the “near poor,” as opposed to the poorest, that participate most frequently in the informal economy, and they typically do so to supplement their incomes from formal jobs. They also noted a prevalence of acceptance for jobs which fell outside the view of the government and, thus, taxation.

Mencken and Maggard (1999) survey a random sample of 521 households in West Virginia in 1996 and find 22% of them participate in the informal economy. They further find that only 8% of those who engaged in informal jobs earned more than 20% of their household income in that manner, confirming the Cohen and Stephens (2005) finding that most informal earnings are to supplement income from jobs in the formal sector. The authors attribute much of the presence of the informal economy to the restructuring of West Virginia’s rural regions from an industrial economy to a service-based one.

2.2 Economic Studies

Economic papers seek to quantify the size of the informal sector through empirical analyses. Again, the lack of recorded data on the informal sector has presented difficulties in all past studies. This section outlines several of the methods that have been utilized in the past along with their findings.

2.2.1 Macroeconomic Approaches

Historically, a majority of studies have employed macroeconomic methods to estimate the size of the informal sector. The first of such methods is the “currency demand” or “currency ratio” approach developed and modified by Cagan (1958), Tanzi (1983), and Bhattacharyya (1990). This approach hinges upon the assumption that informal transactions take place in cash. Thus, an increase in informal economic activity would require an increase in the demand for currency relative to either tax burden or GDP. This approach is limited by the facts that not all informal transactions occur in cash, the approach requires no informal economic activity in the base year, and an increasingly global economy has rendered effective tracking of U.S. currency more difficult.

The second of these techniques is the “transactions” method developed by Feige (1979), which assumes that the ratio between the number of transactions that take place in an economy and its GNP. Using Fisher’s quantity equation to estimate the number of transactions, the percentage of GNP which is produced by the informal sector can be estimated. Again, this method requires the informal sector activity to be zero in the base year. Additionally, it assumes a constant ratio between transactions and GNP, and it requires precise estimates of transactions.

A third macroeconomic procedure is the “physical input” or “electricity consumption” method, pioneered by Kaufmann and Kaliberda (1996). This method assumes that the best proxy for overall economic activity is energy use. Thus, growth in the ratio between electricity consumption and GDP indicates the growth of informal economic activity. Several issues make this method unreliable as

well, including the fact that gains in energy efficiency over time are not captured and not all informal activities require large amounts of electricity usage.

The final macroeconomic technique is the “dynamic multiple indicators multiple causes” (DYMIMIC) method, first developed by Frey and Weck (1983) but extensively developed since then. Unlike the previous methods, this one examines the role of more than one factor in both causing and indicating the presence of informal economic activity. The method treats the growth of the informal economy as the unobserved variable. Tax burden, regulations, inflation, and real income are treated as causes. Monetary indicators (cash/money supply ratio), changes in labor force participation, and formal economy growth are treated as indicators.

These methods are largely criticized for either not being based in economic theory or utilizing imperfect econometric methods (Thomas 1999). Most importantly, however, is the fact that these macroeconomic techniques are not applicable to the estimation of small communities. Instead, they are quite often used to estimate informal sectors at the national level, particularly in developing nations. Thus, we turn our attention to approaches focused on the microeconomic level.

2.2.2 Microeconomic Approaches

Studies using microeconomic data are relatively few compared with macroeconomic studies. While all of the aforementioned methods utilize indirect approaches to estimate the informal sector, the first two of these microeconomic-based methods are direct measures—tax audits and surveys. The tax audit approach measures the discrepancy between declared income on individuals’ tax returns and actual income as determined through audit processes. Feinsten (1999) notes the problems associated with this method including the difficulties in applying this sample to the general population, as the sample is typically not randomly selected. Additionally, audits only uncover some fraction of true noncompliance. Survey methods, used by Mencken and Maggard (1999), directly collect data from a random sample of households. One disadvantage of such a technique is the general unwillingness of participants to admit to illegal activities such as involvement in the underground economy. Another drawback (which is common to tax audits as well) is that they provide only point estimates, not lending any information to the development of the informal sector over time. Finally, surveys are time-consuming and costly to implement.

The third of the microeconomic approaches returns to the indirect methods. The “expenditure” method was pioneered by Pissarides and Weber (1989) and further developed by Lyssiotou et. al. (2004). This approach entails the development of a complete system of demand equations estimated and from household expenditure data and compared to the household budget constraints, estimated from income data. The informal economy is then estimated from the discrepancy in the two. This approach is particularly promising from a local level, the primary obstacle being obtaining data to produce estimates at a county level. County-level identifiers in the U.S. Consumer Expenditure Survey are for restricted-use only. Unfortunately, the process of obtaining restricted-use licenses is extremely long and time-consuming, making this avenue quite possible for a future, more in-depth study.

The fourth microeconomic approach entails examining “labor market discrepancies.” Using various labor market statistics, this method utilizes the difference between the number of jobs reported by employers and the number of people working. Joassart-Marcelli et. al. (2002), examine the informal economy in Los Angeles using a set of nine different labor market metrics. They find a significant underground economy that they attribute to factors of globalization, economic deregulation, and transformation to more flexible forms of production. The data used by this method is available at the county level. The drawbacks to this method include both the fact that it does not account for people who are employed in both the informal and formal economies and the fact that decreases in labor force participation can be due to factors other than just the growth of the informal sector.

Finally, a “neighborhood proxies” method was developed by the non-profit organization, Social Compact. This proprietary approach utilizes over 30 sources of data—both public and private—to formulate a set of eight weighted indicators to develop an estimate of informal activity at a neighborhood level.

- Percentage of households earning less than \$30,000 annually
- Ratio of household income to expenditures
- Percentage of households with no credit or banking histories
- Percentage of cash utility payments
- Percent of foreign born population
- Difference between real home values and model-estimated housing costs
- Number of check-cashing providers per acre
- Number of check-cashing providers per household

The Social Compact methodology was specifically developed to analyze buying power in urban areas. It uses a large array of non-traditional data sources that were collected at a neighborhood level. Unfortunately, the exact methodology is unknown. For a more in-depth study allowing for a longer time-frame, a similar model could be developed and tailored to rural areas in South Carolina.

2.2.3 Informal Economy Estimates

A summary of the estimates of the size of the informal economy produced by each of the methods described in sections 2.2.1 and 2.2.2 is provided in Table 1. Two particular trends are notable. First, the various methods produce a wide range of results. Secondly, the size of the informal sector is increasing over time.

In addition to these studies whose goal is to estimate the amount of informal economic activity, other studies examine the factors that lead to larger informal sectors. For instance, Chong and Gradstein (2007) utilize two macroeconomic methods—electricity consumption and currency demand—and find that the size of the informal economy is negatively correlated with an economy’s wealth and positively correlated with its inequality of income. Using a 1994 survey from a random sample of Mexican immigrant households in Los Angeles, Marcelli et. al. (1999) obtain estimates of

legal status, years of schooling, age, and gender. They then apply these estimates to a sub-sample of the 1990 Census Public Use Microdata Sample (PUMS) that includes “non-Cuban, foreign-born, Latino labor force participants aged 18-64.” They determine the level of informality among this group in various occupations and use it as a proxy for overall informal economic activity. Their findings indicate informal work to be highly related to “lower wages, a higher incidence of poverty, less education, and a higher likelihood of being employed by others.” Workers in occupations with high levels of informal workers experience lower returns to education than workers in occupations with low levels of informality.

Table 1: Previous Estimates of the Informal Economy

Method	Size of Informal Economy (as a % of GDP)								
	U.S. ¹		U.K. ²	Los Angeles ³	Detroit ⁴	Houston ⁴	Santa Ana ⁴	Miami ⁴	San Francisco ⁴
	1981-1985	1986-1990	1993	1998-2001	2006	2004	2004	2004	2004
Currency Demand	5.3	6.2							
Transactions	21.2	19.4							
Electricity Consumption	7.8	9.9							
Surveys	5.6								
Tax Audits	8.2	10							
Expenditure			10.6						
Labor Market Discrepancies	6.1	10.2		15					
Neighborhood Proxies					9.8	9.7	17	11.6	9.8

¹ U.S. data summarized in Schneider and Enste (2000)

² Lyssioutou et. al. (2004)

³ Joassart-Marcelli et. al. (2002)

⁴ City Drilldown Reports summarized in Social Compact (2007)

3. Empirical Methods

To empirically determine the either the presence or the size of an underground economy requires employing one or more of the methods described in section 2. The desire to determine informality at a local level points toward use of the microeconomic methods. In particular, the expenditure method lends itself well to a county-level analysis. Drawbacks associated with the lengthy process to obtain restricted-use licenses to access U.S. Consumer Expenditure Surveys prevent its use in this report. Additionally, analysis of such would provide data for a single year.

Such a cross-sectional view would prevent analysis of informal economic behavior over time. To do so, would require repeating the analysis on multiple expenditure surveys spanning several years. This procedure is an option for a more in-depth study with a longer time frame.

A second promising option is the modification of the neighborhood proxies method to be applicable to rural areas of South Carolina. Unfortunately, like the previous option, this, too, lends itself to a long-term study. Implementation of this method will require the following.

- Development of a custom model based on the DYMIMIC strategy.
- Identification of data available and required.
- Extensive collection of data elements.

In order to provide a basic estimate of the underground economy within a abbreviated period, this analysis will use the labor market discrepancy method. It will compare five different measures of labor force size.

1. **Working-Age Population:** Encompasses individuals ages 15 to 64, as reported by the US Census Bureau.
2. **Labor Force:** Estimated by the Bureau of Labor Statistics (BLS) using data from the Current Population Survey (CPS), the Current Employment Statistics (CES) program, and the state unemployment insurance (UI) system, this measure comprises people who report themselves as either being employed or having actively sought work within the past month.
3. **Employment:** Estimated by the Bureau of Labor Statistics (BLS) using data from the Current Population Survey (CPS), the Current Employment Statistics (CES) program, and the state unemployment insurance (UI) system, this measure is a subset of the previous Labor Force figure and comprises only people who report themselves as employed.
4. **Wages and Salary Employment:** Comprehensive tabulation, from the BLS Quarterly Census of Employment and Wages (QCEW), of the workers covered by state Unemployment Insurance as reported by employers. This measure contains only wage and salary employment, and does not include self-employment.
5. **Total Employment:** Produced by the Bureau of Economic Analysis (BEA) as a part of their Regional Economic Information System (REIS). This data set includes both wage and salary as well as self-employment data at the 1-digit NAICS level and is estimated using the QCEW, Census, IRS data.
6. **Number of Tax Returns Filed:** Reported by the South Carolina Department of Revenue, this figure indicates the percentage of an area's population employed in the formal sector.

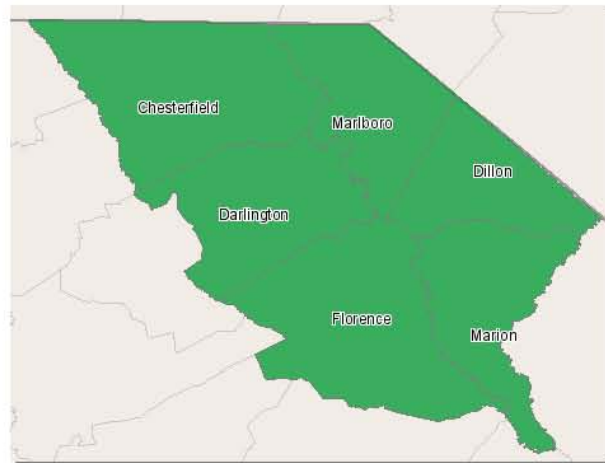
In addition to examining the figures at a given point in time, this method will also explore changes in the measure over time.

4. Results

4.1 Pee Dee Region Overview

The results of this paper focus on a specific region of South Carolina—the Pee Dee region which comprises the counties of Chesterfield, Darlington, Dillon, Florence, Marion, and Marlboro as shown in Figure 1.

Figure 1: Map of South Carolina Pee Dee Region



The Pee Dee region can be described as an economically depressed area. The six counties within the area all have high poverty and unemployment, and low income and property values as displayed in Table 2. Marion, Marlboro, and Dillon, in particular, are distressed areas, as Marlboro has the state's 4th lowest median household income; Dillon has the 4th lowest assessed property values; and Marion as the 3rd highest percentage of unemployment insurance claimants. Furthermore, all of the areas have suffered low or negative population growth between 2003 and 2006. (See Appendix, Table A1 for a complete listing of summary statistics for all South Carolina counties.)

Table 2: Pee Dee Region Economic Statistics

County	Median Household Income		3-Year Population Growth (% of Population)		Assessed Property Value Per Capita		Percent of Population Below Poverty Level		Unemployment Claims (% of Population)	
	Income	Rank	Percent	Rank	Value	Rank	Percent	Rank	Percent	Rank
Chesterfield	\$ 31,527	13	0.2%	15	\$2,203	9	22.0%	14	0.7%	22
Darlington	\$ 33,739	20	-0.2%	13	\$2,987	23	21.2%	15	0.7%	22
Dillon	\$ 28,395	8	0.0%	14	\$2,016	4	24.7%	6	1.0%	12
Florence	\$ 37,251	30	2.4%	28	\$3,498	31	17.4%	23	0.7%	22
Marion	\$ 27,283	6	-0.9%	7	\$2,143	7	24.6%	7	1.3%	3
Marlboro	\$ 26,306	4	3.0%	30	\$2,163	8	24.4%	8	1.1%	8
South Carolina	\$ 39,477		4.4%		\$3,851		15.6%		0.6%	

Sources: Median Household Income and Percent Below Poverty from 2005 U.S. Census Bureau Small Area Income and Poverty Estimates. 3-Year Population Growth from U.S. Census Bureau Population Estimates (July 1, 2003 to July 1, 2006). Adjusted Assessed Property Value Per-Capita from S.C. Comptroller General (2005) and U.S. Census Bureau Population Estimates (July 1, 2005). Unemployment Claims from S.C. Employment Security Commission (2006).

A closer look at household income in Figure 2 further reveals the poor economic situation of the region. Between 2000 and 2005, real median household income declined in all counties. While this trend is felt throughout the United States, it is particularly magnified in South Carolina and the Pee Dee region. Median household income, reported in inflation-adjusted 2007 US dollars, declined 6.6% statewide. Dillon, Florence, and Darlington experienced slightly less income decline, but Marlboro experienced the 3rd largest decline in the state of 13.8%. Marion and Chesterfield also witnessed above average declines. A complete listing of all counties is founding in Table A2.

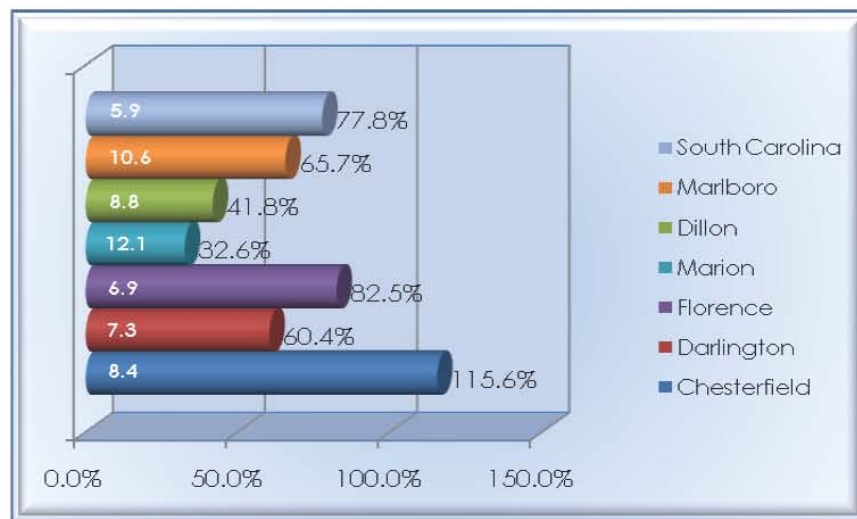
Figure 2: Growth of Real Median Household Income (in 2007 US dollars), 2000 – 2005



Source: U.S. Census Bureau Small Area Income and Poverty Estimates, 2000 – 2005. Growth rates shown are for 2000-2005. Estimates shown are for 2005, reported in inflation adjusted 2007 US dollars.

Pee Dee counties all have higher unemployment rates than state average of 6.4% for 2006. As shown in Figure 3, Marion and Marlboro had the first and third highest 2006 annualized unemployment rate in South Carolina at 12.2% and 11.1%. Most counties have experienced lower unemployment growth than seen statewide. Between 2000 and 2006, South Carolina’s unemployment rate grew 77.8% from 3.6% in 2000 to 6.4% in 2006. Only Chesterfield and Florence grew at higher rates. Marion, in fact, had the lowest unemployment growth rate in the state. See Table A3 in the Appendix for unemployment rates for all counties in South Carolina. Additionally, all of the counties reached unemployment peaks in 2004 or 2005 and have declined since then.

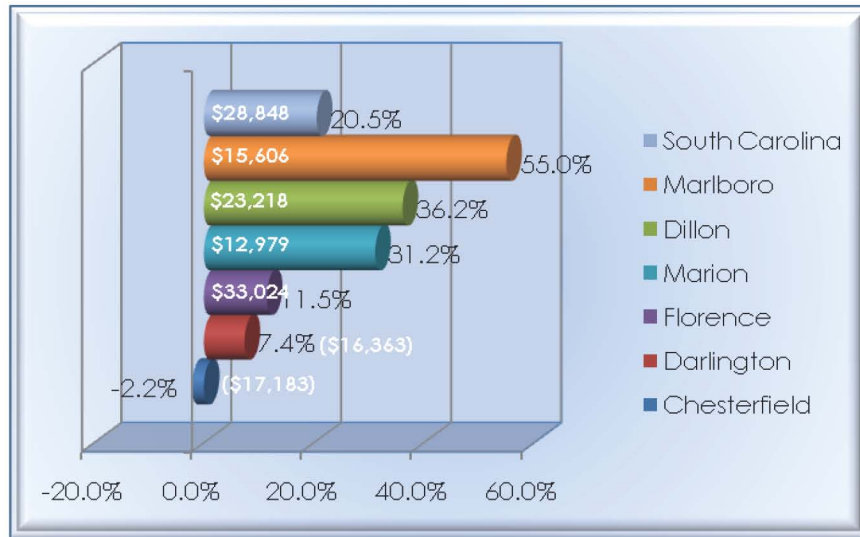
Figure 3: Unemployment, 2001 – 2006



Source: BLS Local Area Unemployment Statistics.

During the same period, the region experienced larger than average growth in per capita gross retail sales. While South Carolina witnessed a statewide 20.5% increase in real per-capita retail sales (as seen in Figure 4), Marlboro, Dillon, and Marion counties all experienced even higher growth rates, with Marlboro County’s being the second highest in the state. (See Appendix Table A4 for a complete listing for all South Carolina counties.) Such high level of retail sales growth may be, in part, explained by the fact that these three counties serve as a “pass through” for visitors on their way to vacation spots in the Grand Strand area of adjacent Horry County. Additionally, although the growth rates are particularly high, the absolute levels in real 2007 dollars are well below state average, with per-capita retail sales for Marion County only totaling \$12,979 (11th lowest in the state). In contrast, Florence’s per-capita retail sales were the 4th highest in the state at \$33,024.

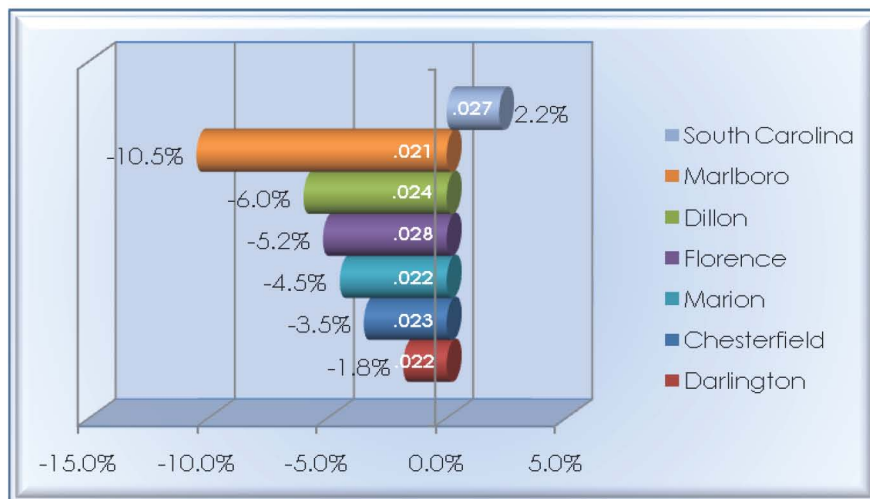
Figure 4: Growth of Gross Retail Sales Per-Capita, 2001 – 2006



Source: S.C. Department of Commerce calculation of South Carolina Department of Revenue data and US Census Estimates of Population., 2001 – 2005. Figures reported in real 2007 U.S. dollars.

In contrast to the dramatic growth in retail sales is the decline in the number of business units (sales-tax collecting entities) per-capita as shown in Figure 5. While the state averaged a 2.2% increase in per-capita business units, all six Pee Dee counties witnessed declines. Marlboro County experienced the second largest decrease in business units per-capita in the state. Furthermore, all but Florence County had a lower than state average number of businesses per person in absolute terms. Appendix Table A5 provides a complete listing for all South Carolina counties.

Figure 5: Growth of Business Units Per-Capita, 2001 – 2006

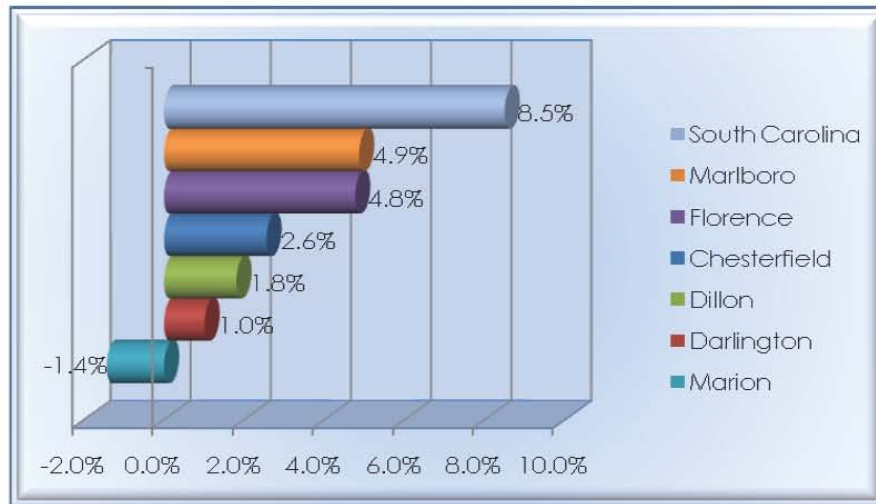


Source: S.C. Department of Commerce calculation of South Carolina Department of Revenue data and US Census Estimates of Population., 2001 - 2005

4.2 Availability of Labor

In addition to stagnant overall population growth in Table 2, the rate of growth of population of working age (between 15 and 64 years old) has also dramatically lagged the remainder of the state (see Figure 6). Marlboro and Florence, who registered the largest percentage 7-year increase of working age population among the Pee Dee counties, were only the 21st and 23rd fastest growing counties in South Carolina. Only Marion County actually lost population. Table A6 of the Appendix contains the same information for all South Carolina counties.

Figure 6: Growth of Working Age Population (Ages 15-64), 2000 – 2006



Source: U.S. Census Bureau Population Estimates, 2000 - 2006

While the size of the working age population has increased, albeit modestly, in the Pee Dee region between 2000 and 2006, the size of the labor force—people who self-describe themselves as being employed or seeking employment as reported by the BLS—has declined in all counties except Florence and Marlboro. Relative to the working age population, the labor force in those counties grew at almost the exact same pace as shown in Table 3. Working age population growth outpaced labor force participation by 11.9% in Marion County, the greatest growth disparity in the state. Chesterfield ranked 8th in the state for this measure, while Dillon ranked 11th. Ratios for the entire state are listed in Table A7. Overall statewide labor force growth has been on par with the working age population growth of 8.5%. Thus, it has outpaced all counties within the Pee Dee region.

Table 3: Ratio of Labor Force Participants to Population of Working Age (15 to 64), 2000 – 2006

County	Ratio (LAUS Labor Force / Census Population of Working Age)										
	Year							Growth	Rank	Average	Rank
	2000	2001	2002	2003	2004	2005	2006				
Chesterfield	0.68	0.66	0.65	0.66	0.64	0.63	0.64	-5.9%	8	0.65	11
Darlington	0.71	0.69	0.69	0.70	0.69	0.69	0.70	-1.4%	24	0.70	20
Dillon	0.69	0.65	0.65	0.66	0.64	0.68	0.66	-4.3%	11	0.66	14
Florence	0.72	0.70	0.70	0.71	0.71	0.71	0.72	0%	25	0.71	26
Marion	0.67	0.63	0.61	0.62	0.62	0.60	0.59	-11.9%	1	0.62	8
Marlboro	0.64	0.64	0.63	0.67	0.66	0.68	0.64	0%	25	0.65	11
South Carolina	0.74	0.72	0.72	0.73	0.73	0.74	0.74	0%		0.73	

Source: S.C. Department of Commerce calculation of BLS Local Area Unemployment Statistics and US Census Estimates of Population 15 to 64 years old.

It is important to remember that the labor force comprises all people employed or seeking employment, thus it includes the unemployed. Since the percentage of unemployed has grown in every county during the period, it means that the percentage of people actually employed in the labor force has fallen even more relative to the working age population.

In addition to measuring the growth since 2000, Table 3 also indicates that for every year, every county in the Pee Dee region has a lower ratio of labor force participants to working age population than the statewide average, indicating a larger percentage of the population in this region do not participate in the formal labor force than is typical throughout the state.

Such a gap in growth raises the question of where these new workers found jobs. To further probe this disparity, we can observe the number of people employed in jobs that pay wages and salaries relative to the supply of labor. Wage and salary employment, as reported in the QCEW, does not include the self-employed (which LAUS does). Thus, it provides an inventory of available jobs filled at legal, established employers. Table 4 reports the ratio of the QCEW wage and salary employment for all industries to the total population of working age individuals. Most notable is that all counties, except Florence, had a significantly lower ratio of wage employment to working age population than the state average of 0.65. Furthermore, all counties have experienced a decrease in the ratio over the 7-year period, meaning a declining percentage of the population is employed in traditional salaried positions. Marion County experienced the largest decline of any county in the state.

Table 4: Ratio of Wage and Salary Employment to Population of Working Age (15 to 64)

County	Ratio (QCEW Employment / Census Population of Working Age)										
	Year							Growth	Rank	Average	Rank
	2000	2001	2002	2003	2004	2005	2006				
Chesterfield	0.57	0.53	0.52	0.50	0.48	0.47	0.48	-15.8%	7	0.51	25
Darlington	0.50	0.49	0.49	0.47	0.47	0.47	0.47	-6.0%	28	0.48	23
Dillon	0.49	0.46	0.46	0.46	0.45	0.48	0.47	-4.1%	30	0.47	21
Florence	0.75	0.75	0.75	0.73	0.72	0.68	0.69	-8%	25	0.72	42
Marion	0.52	0.47	0.45	0.44	0.44	0.41	0.40	-23.1%	1	0.45	18
Marlboro	0.41	0.42	0.41	0.41	0.41	0.43	0.41	0%	36	0.41	15
South Carolina	0.68	0.67	0.65	0.64	0.64	0.64	0.64	-6%		0.65	

Source: S.C. Department of Commerce calculation of BLS Quarterly Census of Employment and Wages and US Census Estimates of Population 15 to 64 years old.

An important caveat regarding QCEW statistics is that they report the county in which the individual is employed, whereas both Census and LAUS labor force figures describe the county in which the individual resides. Thus more urban counties, which may draw a large number of workers from less-developed surrounding areas, are naturally more likely to have higher ratios of wage and salary employment to population than more rural areas with fewer employers. For instance, Richland, Charleston, and Greenville counties have the highest average ratios in the state (see Table A8 of the Appendix) Florence, which also serves as the most developed area of the Pee Dee as well as Santee-Lynches (including Kershaw, Lee, Sumter, and Clarendon counties) regions, has the 5th highest average ratio in the state. The fact that all of the counties within these two regions have experienced declines in these ratios indicates one of the following: either 1.) more workers are turning to self-employment or informal economic activity; or 2.) workers are travelling to other counties to find employment. The remaining neighboring counties (Lancaster, Horry, Williamsburg, and Georgetown) have also all experienced negative growth in the ratio (Williamsburg's has remained the same); thus, these counties cannot be absorbing the excess wage and salary workers from the Pee Dee region.

4.3 Informal Economy Estimates

Because no specific measure of the informal economy exists, much evidence regarding its existence and size is indirect, inferred from discrepancies between the various measures of the labor market. This section will explore discrepancies that can be used to generate estimates of the magnitude of the informal economy. At the end, we will summarize the methods studied and develop an approximation of the Pee Dee region informal economy.

4.3.1 Self-Reported Employment Versus Employer-Reported Employment

First, we will examine the difference in the employment reported by employers versus employment reported by the employed. Table 5 presents the ratio of QCEW employment (employer reported) to LAUS employment (employee-reported). A complete listing of all South Carolina county statistics is found in Table A9. On average statewide, employer-reported jobs account for 95% of the employee-reported jobs. In the Pee Dee region, however, the averages are far less. With the exception of Florence, Pee Dee region period averages range between 0.71 and 0.85. Except for Dillon and Marlboro, these ratios have declined since 2000.

Besides the possibility of a shadow economy, several possible explanations exist for the discrepancies shown. First, as described before, QCEW employment does not include the self-employed, so workers in these areas may be more likely to be involved in proprietorship activities. Typically, self-employment facilitates informal economic activity. Second, QCEW figures are based on the county in which the employer is located while LAUS figures are based on the county in which the employee lives. Counties like Florence, which are more populous and developed, are typically net importers of workers from less developed, surrounding counties and, thus, have ratios in excess of 1. Neither Florence nor any of the other surrounding counties have ratios high enough to suggest that they are absorbing the excess workers. Finally, LAUS only counts an employed individual one time, regardless of the number of job activities in which s/he actually participated. QCEW counts the number of jobs, even if the same worker holds more than one. If multiple jobholders are factored in, however, the ratios would be even lower. According to BLS (CPS studies), multiple jobholders accounted for 5.2% of employed people in 2006.

Table 5: Ratio of Employer-Reported QCEW Employment to Self-Reported LAUS Employment, 2000 – 2006

County	Ratio (QCEW Employment / LAUS Employment)										
	Year							Growth	Rank	Average	Rank
	2000	2001	2002	2003	2004	2005	2006				
Chesterfield	0.88	0.87	0.87	0.85	0.84	0.83	0.83	-5.7%	16	0.85	33
Darlington	0.75	0.76	0.76	0.73	0.74	0.75	0.72	-4.0%	24	0.74	22
Dillon	0.77	0.79	0.78	0.76	0.78	0.77	0.78	1.3%	38	0.78	25
Florence	1.09	1.13	1.14	1.11	1.11	1.05	1.04	-4.6%	21	1.10	42
Marion	0.85	0.85	0.84	0.82	0.81	0.78	0.76	-10.6%	4	0.82	28
Marlboro	0.69	0.72	0.71	0.71	0.72	0.72	0.72	4.3%	42	0.71	18
South Carolina	0.96	0.97	0.96	0.95	0.94	0.94	0.93	-3.1%		0.95	

Source: S.C. Department of Commerce calculation of BLS Local Area Unemployment Statistics and Quarterly Census of Employment and Wages

4.3.3 Wage and Salary Employment Versus Total Private Employment

Informal economic activity is likely to be more highly correlated with those who are self-employed, as it naturally allows for a lower degree of accountability as well as more flexibility than

positions that receive wages and salaries from an employer. Such a measure provides insight as to those working “on the books.” Another source of total employment data is the Bureau of Economic Analysis’ Regional Economic Information System, which includes self-employment. Table 6 provides the ratio of wage and salary employment reported by the QCEW to the total private non-farm employment (including self-employment) reported by BEA (all county figures in Table A10). The BEA utilizes Census, IRS, and other data elements to statistically correct for underreporting and misreporting.

The variations in ratios between South Carolina and Pee Dee counties are not as pronounced as they have been for other measures. Statewide, the average ratio was 0.95 as was Florence’s ratio. Marlboro surprisingly had a ratio above 1. All counties except Dillon and Marlboro saw decreases in ratios since 2000, as did South Carolina. In all, this measure indicates that official self-employment is higher in four of the Pee Dee region than in the rest of the state. We can conclusively say it is also on the rise in these four counties faster than throughout the state.

Table 6: Ratio of QCEW Employment to BEA REIS Employment, 2001 – 2005

County	Ratio (QCEW Employment / BEA REIS Employment)					Growth	Rank	Average	Rank
	Year								
	2001	2002	2003	2004	2005				
Chesterfield	0.93	0.92	0.91	0.90	0.89	-4.3%	20	0.91	19
Darlington	0.90	0.89	0.88	0.88	0.87	-3.3%	25	0.88	15
Dillon	0.91	0.89	0.91	0.88	0.92	1.1%	45	0.90	18
Florence	0.97	0.96	0.96	0.95	0.90	-7.2%	7	0.95	29
Marion	0.88	0.88	0.87	0.86	0.82	-6.8%	12	0.86	10
Marlboro	1.04	1.03	1.02	1.02	1.04	0.0%	43	1.03	41
South Carolina	0.96	0.96	0.95	0.94	0.93	-3.1%		0.95	

Source: S.C. Department of Commerce calculation of BLS Quarterly Census of Employment and Wages and BEA Regional Economic Information System.

Another method of measuring self-employment again utilizes the BEA REIS data set. We develop a location quotient which compares the percentage of wage and salary employment to total employment that exists in each of the Pee Dee counties with the percentage of wage and salary employment in the rest of the state as well as the rest of the nation. If a county is under-represented in its share of wage and salary employment relative to the rest of the state, its location quotient will be less than one. Table 7 presents the results of such calculation and indicates that the Pee Dee region is on par with the rest of the state in regards to the share of employees not participating in self-employment. Only Marion County was significantly below state or national average, indicating a large sole-proprietorship share. The state, in general, had slightly more wage and salary employment than the nation. A complete listing for all counties is in Table A11.

Table 7: Wage and Salary Employment Location Quotients, 2001 – 2005

		BEA REIS Wage and Salary Employment Location Quotients					Average	Rank
		Year						
County		2001	2002	2003	2004	2005		
Chesterfield	State LQ	0.98	0.98	0.97	0.97	0.96	0.97	20
	National LQ	1.01	1.01	1.00	1.00	0.99	1.00	
Darlington	State LQ	0.99	0.99	0.99	0.98	0.98	0.99	24
	National LQ	1.02	1.02	1.02	1.01	1.01	1.02	
Dillon	State LQ	1.00	1.00	1.00	1.00	1.00	1.00	30
	National LQ	1.03	1.03	1.03	1.03	1.03	1.03	
Florence	State LQ	1.02	1.02	1.02	1.02	1.01	1.02	37
	National LQ	1.05	1.05	1.05	1.05	1.05	1.05	
Marion	State LQ	0.90	0.89	0.88	0.87	0.85	0.88	4
	National LQ	0.93	0.92	0.91	0.90	0.88	0.91	
Marlboro	State LQ	1.03	1.04	1.04	1.04	1.04	1.04	42
	National LQ	1.07	1.07	1.07	1.08	1.08	1.07	
South Carolina	National LQ	1.03	1.03	1.03	1.03	1.03	1.03	

Source: S.C. Department of Commerce calculation of BEA Regional Economic Information System data.

4.3.4 Income Tax Filers Versus Population

According to IRS data, in 2004 132,226,042 returns were filed in the US. Another 15 million people did not file returns because they did not earn enough money to be required to do so, according to the Tax Foundation. In an analysis by this group, of these non-filers, 98.9% earned less than \$30,000; 62.8% were over the age of 55; 62.6% were female; 55.5% were married filing jointly; and 95.3% worked part-time for less than 13 weeks of the year. While the Pee Dee counties are more likely to have a higher number of non-filers simply due to lower income and higher poverty, non-filers also serve as a good indicator of people not employed full time in the formal job market. Table 8 shows the percentage of the population who filed state income tax returns. A complete state listing is in Table A12. On average, 45% of South Carolina state residents filed returns between 2000 and 2005. (In the US, 45.4% of the population filed returns in 2005.) This figure remained relatively stable throughout the period. All counties within the Pee Dee region had both lower levels as well as declining levels of tax filing. They were by no means the lowest in the state. Marion County, however, did experience the fourth most rapid decline in percent of population filing in the state.

Again, the results of such a comparison must be reviewed in context. Not filing can be representative of low levels of income, prevalence of part-time work, and workers over 55. Given that much research has linked the former two of these factors with the presence of informality in the economy, they can still provide us with some insight into the factors present that indicate informal economic activity.

Table 8: Percent of Population Filing State Income Tax Returns, 2001 – 2005

County	Year						Growth	Rank	Average	Rank
	2000	2001	2002	2003	2004	2005				
Chesterfield	38%	38%	39%	37%	38%	38%	-1.8%	32	38%	19
Darlington	41%	40%	40%	39%	39%	39%	-3.8%	18	40%	28
Dillon	40%	38%	38%	38%	38%	38%	-3.5%	23	38%	22
Florence	43%	43%	43%	42%	42%	41%	-4.1%	17	42%	42
Marion	41%	40%	39%	39%	38%	38%	-7.5%	4	39%	23
Marlboro	39%	38%	39%	38%	37%	38%	-2.7%	28	38%	20
South Carolina	45%	45%	44%	44%	44%	45%	-0.4%		45%	

Source: S.C. Department of Commerce calculation of South Carolina Department of Revenue data and US Census Estimates of Population.

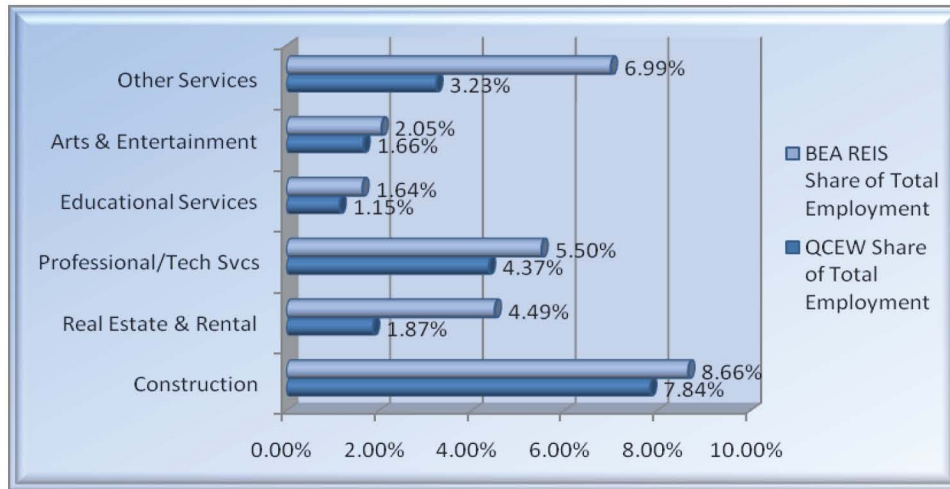
4.3.4 Industry Concentration

Certain industries are more likely than others to be accommodating to informal economic activity. It is easier to perform, for instance, handyman services off the books than industrial machinery manufacturing. Using QCEW and BEA REIS employment data, we can compare the percentage of workers employed in each industry. Recalling that QCEW data does not include self-employment and BEA REIS does, comparing the shares of total employment derived from each data set will provide an indication of which industries are most highly concentrated in self-employed workers. Figures 7 through 13 provide a comparison of these two sets of data by county. According to Figure 7, South Carolina, as a whole, has large discrepancies in QCEW wage and salary employment versus BEA REIS total (including self) employment in six major industry groups.

- Other Services (including repair, maintenance, and personal care services)
- Arts and Entertainment (including spectator sports, performing arts, amusement, and recreation companies)
- Educational Services (including teaching, tutoring, and educational support services)
- Professional and Technical Services (including legal, accounting, architectural, engineering, and consulting services)
- Real Estate and Rental Leasing
- Construction

The largest variations occur in the Other Services and Real Estate and Rental industry groups.

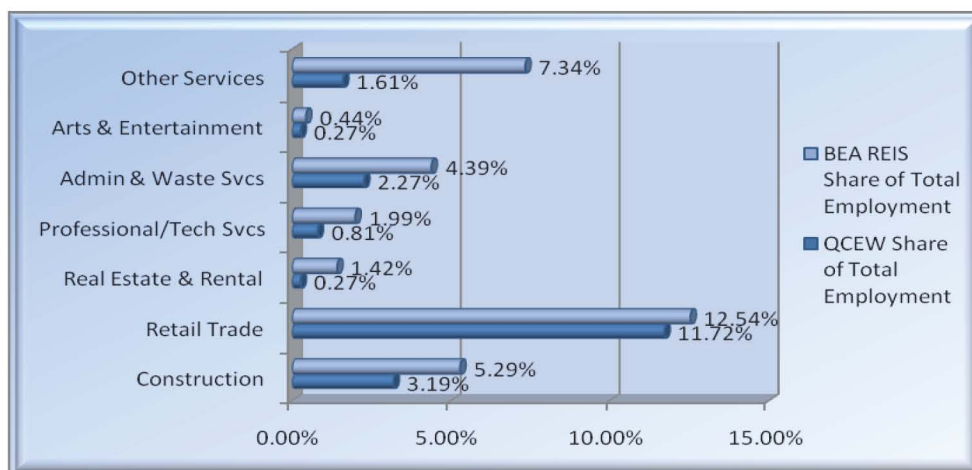
Figure 7: Share of Employment by Industry, South Carolina 2005



Source: S.C. Department of Commerce calculation of BLS Quarterly Census of Employment and Wages and BEA Regional Economic Information System.

The Pee Dee region generally had much larger differences in the share of QCEW employment versus the share of BEA REIS employment for most industries, particularly Other Services and Construction. Many of the Pee Dee counties do not have enough representation of some industry groups (namely, Educational Services, Professional and Technical Services, and Health Care and Social Services) to even be able to calculate employment shares. Chesterfield County exhibits similarities to South Carolina as a whole in its concentration of self-employment in the Other Services and Real Estate and Rental. In addition, Chesterfield had a much larger disparity in Construction, Other Services, Real Estate and Rental, and Administrative and Waste Management Services (including office administrative, employment, business support, waste collection, and disposal services). It also had some difference in Retail Trade.

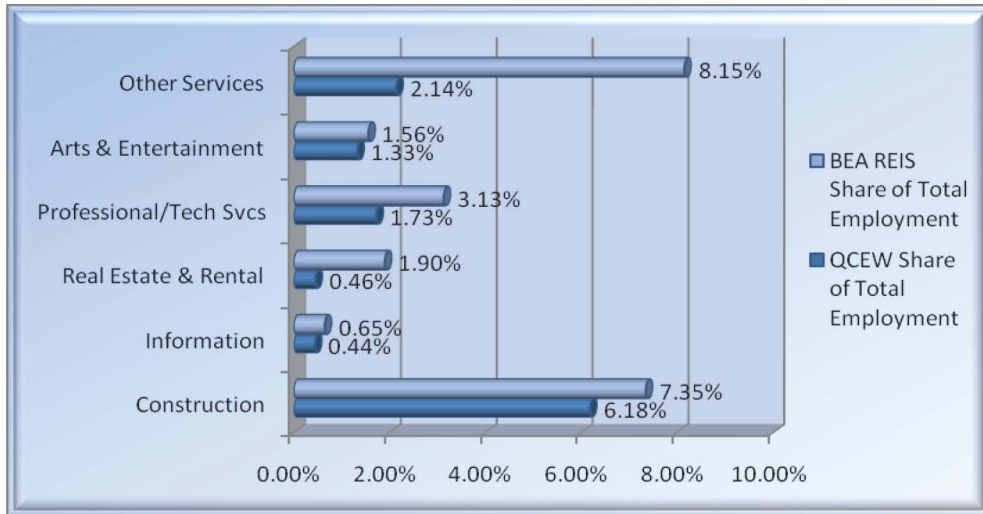
Figure 8: Share of Employment by Industry, Chesterfield County 2005



Source: S.C. Department of Commerce calculation of BLS Quarterly Census of Employment and Wages and BEA Regional Economic Information System.

Darlington County also had a higher difference in self-employment in Other Services and Real Estate and Rental. Additionally, although a small percentage of the total employment, Darlington has a significant discrepancy in the Information industry (including publishing, software, sound recording, internet publishing, and data processing services).

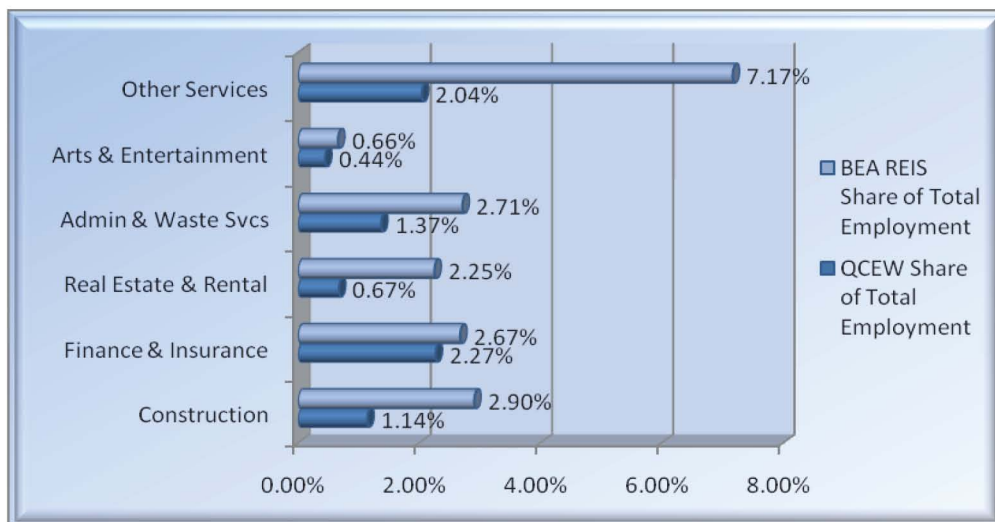
Figure 9: Share of Employment by Industry, Darlington County 2005



Source: S.C. Department of Commerce calculation of BLS Quarterly Census of Employment and Wages and BEA Regional Economic Information System.

Dillon County likewise had a higher than statewide difference in self-employment in Other Services, Real Estate and Rental, Administrative and Waste Management Services, and Construction.

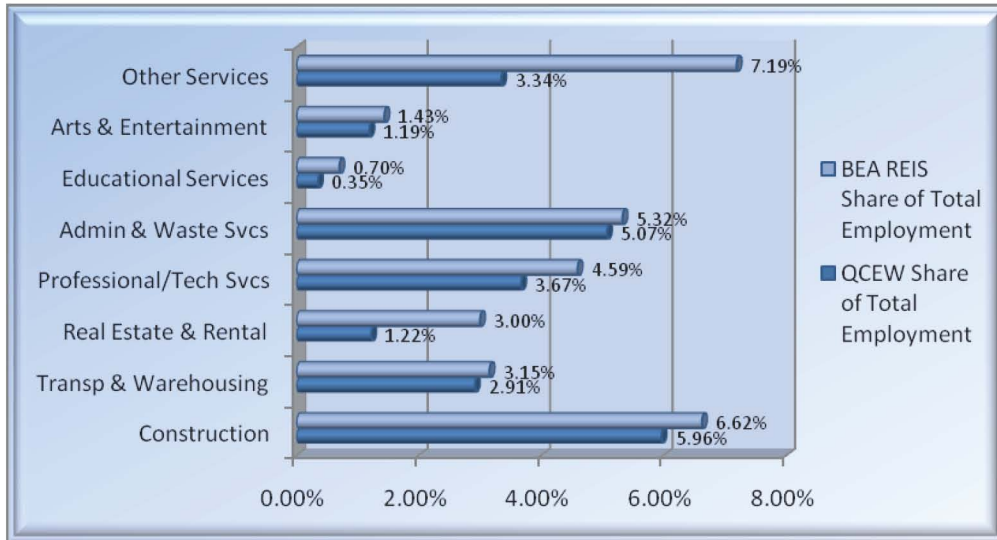
Figure 10: Share of Employment by Industry, Dillon County 2005



Source: S.C. Department of Commerce calculation of BLS Quarterly Census of Employment and Wages and BEA Regional Economic Information System.

In addition to other trends noted, Florence County exhibited differences in QCEW and BEA REIS shares of total employment in the Transportation and Warehousing industry group.

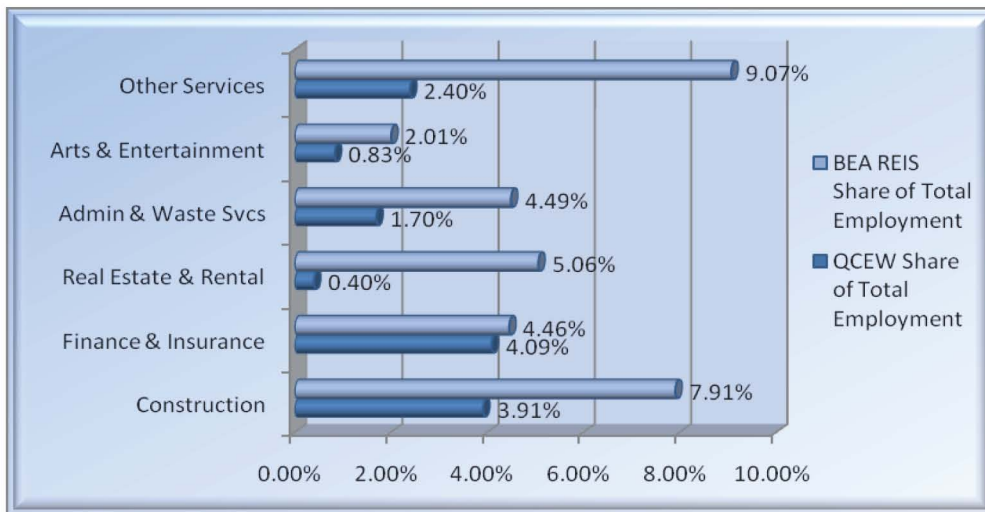
Figure 11: Share of Employment by Industry, Florence County 2005



Source: S.C. Department of Commerce calculation of BLS Quarterly Census of Employment and Wages and BEA Regional Economic Information System.

Marion County also had a much higher than statewide average difference in QCEW and BEA REIS employment shares in all of the industry groups represented in the county.

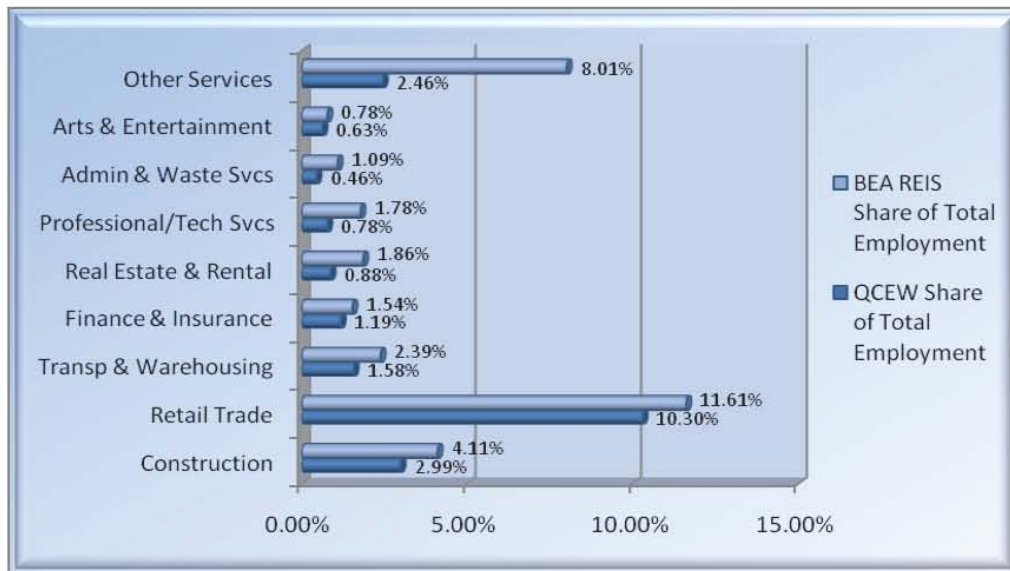
Figure 12: Share of Employment by Industry, Marion County 2005



Source: S.C. Department of Commerce calculation of BLS Quarterly Census of Employment and Wages and BEA Regional Economic Information System.

Finally, Marlboro County had the most industry groups with large differences between QCEW and BEA REIS employment shares. In addition to the industry groups represented by most of the other Pee Dee counties, Marlboro also has discrepancies in Transportation and Warehousing, Finance and Insurance, and Retail Trade.

Figure 13: Share of Employment by Industry, Marlboro County 2005



Source: S.C. Department of Commerce calculation of BLS Quarterly Census of Employment and Wages and BEA Regional Economic Information System.

4.3.5 Compilation of Estimates

Three of the methods utilized to compare informal economic activity easily lend themselves to estimated calculations of an informal economy. These methods and the results they produce are laid out in Table 9. The estimated size for each county is calculated from the most recent data available. While no method is perfect, combined they at least provide a general guide for how much economic activity occurs in the region compared with the rest of the state. The first method—comparing employer-reported QCEW employment with employee-reported LAUS employment—produces a negative result for Florence, primarily due to the fact that Florence draws labor from the other Pee Dee counties. Thus, taken all together, the first method estimates an informal economy of 12.3% in the Pee Dee region in 2005. Statewide it was 6.7%. The second method—comparing QCEW employment (wage and salary only) with BEA REIS private employment (including self-employment)—produces slightly lower results for the counties within the Pee Dee. For 2005, this method estimated an informal economy of 10.6% within the Pee Dee counties and 6.8% statewide.

Table 9: Estimated Size of the Pee Dee Region Informal Economy

County	Method 1: Self-Reported Employment Versus Employer-Reported Employment (reported in Table 5)				Method 2: Wage and Salary Employment Versus Total Employment (reported in Table 6)				Method 3: Income Tax Filers Versus Population (reported in Table 8)			
	Employment		Difference	% of Total	Employment		Difference	% of Total	2005 Census Pop.	2005 SC Tax Returns	% of Pop. Filing	Difference from US % Filing
	2006 QCEW	2006 LAUS			2005 QCEW	2005 BEA REIS						
Chesterfield	14,024	16,855	2,831	16.8%	13,601	15,277	1,676	11.0%	43,191	16,316	37.8%	7.6%
Darlington	20,983	29,039	8,056	27.7%	20,961	24,137	3,176	13.2%	67,369	26,390	39.2%	6.2%
Dillon	9,470	12,095	2,625	21.7%	9,557	10,365	808	7.8%	30,851	11,833	38.4%	7.0%
Florence	60,998	58,543	-2,455	-4.2%	59,516	66,498	6,982	10.5%	130,259	53,997	41.5%	3.9%
Marion	9,037	11,888	2,851	24.0%	9,363	11,420	2,057	18.0%	34,798	13,132	37.7%	7.7%
Marlboro	8,173	11,420	3,247	28.4%	8,071	7,792	-279	-3.6%	27,722	10,474	37.8%	7.6%
Pee Dee Region	122,685	139,840	17,155	12.3%	121,069	135,489	14,420	10.6%	334,190	132,142	39.5%	5.9%
South Carolina	1,855,842	1,988,378	132,536	6.7%	1,819,217	1,952,181	132,964	6.8%	4,246,933	1,906,991	44.9%	0.5%

Source: S.C. Department of Commerce calculation of BLS Quarterly Census of Employment and Wages, BLS Local Area Unemployment Statistics, BEA Regional Economic Information System, US Census Population Estimates, and S.C. Department of Revenue Income Tax data.

Finally, the income tax filers discrepancy method is used. To gauge the size of the informal economy from this measure, the average filing rate for the entire United States (45.5%) in 2005 was examined. Then, the difference between the percentage of filers in each county and the US average filers was calculated. Thus, the estimated size of the informal economy produced by the third method is the percent *above* the estimated size of the US informal economy. We can view the Pee Dee’s estimated 5.9% informal economy figures as a lower bound. For lack of a better procedure for tabulating each of these individual estimates into a single number, this study utilizes the crude method of averaging them. The Pee Dee’s average informal economy makes up 9.6% of its entire economy. Florence had a lower average at 3.4%, while Marion’s average estimate was 16.6%, Darlington’s was 15.7%, Dillon’s was 12.2%, Chesterfield’s was 11.8%, and Marlboro’s was 10.8%.

5. Conclusion and Recommendations

If nothing else, this study provides strong evidence that a sizeable underground economy exists within the Pee Dee region of South Carolina. Furthermore, preliminary results point to the same condition existing throughout many regions of the state. While several preferred methods of determining underground economy size exist, including the expenditure method and the neighborhood proxies method, time and resource constraints precluded these methods at this time. Instead, utilizing the labor market discrepancy method, the size of the informal economy was estimated at 9.6% in the Pee Dee, with estimates ranging as high as 16.6% and as low as 3.4% for the counties within.

The implications of the existence of such underground activities are many. First, informal employment occurs outside the legal and tax systems, reducing the revenues received by national, state, and local governing bodies, as well as national social insurance programs such as Medicare and Social Security. Furthermore, these workers are not vested in other insurance programs financed through legally required employer participation, including Workers Compensation, Unemployment Insurance, and Disability Insurance. Informal workers also receive no health care, retirement, or other employer-provided benefits. Informality also promotes a lack of stability and security in employment. These points, taken together, indicate not only problems for the affected workers, but also strain on the government-provided social services as well, as sufficient financing is not being collected from the informal workers, and they would require utilization of these government services at higher rates.

Many previous studies have linked the prevalence of informal economic activity to economic restructuring—the transition from manufacturing to service-based economies, increasing globalization and immigration, economic deregulation, and transformation to more flexible forms of production. In the rural counties, it may also be correlated with lack of local educational and career opportunities. Many of the rural workers in informal work live in near-poverty on the margins of the economy, which benefits the highly skilled. The inability to efficiently train and utilize these labor resources more effectively translates to lost economic growth from inefficient development and use of labor. Furthermore, the accumulation of unskilled, informal workers within a region has the potential to characterize the area as failed and undesirable.

To develop policy recommendations to combat the prevalence of informality, the underlying causes of it must first be targeted. While increasing systematic regulation of industries in which a high level of informality occurs may be helpful to reducing some level of underground activity, providing effective remedies to combat the root causes will reduce the pervasiveness of informal activity by encouraging economic growth and increasing the opportunities within the formal economy. This study implores a subsequent, in-depth study into the underlying problems affecting these communities, the results of which could be used to craft a comprehensive plan for economic growth. Such a study could utilize Social Compact's Neighborhood Proxies Approach as a building block for determining the type of data necessary and available, as well as key performance indicators for economic growth. A well-formulated plan for analysis and the use of these results for improving the economic infrastructure will provide the groundwork for improving the formal economic opportunities and reducing the informal activities.

References

- Alderslade, Jamie, John Talmage, and Yusef Freeman. (2006) "Measuring the Informal Economy – One Neighborhood at a Time," Brookings Institution Metropolitan Policy Program Discussion Paper [<http://www.brookings.edu/metro/umi.htm>].
- Bhattacharyya, D. (1990) "On the Economic Rationale of Estimating the Hidden Economy, United Kingdom (1960-1884): Estimates and Tests," *Economic Journal*, 100, 703-17.
- Cagan, Phillip. (1958) "The Demand for Currency Relative to the Total Money Supply," *Journal of Political Economy*, 66, 303-29.
- Chong, Alberto and Mark Gradstein. (2007) "Inequality and Informality," *Journal of Public Economics*, 91, 159-79.
- Cohen, Eric D. and Andrea Stephens. (2005) "Informal Economic Activity in a Deindustrialized Rural Pennsylvania Community: A Preliminary Profile," *Journal of Rural Community Psychology*, E8(2).
- Feige, Edgar L. (1979) "How Big is the Irregular Economy?" *Challenge*, 22(1), 5-13.
- Feinstein, Jonathan S. (1999) "Approaches for Estimating Noncompliance: Examples from Federal Taxation in the United States," *Economic Journal*, 109 (June), F360-9.
- Frey, Bruno and Hannelore Weck. (1983) "Bureaucracy and the Shadow Economy: A Macro-Approach," in *Anatomy of Government Deficiencies*. Horst Hanusch, ed. Berlin: Springer, 89-109.
- Hodge, Scott A. (2005) "Number of Americans Outside Tax System Continues to Grow," *Fiscal Facts*, 27 [<http://www.taxfoundation.org/research/show/542.html>].
- Kaufmann, Daniel and Aleksander Kaliberda. (1996) "Integrating the Unofficial Economy into the Dynamics of Post Socialist Economies: A Framework of Analyses and Evidence," World Bank Policy Research Paper 1691.
- Lyssioutou, Panayiota, Panos Pashardes, and Thanasis Stengos. (2004) "Estimates of the Black Economy Based on Consumer Demand Approaches," *Economic Journal*, 114, 622-39.
- Marcelli, Enrico, Manuel Pastor, and Pascale Joassart. (1999) "Estimating the Effects of Informal Economic Activity: Evidence from Los Angeles County," *Journal of Economic Issues*, 33(3), 579-607.
- Mencken, F. Carson and Sally Ward Maggard. (1999) "Informal Economic Activity in West Virginia: A Descriptive and Multivariate Analysis," in *Inside West Virginia: Public Policy Perspectives for the 21st Century*. Keith, Bruce and Ronald Althouse, ed. West Virginia: West Virginia University Press.

- Joassart-Marcelli, Pascale and Daniel Flaming. (2002) "Workers Without Rights: The Informal Economy in Los Angeles," Economic Roundtable Briefing Paper
[<http://www.economicrt.org/publications.html>]
- Pissarides, C. and G. Weber. (1989) "An Expenditure-Based Estimate of Britain's Black Economy," *Journal of Public Economics*, 39, 17-32.
- Schneider, Friedrich and Dominik Enste. (2000) "Shadow Economies: Size, Causes, and Consequences," *Journal of Economic Literature*, 37(March), 77-114.
- Social Compact. (2007) "Making Connections: Community Development That Works," Presentation to 2007 Community Development Policy Summit.
[<http://www.clevelandfed.org/CommAffairs/Conf2007/PolicySummit/pdf/TALMAGE.pdf>]
- Tanzi, Vito. (1983) "The Underground Economy in the United States: Annual Estimates 1930-1980," *IMF Staff Papers*, 30(2), 283-305.
- Thomas, James. (1999) "Quantifying the Black Economy: Measurement Without Theory 'Yet Again?'" *Economic Journal*, 109, 381-9.

Appendix

Table A1: South Carolina Summary Statistics by County

County	Median Household Income		3-Year Population Growth (% of Population)		Assessed Property Value Per Capita		Percent of Population Below Poverty Level		Unemployment Claims (% of Population)	
	Income	Rank	Percent	Rank	Value	Rank	Percent	Rank	Percent	Rank
Abbeville	\$ 32,486	15	-1.3%	6	\$2,206	10	19.2%	18	1.4%	1
Aiken	\$ 41,875	38	3.6%	33	\$3,073	24	15.4%	32	0.7%	22
Allendale	\$ 22,491	1	-2.3%	3	\$2,252	12	38.3%	1	1.0%	12
Anderson	\$ 38,725	32	3.7%	36	\$3,169	27	15.6%	30	0.7%	22
Bamberg	\$ 26,299	3	-1.8%	4	\$1,829	2	27.2%	4	1.1%	8
Barnwell	\$ 30,155	9	-0.3%	10	\$2,035	5	23.3%	11	1.2%	6
Beaufort	\$ 49,638	46	9.0%	43	\$11,587	46	11.5%	44	0.2%	46
Berkeley	\$ 44,733	42	4.1%	38	\$3,882	36	13.4%	40	0.4%	41
Calhoun	\$ 35,698	26	-1.6%	5	\$3,980	37	15.0%	35	0.7%	22
Charleston	\$ 42,465	39	3.5%	32	\$5,204	40	15.5%	31	0.4%	41
Cherokee	\$ 35,555	25	0.9%	20	\$3,273	28	16.2%	28	0.8%	18
Chester	\$ 33,316	19	-2.6%	2	\$2,866	20	19.2%	18	1.3%	3
Chesterfield	\$ 31,527	13	0.2%	15	\$2,203	9	22.0%	14	0.7%	22
Clarendon	\$ 27,944	7	1.6%	25	\$2,360	16	23.1%	12	0.7%	22
Colleton	\$ 31,059	10	1.1%	21	\$4,054	38	22.3%	13	0.5%	37
Darlington	\$ 33,739	20	-0.2%	13	\$2,987	23	21.2%	15	0.7%	22
Dillon	\$ 28,395	8	0.0%	14	\$2,016	4	24.7%	6	1.0%	12
Dorchester	\$ 49,636	45	14.4%	46	\$3,507	32	11.2%	45	0.4%	41
Edgefield	\$ 39,347	34	0.8%	19	\$2,299	14	17.8%	22	0.8%	18
Fairfield	\$ 32,748	16	0.3%	17	\$5,372	41	19.7%	17	1.1%	8
Florence	\$ 37,251	30	2.4%	28	\$3,498	31	17.4%	23	0.7%	22
Georgetown	\$ 35,050	22	3.7%	35	\$5,789	43	17.0%	24	0.8%	18
Greenville	\$ 42,714	40	5.5%	40	\$2,377	17	12.9%	41	0.5%	37
Greenwood	\$ 36,629	28	1.2%	23	\$3,561	33	16.1%	29	0.9%	15
Hampton	\$ 31,309	12	-0.5%	9	\$1,908	3	23.9%	9	0.5%	37
Horry	\$ 38,727	33	13.2%	45	\$6,598	45	15.2%	34	0.6%	32
Jasper	\$ 32,892	17	4.1%	37	\$5,491	42	24.8%	5	0.3%	45
Kershaw	\$ 40,915	37	5.5%	41	\$3,159	26	13.6%	39	0.7%	22
Lancaster	\$ 36,064	27	1.7%	26	\$2,869	21	14.5%	36	1.3%	3
Laurens	\$ 35,080	23	0.3%	18	\$2,309	15	16.7%	26	0.7%	22
Lee	\$ 27,227	5	1.2%	24	\$1,543	1	28.0%	3	0.9%	15
Lexington	\$ 46,504	43	5.9%	42	\$3,633	35	11.7%	43	0.4%	41
Marion	\$ 27,283	6	-0.9%	7	\$2,143	7	24.6%	7	1.3%	3
Marlboro	\$ 26,306	4	3.0%	30	\$2,163	8	24.4%	8	1.1%	8
McCormick	\$ 32,330	14	-0.3%	12	\$3,125	25	19.9%	16	0.9%	15
Newberry	\$ 35,245	24	2.5%	29	\$2,701	19	16.8%	25	0.6%	32
Oconee	\$ 39,724	35	3.1%	31	\$5,846	44	11.2%	45	1.0%	12
Orangeburg	\$ 31,151	11	-0.3%	11	\$2,963	22	23.7%	10	1.2%	6
Pickens	\$ 40,744	36	2.2%	27	\$3,391	29	13.7%	38	0.6%	32
Richland	\$ 43,250	41	4.4%	39	\$3,609	34	14.3%	37	0.6%	32
Saluda	\$ 37,245	29	0.2%	16	\$2,240	11	18.1%	20	0.6%	32
Spartanburg	\$ 38,197	31	3.7%	34	\$3,401	30	15.3%	33	0.7%	22
Sumter	\$ 34,246	21	-0.8%	8	\$2,480	18	18.0%	21	0.8%	18
Union	\$ 33,243	18	-2.6%	1	\$2,123	6	16.3%	27	1.4%	1
Williamsburg	\$ 25,690	2	1.1%	22	\$2,281	13	29.7%	2	1.1%	8
York	\$ 47,245	44	11.7%	44	\$4,140	39	12.0%	42	0.5%	37
South Carolina	\$ 39,477		4.4%		\$3,851		15.6%		0.6%	

Sources: Median Household Income and Percent Below Poverty from 2005 U.S. Census Bureau Small Area Income and Poverty Estimates. 3-Year Population Growth from U.S. Census Bureau Population Estimates (July 1, 2003 to July 1, 2006). Adjusted Assessed Property Value Per-Capita from S.C. Comptroller General (2005) and U.S. Census Bureau Population Estimates (July 1, 2005). Unemployment Claims from S.C. Employment Security Commission (2006).

Table A2: Growth of Real Median Household Income (in 2007 US dollars), 2000 – 2005

County	Year						Rank	Growth	Rank
	2000	2001	2002	2003	2004	2005			
Abbeville	40,107	36,676	36,010	34,457	34,424	34,489	15	-14.0%	2
Aiken	46,854	44,590	44,412	44,353	43,962	44,457	38	-5.1%	38
Allendale	26,669	24,702	23,889	23,671	23,629	23,878	1	-10.5%	7
Anderson	45,720	43,647	42,880	43,221	42,442	41,113	32	-10.1%	8
Bamberg	30,197	28,151	28,007	28,014	28,152	27,921	3	-7.5%	25
Barnwell	35,420	33,360	31,818	29,971	29,849	32,014	9	-9.6%	11
Beaufort	55,973	53,233	52,812	52,589	53,319	52,699	46	-5.8%	33
Berkeley	48,535	46,216	46,287	47,393	47,796	47,491	42	-2.2%	43
Calhoun	39,665	37,668	37,166	38,068	38,194	37,899	26	-4.5%	41
Charleston	47,940	45,203	44,324	44,307	43,863	45,083	39	-6.0%	32
Cherokee	41,641	38,986	38,301	38,701	38,828	37,747	25	-9.4%	14
Chester	39,177	37,094	36,553	37,263	37,458	35,370	19	-9.7%	10
Chesterfield	36,368	34,417	34,006	34,387	33,893	33,471	13	-8.0%	23
Clarendon	32,893	30,754	29,846	30,160	30,175	29,667	7	-9.8%	9
Colleton	35,843	33,789	33,330	33,535	33,733	32,974	10	-8.0%	21
Darlington	37,771	35,940	35,471	35,398	35,104	35,819	20	-5.2%	36
Dillon	31,996	30,243	29,450	30,207	29,975	30,146	8	-5.8%	34
Dorchester	51,482	49,268	49,428	50,217	51,725	52,697	45	2.4%	46
Edgefield	41,479	39,850	39,529	38,926	39,525	41,773	34	0.7%	45
Fairfield	36,634	34,562	34,530	34,848	34,500	34,767	16	-5.1%	39
Florence	41,877	39,839	39,197	39,381	39,334	39,548	30	-5.6%	35
Georgetown	43,824	40,642	40,348	41,100	41,358	37,211	22	-15.1%	1
Greenville	51,226	49,167	48,013	47,419	46,582	45,348	40	-11.5%	5
Greenwood	42,707	40,220	39,312	39,059	39,425	38,888	28	-8.9%	17
Hampton	35,033	32,696	31,868	31,872	31,963	33,239	12	-5.1%	37
Horry	43,728	40,887	39,940	40,150	40,455	41,115	33	-6.0%	31
Jasper	35,193	32,676	31,253	32,260	32,618	34,920	17	-0.8%	44
Kershaw	47,048	45,054	44,995	45,444	45,268	43,438	37	-7.7%	24
Lancaster	42,119	39,613	38,838	38,684	39,366	38,288	27	-9.1%	16
Laurens	40,056	38,182	37,250	36,672	36,393	37,243	23	-7.0%	27
Lee	31,967	29,870	28,979	29,372	29,283	28,906	5	-9.6%	12
Lexington	55,172	52,856	52,026	51,614	51,058	49,371	43	-10.5%	6
Marion	31,791	29,631	28,823	29,615	29,189	28,965	6	-8.9%	18
Marlboro	32,385	30,419	29,958	30,389	29,994	27,928	4	-13.8%	3
McCormick	37,913	34,786	34,351	34,305	34,551	34,323	14	-9.5%	13
Newberry	40,152	37,816	37,148	37,423	37,232	37,418	24	-6.8%	30
Oconee	45,445	42,961	42,543	43,098	43,263	42,173	35	-7.2%	26
Orangeburg	36,050	33,751	32,990	33,171	32,862	33,072	11	-8.3%	20
Pickens	45,291	43,155	42,706	42,691	41,928	43,256	36	-4.5%	40
Richland	49,366	46,870	45,626	44,861	43,933	45,917	41	-7.0%	28
Saluda	41,043	37,885	36,102	35,638	38,166	39,541	29	-3.7%	42
Spartanburg	46,497	43,586	42,750	43,014	43,357	40,552	31	-12.8%	4
Sumter	40,079	37,684	36,821	37,032	37,164	36,358	21	-9.3%	15
Union	38,350	36,105	35,499	35,558	35,265	35,293	18	-8.0%	22
Williamsburg	29,836	28,105	27,371	27,913	27,744	27,274	2	-8.6%	19
York	53,882	51,536	51,425	51,495	51,974	50,158	44	-6.9%	29
South Carolina	44,892	43,263	43,153	42,824	43,306	41,911		-6.6%	

Source: U.S. Census Bureau Small Area Income and Poverty Estimates, 2000 – 2005. Growth rates shown are for 2000-2005. Estimates shown are for 2005, reported in inflation adjusted 2007 US dollars.

Table A3: Unemployment Rate, 2001 – 2006

County	Year							2000-06		Average	Rank
	2000	2001	2002	2003	2004	2005	2006	Growth	Rank		
Abbeville	3.7	6.5	7.9	8.8	8.2	7.7	8.8	137.8%	3	7.4	20
Aiken	3.7	5	5	5.2	5.7	5.8	6.5	75.7%	18	5.3	37
Allendale	5.1	6.1	7.2	8.5	9.6	10.6	11.5	125.5%	5	8.4	9
Anderson	3	5.3	6.3	7.1	7.1	7.3	6.8	126.7%	4	6.1	31
Bamberg	5	6.6	6.9	7.6	7.3	8.6	9.9	98.0%	15	7.4	19
Barnwell	4.9	6.9	8	9.3	9.5	9	10.2	108.2%	10	8.3	11
Beaufort	3.1	3.9	4.2	4.7	4.9	4.9	5	61.3%	37	4.4	45
Berkeley	3.2	4.4	4.4	5.4	5.5	5.3	5.6	75.0%	30	4.8	41
Calhoun	3.7	5.9	6.4	6.8	6.6	7.3	7	89.2%	19	6.2	29
Charleston	3.2	4.1	4.6	5.3	5.4	5.4	5.1	59.4%	40	4.7	43
Cherokee	4.1	7	8.2	8.6	8.8	7.9	7.8	90.2%	18	7.5	17
Chester	5	7.7	10	10.9	9.8	9.2	10.3	106.0%	13	9.0	6
Chesterfield	4.5	7.4	7.8	9.8	10	9.4	9.7	115.6%	8	8.4	10
Clarendon	5.3	7.5	7.7	8.6	8.9	9.7	9.4	77.4%	27	8.2	12
Colleton	3.7	5	6	7.2	7.2	7.1	6.8	83.8%	21	6.1	30
Darlington	4.8	6.3	7	8.1	8.2	8.7	7.7	60.4%	39	7.3	21
Dillon	6.7	9.2	8	9.3	9.7	9.4	9.5	41.8%	43	8.8	7
Dorchester	3	4.1	4.3	5.1	5.1	5.3	5.2	73.3%	31	4.6	44
Edgefield	3.6	4.8	5	4.9	5.8	7.1	7.7	113.9%	9	5.6	36
Fairfield	4.9	8.4	8.5	10.5	7.9	7.8	8.8	79.6%	25	8.1	13
Florence	4	5.5	6.6	7.7	8.4	8.9	7.3	82.5%	22	6.9	24
Georgetown	5.3	7.4	8.3	9.8	9.5	8.6	7.5	41.5%	44	8.1	14
Greenville	2.6	3.7	4.8	5.5	5.9	5.5	5.4	107.7%	11	4.8	42
Greenwood	4.2	6.8	8.9	9.3	8.7	9	8.1	92.9%	16	7.9	16
Hampton	4.2	6.2	7.4	9.3	9.3	8.3	7.4	76.2%	28	7.4	18
Horry	3.5	4.9	5.2	5.7	5.9	5.7	5.4	54.3%	41	5.2	38
Jasper	3.5	4.3	5.1	5.8	5.5	5.1	5.1	45.7%	42	4.9	40
Kershaw	3.7	5.1	6.1	6.3	6.2	6.5	6.3	70.3%	34	5.7	34
Lancaster	3.6	5.4	6.6	8.9	8.8	8.3	9.1	152.8%	2	7.2	22
Laurens	3.2	6.5	7.6	7.5	7.1	6.7	6.9	115.6%	7	6.5	27
Lee	5.6	7	7.5	8.4	8.7	9.4	9.7	73.2%	32	8.0	15
Lexington	2.6	3.6	3.9	4.5	4.9	4.9	4.7	80.8%	24	4.2	46
Marion	9.2	12.3	11	12.8	13.5	13.6	12.2	32.6%	46	12.1	1
Marlboro	6.7	9.5	10	12.9	12.9	11.3	11.1	65.7%	36	10.6	2
McCormick	6.2	9.6	10.9	12.5	11.1	11.1	11.1	79.0%	26	10.4	4
Newberry	4.1	6.2	7.3	7.4	7.3	6.9	6.6	61.0%	38	6.5	26
Oconee	3.4	5.4	6.7	7.5	7.4	8.6	9	164.7%	1	6.9	25
Orangeburg	5.7	8.6	8.8	9.9	9.4	9.6	9.5	66.7%	35	8.8	8
Pickens	3	5	5.9	6.7	6.7	6.5	6.2	106.7%	12	5.7	35
Richland	3.2	4.2	4.7	5.6	6	5.9	5.8	81.3%	23	5.1	39
Saluda	3.6	5.2	5.8	6.2	7.4	6.6	6.2	72.2%	33	5.9	33
Spartanburg	3.5	5.4	6.7	7.2	7.5	7.4	6.7	91.4%	17	6.3	28
Sumter	4.2	6.5	7.2	7.5	7.8	8.5	7.9	88.1%	20	7.1	23
Union	5	8.9	10.5	11.1	12.1	10.8	10.9	118.0%	6	9.9	5
Williamsburg	7.4	10.2	10.8	12.7	12	11.1	9.9	33.8%	45	10.6	3
York	3.2	4.8	6.5	7.3	7.2	6.6	6.4	100.0%	14	6.0	32
South Carolina	3.6	5.2	5.9	6.7	6.8	6.7	6.4	77.8%		5.9	

Source: BLS Local Area Unemployment Statistics.

Table A4: Gross Retail Sales Per-Capita (in 2007 US dollars), 2001 – 2006

County	Fiscal Year					2001-2005			
	2001-02	2002-03	2003-04	2004-05	2005-06	Growth	Rank	Average	Rank
Abbeville	7,577	6,957	6,476	7,376	7,364	-2.8%	4	7,732	3
Aiken	15,705	15,730	13,817	17,955	18,342	16.8%	29	16,300	22
Allendale	13,395	14,407	11,872	17,330	18,719	39.7%	42	15,104	18
Anderson	22,968	23,262	19,882	24,479	24,091	4.9%	13	23,151	36
Bamberg	10,970	13,323	11,781	14,833	14,845	35.3%	39	12,885	10
Barnwell	12,536	12,626	10,403	13,295	12,853	2.5%	8	13,199	12
Beaufort	28,223	27,879	23,245	29,165	29,897	5.9%	14	27,995	39
Berkeley	23,137	21,175	18,274	22,011	21,973	-5.0%	2	21,495	33
Calhoun	10,874	11,726	10,464	13,410	15,098	38.8%	41	12,070	8
Charleston	34,310	35,005	28,310	38,451	41,505	21.0%	31	35,664	44
Cherokee	15,237	16,299	14,983	17,640	19,171	25.8%	36	16,985	26
Chester	15,254	17,188	17,396	17,802	18,498	21.3%	32	17,184	28
Chesterfield	18,023	18,605	13,664	17,671	17,635	-2.2%	5	17,183	27
Clarendon	11,526	11,123	9,870	12,193	11,929	3.5%	10	11,360	7
Colleton	15,544	14,934	12,394	15,707	16,684	7.3%	15	15,565	20
Darlington	15,982	15,713	13,533	17,393	17,166	7.4%	16	16,363	23
Dillon	20,376	24,504	18,261	27,461	27,746	36.2%	40	23,218	37
Dorchester	13,646	13,279	11,550	15,939	15,476	13.4%	24	14,075	15
Edgefield	7,273	8,124	23,950	18,752	7,136	-1.9%	6	12,648	9
Fairfield	14,072	13,928	10,716	13,887	16,318	16.0%	27	13,557	14
Florence	32,984	29,070	27,206	35,947	36,762	11.5%	20	33,024	43
Georgetown	19,941	19,747	18,177	23,955	23,217	16.4%	28	20,946	32
Greenville	26,066	24,943	19,499	32,894	36,864	41.4%	44	28,594	40
Greenwood	21,844	22,204	18,507	22,823	22,436	2.7%	9	21,781	34
Hampton	16,206	13,116	10,246	13,546	14,611	-9.8%	1	13,398	13
Horry	35,290	35,711	29,661	39,759	41,590	17.9%	30	36,577	45
Jasper	23,186	28,957	51,447	50,611	43,939	89.5%	46	36,869	46
Kershaw	16,135	16,086	18,948	23,027	21,462	33.0%	38	19,006	30
Lancaster	14,150	13,305	11,452	15,192	15,930	12.6%	22	14,346	17
Laurens	10,565	10,701	9,367	11,550	11,453	8.4%	18	10,843	6
Lee	7,648	8,472	7,446	9,885	10,746	40.5%	43	8,912	4
Lexington	31,074	31,217	28,912	37,480	37,972	22.2%	34	32,868	42
Marion	11,993	11,540	10,051	14,932	15,731	31.2%	37	12,979	11
Marlboro	12,787	15,765	13,886	17,615	19,823	55.0%	45	15,606	21
McCormick	5,318	4,965	4,256	5,450	5,555	4.5%	12	5,188	1
Newberry	17,862	17,663	16,134	21,268	20,490	14.7%	26	18,886	29
Oconee	15,641	16,407	14,097	17,831	17,667	13.0%	23	16,396	24
Orangeburg	18,927	19,087	16,412	21,713	23,019	21.6%	33	19,831	31
Pickens	14,841	14,781	12,820	15,712	16,580	11.7%	21	15,290	19
Richland	29,145	29,534	25,500	31,188	33,086	13.5%	25	29,962	41
Saluda	6,994	6,526	5,305	6,439	6,976	-0.3%	7	6,529	2
Spartanburg	24,742	26,599	23,969	30,546	31,104	25.7%	35	27,128	38
Sumter	16,972	16,602	13,920	17,455	18,310	7.9%	17	16,840	25
Union	11,432	10,210	8,080	10,518	11,085	-3.0%	3	10,397	5
Williamsburg	14,101	14,633	12,346	15,182	14,671	4.0%	11	14,339	16
York	22,608	22,002	19,020	23,300	24,990	10.5%	19	22,631	35
South Carolina	27,600	27,265	23,988	31,408	33,268	20.5%		28,842	

Source: S.C. Department of Commerce calculation of South Carolina Department of Revenue data and US Census Estimates of Population., 2001 – 2005. Figures reported in real 2007 U.S. dollars.

Table A5: Business Units Per-Capita, 2001 – 2006

County	Fiscal Year						2001-05		Average	Rank
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	Growth	Rank		
Abbeville	0.021	0.018	0.017	0.017	0.017	0.018	-1.1%	34	0.018	3
Aiken	0.024	0.022	0.021	0.021	0.021	0.021	-5.0%	12	0.022	18
Allendale	0.023	0.019	0.019	0.018	0.019	0.018	-5.3%	9	0.019	8
Anderson	0.026	0.025	0.024	0.024	0.024	0.023	-4.9%	13	0.024	36
Bamberg	0.023	0.022	0.022	0.021	0.023	0.022	-3.2%	19	0.022	21
Barnwell	0.025	0.023	0.023	0.022	0.024	0.023	-0.9%	35	0.023	30
Beaufort	0.033	0.031	0.031	0.032	0.034	0.034	8.3%	44	0.032	45
Berkeley	0.018	0.017	0.017	0.017	0.018	0.018	7.6%	43	0.018	1
Calhoun	0.021	0.020	0.020	0.019	0.021	0.020	3.1%	40	0.020	12
Charleston	0.031	0.030	0.028	0.023	0.031	0.031	5.1%	42	0.029	43
Cherokee	0.029	0.023	0.022	0.021	0.022	0.022	-5.6%	8	0.023	29
Chester	0.023	0.022	0.021	0.020	0.021	0.021	-2.3%	24	0.021	16
Chesterfield	0.025	0.023	0.022	0.022	0.023	0.022	-3.5%	16	0.023	26
Clarendon	0.024	0.022	0.022	0.022	0.022	0.022	-1.8%	30	0.022	23
Colleton	0.025	0.025	0.023	0.023	0.024	0.023	-5.3%	10	0.024	31
Darlington	0.025	0.022	0.022	0.021	0.022	0.022	-1.8%	29	0.022	22
Dillon	0.032	0.023	0.022	0.022	0.023	0.022	-6.0%	6	0.024	33
Dorchester	0.020	0.019	0.018	0.018	0.018	0.018	-7.3%	4	0.019	7
Edgefield	0.020	0.018	0.018	0.016	0.017	0.018	1.1%	38	0.018	2
Fairfield	0.022	0.019	0.019	0.019	0.019	0.019	0.0%	36	0.019	9
Florence	0.031	0.029	0.028	0.027	0.028	0.027	-5.2%	11	0.028	42
Georgetown	0.031	0.030	0.029	0.028	0.029	0.030	2.0%	39	0.029	44
Greenville	0.025	0.020	0.017	0.015	0.027	0.027	32.3%	46	0.022	19
Greenwood	0.025	0.024	0.024	0.023	0.024	0.024	0.0%	36	0.024	32
Hampton	0.024	0.023	0.022	0.021	0.023	0.024	4.9%	41	0.023	24
Horry	0.046	0.042	0.041	0.041	0.042	0.041	-1.7%	31	0.042	46
Jasper	0.027	0.023	0.023	0.024	0.025	0.026	13.3%	45	0.025	38
Kershaw	0.026	0.024	0.024	0.024	0.024	0.023	-2.9%	20	0.024	35
Lancaster	0.025	0.023	0.022	0.022	0.023	0.023	-2.2%	27	0.023	27
Laurens	0.020	0.019	0.018	0.017	0.018	0.018	-2.2%	28	0.018	4
Lee	0.021	0.020	0.018	0.017	0.017	0.017	-10.8%	1	0.018	4
Lexington	0.029	0.028	0.027	0.026	0.027	0.027	-2.2%	26	0.027	41
Marion	0.024	0.022	0.022	0.021	0.021	0.021	-4.5%	14	0.022	20
Marlboro	0.027	0.022	0.020	0.018	0.020	0.020	-10.5%	2	0.021	15
McCormick	0.023	0.022	0.021	0.020	0.021	0.020	-10.0%	3	0.021	17
Newberry	0.025	0.023	0.022	0.022	0.023	0.022	-2.2%	25	0.023	25
Oconee	0.027	0.025	0.024	0.024	0.025	0.024	-1.6%	32	0.025	39
Orangeburg	0.027	0.026	0.025	0.024	0.026	0.025	-2.4%	23	0.025	40
Pickens	0.020	0.020	0.020	0.019	0.019	0.019	-2.5%	22	0.020	10
Richland	0.026	0.024	0.024	0.023	0.024	0.024	-1.2%	33	0.024	34
Saluda	0.020	0.019	0.019	0.018	0.018	0.018	-3.2%	18	0.019	6
Spartanburg	0.027	0.025	0.024	0.023	0.024	0.023	-6.0%	5	0.024	37
Sumter	0.022	0.021	0.020	0.019	0.020	0.020	-5.8%	7	0.020	11
Union	0.023	0.021	0.020	0.020	0.019	0.020	-4.3%	15	0.020	13
Williamsburg	0.022	0.021	0.020	0.021	0.021	0.020	-2.9%	21	0.021	14
York	0.026	0.023	0.023	0.022	0.023	0.023	-3.4%	17	0.023	28
South Carolina	0.030	0.027	0.026	0.025	0.028	0.028	2.2%		0.027	

Source: S.C. Department of Commerce calculation of South Carolina Department of Revenue data and US Census Estimates of Population., 2001 - 2005

Table A6: Census Estimates of Working Age Population (Ages 15-64), 2000 – 2006

County	Year							2000-2006	
	2000	2001	2002	2003	2004	2005	2006	Growth	Rank
Abbeville	16,893	17,081	17,162	17,205	17,262	17,178	17,158	1.6%	13
Aiken	93,579	94,342	95,525	96,810	98,493	99,502	100,729	7.6%	36
Allendale	7,326	7,124	7,238	7,243	7,189	7,173	7,087	-3.3%	3
Anderson	109,437	111,246	112,293	113,444	114,719	116,287	118,183	8.0%	37
Bamberg	10,899	10,726	10,698	10,494	10,496	10,460	10,397	-4.6%	1
Barnwell	15,073	15,097	15,075	15,210	15,220	15,296	15,258	1.2%	12
Beaufort	78,978	80,068	81,792	82,165	83,921	85,907	87,901	11.3%	43
Berkeley	98,564	99,232	99,807	100,638	102,521	102,844	105,095	6.6%	34
Calhoun	9,990	10,059	10,036	10,145	10,164	10,128	10,191	2.0%	15
Charleston	212,209	213,502	216,591	219,468	223,847	225,355	226,122	6.6%	32
Cherokee	34,717	34,963	35,327	35,403	35,639	35,842	36,168	4.2%	23
Chester	22,192	22,170	22,238	22,150	22,032	21,895	21,797	-1.8%	4
Chesterfield	28,277	28,453	28,563	28,652	28,684	28,935	29,000	2.6%	16
Clarendon	21,222	21,502	21,656	21,624	21,759	21,816	21,882	3.1%	19
Colleton	24,764	25,009	25,260	25,413	25,783	25,913	25,965	4.8%	25
Darlington	44,426	44,562	44,712	44,763	44,690	44,700	44,875	1.0%	10
Dillon	19,817	19,993	20,031	20,053	20,192	20,115	20,175	1.8%	14
Dorchester	64,911	66,608	68,761	71,316	73,969	78,650	83,817	29.1%	46
Edgefield	16,993	17,057	17,283	17,733	17,997	18,148	18,110	6.6%	33
Fairfield	15,328	15,473	15,641	15,603	15,872	15,828	15,836	3.3%	20
Florence	84,102	84,437	85,027	85,876	86,605	87,427	88,113	4.8%	24
Georgetown	36,068	36,528	37,275	37,669	38,254	38,771	39,358	9.1%	38
Greenville	257,798	261,784	265,197	268,013	271,599	276,115	283,401	9.9%	40
Greenwood	43,113	43,374	43,728	44,045	44,172	44,584	44,858	4.0%	22
Hampton	13,926	13,945	13,917	14,094	14,075	14,132	14,295	2.6%	17
Horry	133,271	135,306	137,831	140,605	144,863	151,202	158,323	18.8%	44
Jasper	13,789	13,891	14,014	14,094	14,331	14,410	14,638	6.2%	30
Kershaw	34,698	35,122	35,461	36,118	36,803	37,678	38,615	11.3%	42
Lancaster	40,967	41,143	41,622	41,940	42,322	42,509	42,997	5.0%	28
Laurens	45,872	46,361	46,561	46,831	46,993	47,389	47,555	3.7%	21
Lee	13,406	13,486	13,666	13,755	14,020	14,124	14,139	5.5%	29
Lexington	147,659	149,735	151,719	154,533	157,323	160,507	164,277	11.3%	41
Marion	23,209	23,068	22,969	22,994	22,987	22,994	22,877	-1.4%	5
Marlboro	19,099	19,057	19,100	18,939	18,988	18,597	20,029	4.9%	26
McCormick	6,822	6,842	6,897	6,897	6,702	6,719	6,755	-1.0%	7
Newberry	23,526	23,729	24,096	24,288	24,478	24,682	25,005	6.3%	31
Oconee	43,475	43,787	44,245	44,515	44,808	45,141	45,615	4.9%	27
Orangeburg	60,100	60,058	60,146	60,070	59,961	60,069	59,889	-0.4%	8
Pickens	77,594	77,934	77,631	78,225	78,831	79,202	79,995	3.1%	18
Richland	225,696	229,956	231,966	235,824	242,397	242,521	247,431	9.6%	39
Saluda	12,502	12,561	12,553	12,523	12,422	12,578	12,632	1.0%	11
Spartanburg	169,668	171,718	173,604	175,373	177,144	179,367	182,571	7.6%	35
Sumter	68,452	67,855	68,347	68,364	68,521	68,077	67,498	-1.4%	6
Union	19,301	19,053	18,860	18,742	18,481	18,465	18,418	-4.6%	2
Williamsburg	23,653	23,516	23,360	23,048	23,293	23,019	23,864	0.9%	9
York	112,243	115,227	118,613	122,154	126,205	131,229	138,161	23.1%	45
South Carolina	2,657,281	2,685,457	2,719,548	2,749,010	2,789,813	2,829,477	2,883,183	8.5%	

Source: U.S. Census Bureau Population Estimates, 2000 - 2006

Table A7: Ratio of Labor Force Participants to Population of Working Age (15 to 64), 2000-2006

County	Ratio (LAUS Labor Force / Census Population of Working Age)								Growth	Rank	Average	Rank
	Year											
	2000	2001	2002	2003	2004	2005	2006					
Abbeville	0.74	0.72	0.69	0.69	0.69	0.71	0.72	-2.7%	16	0.71	23	
Aiken	0.74	0.72	0.73	0.74	0.75	0.75	0.75	1.4%	33	0.74	39	
Allendale	0.51	0.51	0.49	0.47	0.46	0.46	0.50	-2.0%	20	0.49	1	
Anderson	0.76	0.75	0.73	0.72	0.73	0.73	0.72	-5.3%	10	0.73	37	
Bamberg	0.60	0.60	0.59	0.63	0.61	0.63	0.64	6.7%	46	0.61	7	
Barnwell	0.68	0.66	0.64	0.63	0.62	0.62	0.61	-10.3%	2	0.64	10	
Beaufort	0.65	0.64	0.66	0.69	0.70	0.72	0.69	6.2%	44	0.68	17	
Berkeley	0.67	0.65	0.66	0.68	0.69	0.70	0.71	6.0%	43	0.68	18	
Calhoun	0.71	0.70	0.69	0.70	0.70	0.70	0.72	1.4%	36	0.70	22	
Charleston	0.72	0.70	0.71	0.73	0.74	0.75	0.76	5.6%	42	0.73	36	
Cherokee	0.74	0.73	0.69	0.69	0.71	0.70	0.70	-5.4%	9	0.71	23	
Chester	0.74	0.73	0.71	0.71	0.71	0.73	0.75	1.4%	33	0.73	34	
Chesterfield	0.68	0.66	0.65	0.66	0.64	0.63	0.64	-5.9%	8	0.65	11	
Clarendon	0.61	0.59	0.58	0.59	0.58	0.59	0.60	-1.6%	22	0.59	4	
Colleton	0.64	0.63	0.63	0.64	0.63	0.64	0.64	0.0%	25	0.64	9	
Darlington	0.71	0.69	0.69	0.70	0.69	0.69	0.70	-1.4%	24	0.70	20	
Dillon	0.69	0.65	0.65	0.66	0.64	0.68	0.66	-4.3%	11	0.66	14	
Dorchester	0.73	0.70	0.71	0.72	0.72	0.73	0.70	-4.1%	12	0.72	28	
Edgefield	0.61	0.60	0.60	0.60	0.61	0.62	0.63	3.3%	39	0.61	6	
Fairfield	0.72	0.72	0.71	0.73	0.71	0.72	0.75	4.2%	41	0.72	32	
Florence	0.72	0.70	0.70	0.71	0.71	0.71	0.72	0.0%	25	0.71	26	
Georgetown	0.72	0.71	0.70	0.72	0.73	0.75	0.73	1.4%	35	0.72	33	
Greenville	0.79	0.77	0.75	0.75	0.76	0.76	0.76	-3.8%	14	0.76	43	
Greenwood	0.76	0.75	0.73	0.73	0.73	0.73	0.71	-6.6%	7	0.73	37	
Hampton	0.60	0.58	0.59	0.57	0.55	0.55	0.55	-8.3%	3	0.57	3	
Horry	0.79	0.76	0.77	0.80	0.81	0.81	0.82	3.8%	40	0.79	46	
Jasper	0.67	0.65	0.67	0.69	0.70	0.70	0.68	1.5%	37	0.68	18	
Kershaw	0.78	0.76	0.76	0.76	0.77	0.77	0.78	0.0%	25	0.77	44	
Lancaster	0.74	0.73	0.71	0.70	0.70	0.70	0.72	-2.7%	16	0.71	27	
Laurens	0.74	0.73	0.72	0.71	0.71	0.70	0.72	-2.7%	16	0.72	30	
Lee	0.62	0.60	0.59	0.61	0.59	0.59	0.60	-3.2%	15	0.60	5	
Lexington	0.80	0.78	0.78	0.79	0.79	0.80	0.81	1.3%	31	0.79	45	
Marion	0.67	0.63	0.61	0.62	0.62	0.60	0.59	-11.9%	1	0.62	8	
Marlboro	0.64	0.64	0.63	0.67	0.66	0.68	0.64	0.0%	25	0.65	11	
McCormick	0.55	0.54	0.53	0.53	0.52	0.53	0.54	-1.8%	21	0.53	2	
Newberry	0.74	0.72	0.71	0.73	0.71	0.72	0.71	-4.1%	13	0.72	31	
Oconee	0.74	0.73	0.72	0.72	0.71	0.71	0.68	-8.1%	4	0.72	29	
Orangeburg	0.68	0.66	0.67	0.67	0.66	0.68	0.67	-1.5%	23	0.67	16	
Pickens	0.74	0.73	0.72	0.72	0.72	0.73	0.74	0.0%	25	0.73	35	
Richland	0.72	0.69	0.69	0.70	0.69	0.71	0.72	0.0%	25	0.70	21	
Saluda	0.75	0.73	0.73	0.73	0.75	0.74	0.76	1.3%	32	0.74	40	
Spartanburg	0.76	0.74	0.74	0.74	0.74	0.74	0.74	-2.6%	19	0.74	41	
Sumter	0.65	0.64	0.63	0.66	0.67	0.69	0.69	6.2%	44	0.66	14	
Union	0.73	0.73	0.72	0.71	0.71	0.69	0.68	-6.8%	6	0.71	25	
Williamsburg	0.64	0.63	0.64	0.68	0.65	0.68	0.66	3.1%	38	0.65	13	
York	0.79	0.77	0.77	0.76	0.75	0.74	0.73	-7.6%	5	0.76	42	
South Carolina	0.74	0.72	0.72	0.73	0.73	0.74	0.74	0%		0.73		

Source: S.C. Department of Commerce calculation of BLS Local Area Unemployment Statistics and US Census Estimates of Population 15 to 64 years old.

Table A8: Ratio of Wage & Salary Employment to Population of Working Age (15 to 64), 2000-06

County	Ratio (QCEW Employment / Population of Working Age)							Growth	Rank	Average	Rank
	Year										
	2000	2001	2002	2003	2004	2005	2006				
Abbeville	0.45	0.43	0.40	0.38	0.39	0.40	0.39	-13.3%	10	0.41	12
Aiken	0.60	0.60	0.59	0.58	0.58	0.56	0.55	-8.3%	22	0.58	38
Allendale	0.54	0.56	0.52	0.48	0.46	0.46	0.59	9.3%	45	0.52	28
Anderson	0.59	0.56	0.55	0.52	0.52	0.51	0.51	-13.6%	9	0.54	30
Bamberg	0.45	0.46	0.46	0.48	0.47	0.48	0.46	2.2%	40	0.47	20
Barnwell	0.58	0.56	0.53	0.49	0.49	0.48	0.46	-20.7%	4	0.51	27
Beaufort	0.68	0.68	0.68	0.69	0.70	0.71	0.70	2.9%	42	0.69	40
Berkeley	0.33	0.33	0.34	0.34	0.34	0.35	0.36	9.1%	44	0.34	3
Calhoun	0.40	0.40	0.40	0.41	0.39	0.41	0.41	2.5%	41	0.40	10
Charleston	0.86	0.85	0.84	0.85	0.86	0.88	0.90	4.7%	43	0.86	45
Cherokee	0.61	0.58	0.55	0.53	0.54	0.54	0.54	-11.5%	14	0.56	35
Chester	0.57	0.55	0.50	0.49	0.48	0.50	0.49	-14.0%	8	0.51	26
Chesterfield	0.57	0.53	0.52	0.50	0.48	0.47	0.48	-15.8%	7	0.51	25
Clarendon	0.39	0.37	0.36	0.35	0.35	0.35	0.35	-10.3%	17	0.36	4
Colleton	0.43	0.42	0.42	0.41	0.41	0.40	0.42	-2.3%	33	0.42	16
Darlington	0.50	0.49	0.49	0.47	0.47	0.47	0.47	-6.0%	28	0.48	23
Dillon	0.49	0.46	0.46	0.46	0.45	0.48	0.47	-4.1%	30	0.47	21
Dorchester	0.40	0.40	0.41	0.40	0.40	0.38	0.36	-10.0%	18	0.39	7
Edgefield	0.37	0.37	0.38	0.37	0.37	0.35	0.34	-8.1%	24	0.36	5
Fairfield	0.49	0.45	0.43	0.37	0.36	0.37	0.38	-22.4%	3	0.41	13
Florence	0.75	0.75	0.75	0.73	0.72	0.68	0.69	-8.0%	25	0.72	42
Georgetown	0.59	0.58	0.57	0.56	0.57	0.59	0.60	1.7%	38	0.58	37
Greenville	0.90	0.86	0.83	0.83	0.82	0.82	0.82	-8.9%	21	0.84	44
Greenwood	0.75	0.74	0.70	0.69	0.69	0.68	0.67	-10.7%	16	0.70	41
Hampton	0.46	0.44	0.42	0.39	0.38	0.38	0.38	-17.4%	6	0.41	13
Horry	0.74	0.71	0.72	0.72	0.73	0.72	0.73	-1.4%	35	0.72	42
Jasper	0.35	0.35	0.37	0.38	0.39	0.43	0.52	48.6%	46	0.40	8
Kershaw	0.52	0.50	0.50	0.50	0.50	0.47	0.46	-11.5%	13	0.49	24
Lancaster	0.47	0.46	0.45	0.42	0.41	0.41	0.41	-12.8%	11	0.43	17
Laurens	0.44	0.43	0.41	0.38	0.38	0.39	0.39	-11.4%	15	0.40	10
Lee	0.30	0.30	0.29	0.29	0.28	0.27	0.27	-10.0%	19	0.29	1
Lexington	0.55	0.54	0.54	0.54	0.55	0.55	0.56	1.8%	39	0.55	32
Marion	0.52	0.47	0.45	0.44	0.44	0.41	0.40	-23.1%	1	0.45	18
Marlboro	0.41	0.42	0.41	0.41	0.41	0.43	0.41	0.0%	36	0.41	15
McCormick	0.33	0.31	0.30	0.28	0.28	0.29	0.29	-12.1%	12	0.30	2
Newberry	0.57	0.55	0.53	0.55	0.55	0.55	0.55	-3.5%	31	0.55	33
Oconee	0.59	0.58	0.56	0.55	0.54	0.52	0.48	-18.6%	5	0.55	31
Orangeburg	0.58	0.56	0.56	0.54	0.54	0.54	0.54	-6.9%	27	0.55	34
Pickens	0.47	0.46	0.45	0.44	0.44	0.44	0.46	-2.1%	34	0.45	19
Richland	0.92	0.90	0.88	0.87	0.85	0.85	0.85	-7.6%	26	0.87	46
Saluda	0.37	0.37	0.38	0.37	0.35	0.35	0.36	-2.7%	32	0.36	5
Spartanburg	0.71	0.68	0.67	0.66	0.65	0.64	0.64	-9.9%	20	0.66	39
Sumter	0.61	0.58	0.56	0.56	0.56	0.57	0.56	-8.2%	23	0.57	36
Union	0.53	0.52	0.50	0.47	0.45	0.44	0.41	-22.6%	2	0.47	22
Williamsburg	0.40	0.41	0.39	0.40	0.40	0.41	0.40	0.0%	36	0.40	9
York	0.54	0.52	0.51	0.51	0.52	0.51	0.51	-5.6%	29	0.52	29
South Carolina	0.68	0.67	0.65	0.64	0.64	0.64	0.64	-6%		0.65	

Source: S.C. Department of Commerce calculation of BLS Quarterly Census of Employment and Wages and US Census Estimates of Population 15 to 64 years old.

Table A9: Ratio of Employer-Reported QCEW Employment to Self-Reported LAUS Employment, 2000 – 2006

County	Ratio (QCEW Employment / LAUS Employment)										
	Year							Growth	Rank	Average	Rank
	2000	2001	2002	2003	2004	2005	2006				
Abbeville	0.64	0.64	0.63	0.61	0.61	0.62	0.60	-6.3%	12	0.62	10
Aiken	0.84	0.87	0.85	0.83	0.82	0.80	0.79	-6.0%	14	0.83	31
Allendale	1.13	1.16	1.15	1.12	1.12	1.10	1.33	17.7%	45	1.16	44
Anderson	0.79	0.80	0.80	0.77	0.77	0.76	0.75	-5.1%	18	0.78	26
Bamberg	0.80	0.82	0.83	0.83	0.83	0.83	0.80	0.0%	31	0.82	30
Barnwell	0.90	0.91	0.89	0.86	0.87	0.85	0.83	-7.8%	8	0.87	34
Beaufort	1.08	1.10	1.07	1.06	1.05	1.03	1.07	-0.9%	30	1.07	41
Berkeley	0.51	0.54	0.54	0.53	0.53	0.53	0.53	3.9%	41	0.53	3
Calhoun	0.58	0.61	0.61	0.63	0.60	0.64	0.61	5.2%	43	0.61	6
Charleston	1.23	1.26	1.24	1.24	1.23	1.24	1.24	0.8%	36	1.24	45
Cherokee	0.86	0.86	0.86	0.85	0.84	0.84	0.84	-2.3%	26	0.85	32
Chester	0.82	0.81	0.78	0.76	0.76	0.75	0.73	-11.0%	3	0.77	24
Chesterfield	0.88	0.87	0.87	0.85	0.84	0.83	0.83	-5.7%	16	0.85	33
Clarendon	0.66	0.68	0.67	0.65	0.66	0.65	0.66	0.0%	31	0.66	14
Colleton	0.70	0.71	0.71	0.69	0.69	0.68	0.70	0.0%	31	0.70	17
Darlington	0.75	0.76	0.76	0.73	0.74	0.75	0.72	-4.0%	24	0.74	22
Dillon	0.77	0.79	0.78	0.76	0.78	0.77	0.78	1.3%	38	0.78	25
Dorchester	0.57	0.60	0.60	0.59	0.58	0.55	0.54	-5.3%	17	0.58	4
Edgefield	0.63	0.66	0.67	0.64	0.65	0.61	0.58	-7.9%	7	0.63	11
Fairfield	0.72	0.68	0.65	0.57	0.55	0.56	0.56	-22.2%	1	0.61	7
Florence	1.09	1.13	1.14	1.11	1.11	1.05	1.04	-4.6%	21	1.10	42
Georgetown	0.87	0.88	0.88	0.86	0.87	0.86	0.89	2.3%	39	0.87	34
Greenville	1.18	1.17	1.16	1.16	1.14	1.14	1.13	-4.2%	22	1.15	43
Greenwood	1.04	1.05	1.06	1.05	1.03	1.02	1.03	-1.0%	29	1.04	40
Hampton	0.80	0.80	0.78	0.74	0.77	0.75	0.74	-7.5%	9	0.77	23
Horry	0.97	0.99	0.98	0.95	0.96	0.95	0.94	-3.1%	25	0.96	39
Jasper	0.55	0.56	0.59	0.59	0.60	0.64	0.81	47.3%	46	0.62	8
Kershaw	0.69	0.70	0.69	0.70	0.69	0.65	0.63	-8.7%	5	0.68	15
Lancaster	0.67	0.67	0.68	0.65	0.64	0.63	0.62	-7.5%	10	0.65	12
Laurens	0.62	0.62	0.61	0.58	0.58	0.60	0.58	-6.5%	11	0.60	5
Lee	0.52	0.53	0.53	0.52	0.53	0.51	0.49	-5.8%	15	0.52	1
Lexington	0.71	0.72	0.73	0.72	0.73	0.73	0.73	2.8%	40	0.72	19
Marion	0.85	0.85	0.84	0.82	0.81	0.78	0.76	-10.6%	4	0.82	28
Marlboro	0.69	0.72	0.71	0.71	0.72	0.72	0.72	4.3%	42	0.71	18
McCormick	0.64	0.64	0.64	0.61	0.60	0.60	0.61	-4.7%	20	0.62	8
Newberry	0.81	0.81	0.81	0.81	0.83	0.81	0.82	1.2%	37	0.81	27
Oconee	0.82	0.84	0.84	0.83	0.82	0.80	0.78	-4.9%	19	0.82	29
Orangeburg	0.91	0.93	0.92	0.90	0.89	0.88	0.89	-2.2%	27	0.90	36
Pickens	0.66	0.66	0.67	0.67	0.65	0.65	0.66	0.0%	31	0.66	13
Richland	1.33	1.35	1.33	1.32	1.31	1.27	1.25	-6.0%	13	1.31	46
Saluda	0.52	0.53	0.55	0.54	0.51	0.51	0.51	-1.9%	28	0.52	2
Spartanburg	0.96	0.97	0.97	0.96	0.94	0.94	0.92	-4.2%	23	0.95	38
Sumter	0.97	0.98	0.97	0.92	0.91	0.90	0.89	-8.2%	6	0.93	37
Union	0.77	0.77	0.77	0.74	0.72	0.71	0.67	-13.0%	2	0.74	21
Williamsburg	0.68	0.71	0.69	0.68	0.69	0.68	0.68	0.0%	31	0.69	16
York	0.71	0.71	0.71	0.73	0.75	0.74	0.75	5.6%	44	0.73	20
South Carolina	0.96	0.97	0.96	0.95	0.94	0.94	0.93	-3.1%		0.95	

Source: S.C. Department of Commerce calculation of BLS LAUS and Quarterly Census of Employment and Wages.

Table A10: Ratio of QCEW Employment to BEA REIS Private Employment, 2001 – 2005

County	Ratio (QCEW Employment / BEA REIS Employment)									
	Year					Growth	Rank	Average		Rank
	2001	2002	2003	2004	2005					
Abbeville	0.76	0.76	0.76	0.75	0.75	-1.3%	38	0.76	3	
Aiken	0.84	0.83	0.82	0.82	0.80	-4.8%	18	0.82	5	
Allendale	1.21	1.21	1.19	1.15	1.14	-5.8%	15	1.18	46	
Anderson	0.91	0.91	0.88	0.87	0.86	-5.5%	16	0.89	16	
Bamberg	0.94	0.93	0.93	0.92	0.91	-3.2%	27	0.93	25	
Barnwell	1.08	1.06	0.99	1.00	0.99	-8.3%	5	1.02	38	
Beaufort	0.86	0.86	0.86	0.85	0.84	-2.3%	30	0.85	9	
Berkeley	0.76	0.76	0.75	0.73	0.73	-3.9%	22	0.75	2	
Calhoun	0.66	0.65	0.64	0.62	0.62	-6.1%	14	0.64	1	
Charleston	0.93	0.93	0.93	0.92	0.91	-2.2%	35	0.92	24	
Cherokee	0.92	0.93	0.92	0.91	0.90	-2.2%	34	0.92	22	
Chester	0.99	0.95	0.94	0.91	0.89	-10.1%	3	0.94	27	
Chesterfield	0.93	0.92	0.91	0.90	0.89	-4.3%	20	0.91	19	
Clarendon	0.98	0.93	0.90	0.88	0.87	-11.2%	1	0.91	20	
Colleton	0.87	0.86	0.83	0.82	0.81	-6.9%	11	0.84	7	
Darlington	0.90	0.89	0.88	0.88	0.87	-3.3%	25	0.88	15	
Dillon	0.91	0.89	0.91	0.88	0.92	1.1%	45	0.90	18	
Dorchester	0.97	0.98	0.99	0.97	0.96	-1.0%	41	0.97	33	
Edgefield	1.04	1.09	1.09	1.07	1.08	3.8%	46	1.07	43	
Fairfield	0.98	0.96	0.95	0.91	0.91	-7.1%	8	0.94	28	
Florence	0.97	0.96	0.96	0.95	0.90	-7.2%	7	0.95	29	
Georgetown	0.81	0.77	0.77	0.78	0.78	-3.7%	23	0.78	4	
Greenville	0.88	0.89	0.88	0.87	0.86	-2.3%	31	0.88	11	
Greenwood	1.02	1.03	1.03	1.03	1.01	-1.0%	42	1.02	38	
Hampton	1.01	1.03	0.97	0.96	0.94	-6.9%	10	0.98	34	
Horry	0.88	0.89	0.89	0.88	0.87	-1.1%	39	0.88	14	
Jasper	0.89	0.89	0.88	0.87	0.87	-2.2%	32	0.88	13	
Kershaw	0.88	0.87	0.86	0.84	0.81	-8.0%	6	0.85	8	
Lancaster	0.91	0.92	0.88	0.87	0.86	-5.5%	16	0.89	17	
Laurens	0.99	1.02	0.94	0.93	0.92	-7.1%	9	0.96	32	
Lee	0.94	0.92	0.91	0.91	0.88	-6.4%	13	0.91	21	
Lexington	0.84	0.84	0.82	0.81	0.81	-3.6%	24	0.82	6	
Marion	0.88	0.88	0.87	0.86	0.82	-6.8%	12	0.86	10	
Marlboro	1.04	1.03	1.02	1.02	1.04	0.0%	43	1.03	41	
McCormick	1.16	1.11	1.08	1.05	1.03	-11.2%	2	1.09	45	
Newberry	1.00	1.03	1.03	0.99	0.98	-2.0%	36	1.01	37	
Oconee	0.93	0.92	0.92	0.91	0.90	-3.2%	26	0.92	22	
Orangeburg	1.00	0.98	0.99	0.98	0.97	-3.0%	29	0.98	35	
Pickens	0.96	0.97	0.95	0.94	0.93	-3.1%	28	0.95	30	
Richland	1.09	1.09	1.09	1.08	1.04	-4.6%	19	1.08	44	
Saluda	1.05	1.10	1.09	1.05	1.03	-1.9%	37	1.06	42	
Spartanburg	0.93	0.94	0.93	0.92	0.92	-1.1%	40	0.93	26	
Sumter	0.97	0.96	0.96	0.94	0.93	-4.1%	21	0.95	31	
Union	1.06	1.08	1.03	1.01	0.96	-9.4%	4	1.03	40	
Williamsburg	0.99	0.99	1.00	0.98	0.99	0.0%	43	0.99	36	
York	0.90	0.87	0.86	0.88	0.88	-2.2%	33	0.88	12	
South Carolina	0.96	0.96	0.95	0.94	0.93	-3.1%		0.95		

Source: S.C. Department of Commerce calculation of BLS Quarterly Census of Employment and Wages and BEA Regional Economic Information System.

Table A11: Wage and Salary Employment Location Quotients, 2001 – 2005

		BEA REIS Wage and Salary Employment Location Quotients						
County		Year					Average	Rank
		2001	2002	2003	2004	2005		
Abbeville	State LQ	0.86	0.85	0.83	0.83	0.82	0.84	3
	National LQ	0.89	0.87	0.85	0.85	0.85	0.86	
Aiken	State LQ	0.94	0.94	0.94	0.93	0.93	0.94	14
	National LQ	0.97	0.97	0.97	0.96	0.96	0.97	
Allendale	State LQ	1.02	1.01	1.00	1.00	1.00	1.01	33
	National LQ	1.05	1.04	1.04	1.03	1.03	1.04	
Anderson	State LQ	0.95	0.95	0.95	0.94	0.94	0.95	17
	National LQ	0.99	0.98	0.98	0.97	0.97	0.98	
Bamberg	State LQ	0.91	0.92	0.92	0.91	0.91	0.91	10
	National LQ	0.94	0.94	0.95	0.94	0.94	0.94	
Barnwell	State LQ	0.98	0.99	0.99	0.98	0.98	0.98	23
	National LQ	1.02	1.02	1.02	1.01	1.01	1.02	
Beaufort	State LQ	1.00	1.00	1.00	1.00	1.00	1.00	29
	National LQ	1.03	1.03	1.04	1.04	1.04	1.04	
Berkeley	State LQ	0.82	0.83	0.82	0.82	0.82	0.82	2
	National LQ	0.85	0.86	0.85	0.85	0.85	0.85	
Calhoun	State LQ	0.71	0.72	0.73	0.71	0.71	0.72	1
	National LQ	0.74	0.74	0.75	0.73	0.73	0.74	
Charleston	State LQ	1.01	1.01	1.02	1.02	1.02	1.02	35
	National LQ	1.04	1.04	1.05	1.05	1.05	1.05	
Cherokee	State LQ	1.03	1.03	1.03	1.03	1.03	1.03	39
	National LQ	1.06	1.06	1.06	1.07	1.07	1.06	
Chester	State LQ	0.99	0.98	0.98	0.97	0.97	0.98	21
	National LQ	1.02	1.01	1.01	1.01	1.01	1.01	
Chesterfield	State LQ	0.98	0.98	0.97	0.97	0.96	0.97	20
	National LQ	1.01	1.01	1.00	1.00	0.99	1.00	
Clarendon	State LQ	0.92	0.92	0.91	0.91	0.90	0.91	9
	National LQ	0.95	0.94	0.94	0.94	0.93	0.94	
Colleton	State LQ	0.89	0.89	0.89	0.88	0.87	0.88	6
	National LQ	0.92	0.91	0.91	0.91	0.90	0.91	
Darlington	State LQ	0.99	0.99	0.99	0.98	0.98	0.99	24
	National LQ	1.02	1.02	1.02	1.01	1.01	1.02	
Dillon	State LQ	1.00	1.00	1.00	1.00	1.00	1.00	30
	National LQ	1.03	1.03	1.03	1.03	1.03	1.03	
Dorchester	State LQ	1.04	1.05	1.05	1.06	1.06	1.05	45
	National LQ	1.07	1.08	1.09	1.09	1.10	1.09	
Edgefield	State LQ	0.99	1.00	1.00	1.01	0.99	1.00	28
	National LQ	1.02	1.03	1.03	1.04	1.03	1.03	
Fairfield	State LQ	0.98	0.97	0.95	0.96	0.96	0.96	19
	National LQ	1.01	1.00	0.99	0.99	0.99	1.00	
Florence	State LQ	1.02	1.02	1.02	1.02	1.01	1.02	37
	National LQ	1.05	1.05	1.05	1.05	1.05	1.05	
Georgetown	State LQ	0.88	0.89	0.88	0.88	0.87	0.88	5
	National LQ	0.91	0.92	0.91	0.90	0.90	0.91	
Greenville	State LQ	1.03	1.03	1.03	1.03	1.03	1.03	40
	National LQ	1.07	1.06	1.06	1.06	1.07	1.06	
Greenwood	State LQ	1.04	1.04	1.04	1.04	1.04	1.04	43
	National LQ	1.07	1.07	1.07	1.07	1.08	1.07	
Hampton	State LQ	0.96	0.95	0.95	0.94	0.94	0.95	18

BEA REIS Wage and Salary Employment Location Quotients								
County		Year					Average	Rank
		2001	2002	2003	2004	2005		
Horry	National LQ	0.99	0.98	0.98	0.97	0.97	0.98	
	State LQ	1.02	1.02	1.02	1.03	1.03	1.02	38
Jasper	National LQ	1.05	1.05	1.06	1.06	1.07	1.06	
	State LQ	0.90	0.91	0.91	0.92	0.93	0.91	11
Kershaw	National LQ	0.93	0.94	0.94	0.95	0.96	0.94	
	State LQ	0.92	0.92	0.92	0.92	0.92	0.92	13
Lancaster	National LQ	0.95	0.95	0.95	0.95	0.95	0.95	
	State LQ	0.96	0.95	0.94	0.94	0.93	0.94	15
Laurens	National LQ	0.99	0.98	0.97	0.97	0.97	0.98	
	State LQ	0.99	0.99	0.98	0.98	0.99	0.99	25
Lee	National LQ	1.02	1.02	1.02	1.02	1.02	1.02	
	State LQ	0.90	0.89	0.89	0.88	0.87	0.89	7
Lexington	National LQ	0.93	0.92	0.92	0.91	0.90	0.92	
	State LQ	0.91	0.92	0.92	0.92	0.92	0.92	12
Marion	State LQ	0.90	0.89	0.88	0.87	0.85	0.88	4
	National LQ	0.93	0.92	0.91	0.90	0.88	0.91	
Marlboro	State LQ	1.03	1.04	1.04	1.04	1.04	1.04	42
	National LQ	1.07	1.07	1.07	1.08	1.08	1.07	
McCormick	State LQ	0.91	0.91	0.89	0.88	0.88	0.89	8
	National LQ	0.94	0.93	0.92	0.91	0.91	0.92	
Newberry	State LQ	1.01	1.01	1.02	1.02	1.02	1.02	36
	National LQ	1.04	1.04	1.05	1.06	1.06	1.05	
Oconee	State LQ	0.99	0.99	0.98	0.98	0.97	0.98	22
	National LQ	1.02	1.02	1.02	1.01	1.00	1.01	
Orangeburg	State LQ	1.01	1.00	1.00	1.00	1.00	1.00	31
	National LQ	1.04	1.03	1.03	1.03	1.03	1.03	
Pickens	State LQ	1.00	0.99	0.99	0.99	0.99	0.99	26
	National LQ	1.03	1.02	1.02	1.02	1.02	1.02	
Richland	State LQ	1.08	1.08	1.08	1.08	1.09	1.08	46
	National LQ	1.11	1.11	1.12	1.12	1.12	1.12	
Saluda	State LQ	0.95	0.94	0.94	0.94	0.95	0.94	16
	National LQ	0.98	0.97	0.97	0.97	0.98	0.97	
Spartanburg	State LQ	1.03	1.04	1.04	1.04	1.03	1.04	41
	National LQ	1.07	1.07	1.07	1.07	1.07	1.07	
Sumter	State LQ	1.04	1.04	1.05	1.05	1.05	1.05	44
	National LQ	1.08	1.08	1.08	1.08	1.08	1.08	
Union	State LQ	1.01	1.02	1.01	1.00	1.01	1.01	34
	National LQ	1.04	1.05	1.04	1.04	1.04	1.04	
Williamsburg	State LQ	1.00	1.00	1.00	1.00	1.01	1.00	32
	National LQ	1.04	1.03	1.03	1.04	1.04	1.04	
York	State LQ	0.99	0.99	1.00	1.00	1.00	1.00	27
	National LQ	1.02	1.03	1.03	1.04	1.04	1.03	
South Carolina	National LQ	1.03	1.03	1.03	1.03	1.03	1.03	

Source: S.C. Department of Commerce calculation of BEA Regional Economic Information System data.

Table A12: Percent of Population Filing State Income Tax Returns, 2000 – 2005

County	Year						Growth	Rank	Average	Rank
	2000	2001	2002	2003	2004	2005				
Abbeville	39%	38%	37%	36%	36%	36%	-6.4%	9	37%	14
Aiken	40%	40%	40%	40%	39%	40%	-0.2%	38	40%	26
Allendale	35%	35%	33%	33%	33%	34%	-2.7%	26	34%	5
Anderson	42%	41%	40%	39%	39%	39%	-6.6%	5	40%	29
Bamberg	36%	36%	36%	36%	36%	36%	-1.5%	36	36%	10
Barnwell	38%	37%	37%	36%	36%	36%	-6.2%	11	37%	12
Beaufort	39%	40%	40%	40%	40%	41%	4.9%	44	40%	27
Berkeley	34%	35%	34%	35%	36%	37%	9.7%	46	35%	7
Calhoun	32%	31%	32%	31%	32%	32%	1.4%	41	31%	3
Charleston	44%	44%	44%	44%	44%	44%	1.5%	42	44%	45
Cherokee	39%	38%	37%	37%	36%	37%	-5.8%	12	37%	15
Chester	41%	40%	39%	38%	39%	39%	-5.5%	13	39%	25
Chesterfield	38%	38%	39%	37%	38%	38%	-1.8%	32	38%	19
Clarendon	37%	36%	35%	35%	36%	35%	-3.2%	24	36%	9
Colleton	40%	40%	39%	39%	39%	39%	-0.7%	37	39%	24
Darlington	41%	40%	40%	39%	39%	39%	-3.8%	18	40%	28
Dillon	40%	38%	38%	38%	38%	38%	-3.5%	23	38%	22
Dorchester	40%	40%	40%	40%	40%	40%	1.3%	40	40%	30
Edgefield	29%	30%	29%	28%	28%	28%	-3.8%	20	29%	2
Fairfield	42%	41%	40%	39%	39%	39%	-6.4%	8	40%	31
Florence	43%	43%	43%	42%	42%	41%	-4.1%	17	42%	42
Georgetown	42%	42%	41%	40%	40%	40%	-5.2%	14	41%	35
Greenville	44%	44%	43%	42%	42%	43%	-3.8%	21	43%	44
Greenwood	42%	41%	40%	39%	40%	39%	-6.6%	6	40%	33
Hampton	38%	37%	37%	36%	36%	36%	-4.4%	16	37%	13
Horry	44%	44%	44%	44%	45%	45%	2.5%	43	44%	46
Jasper	28%	28%	29%	29%	30%		5.0%	45	29%	1
Kershaw	43%	43%	43%	42%	43%	43%	-1.6%	34	43%	43
Lancaster	39%	38%	38%	37%	38%	38%	-2.5%	29	38%	18
Laurens	38%	36%	35%	34%	35%	34%	-8.6%	2	35%	8
Lee	35%	34%	33%	32%	33%	32%	-9.0%	1	33%	4
Lexington	42%	42%	42%	41%	41%	41%	-1.8%	33	41%	38
Marion	41%	40%	39%	39%	38%	38%	-7.5%	4	39%	23
Marlboro	39%	38%	39%	38%	37%	38%	-2.7%	28	38%	20
McCormick	39%	38%	37%	36%	38%	38%	-1.5%	35	38%	17
Newberry	43%	42%	41%	40%	40%	40%	-7.7%	3	41%	36
Oconee	44%	43%	42%	41%	41%	41%	-6.5%	7	42%	40
Orangeburg	41%	41%	40%	39%	40%	40%	-3.0%	25	40%	32
Pickens	39%	39%	38%	38%	38%	38%	-3.5%	22	38%	21
Richland	43%	43%	42%	41%	41%	42%	-1.9%	31	42%	41
Saluda	35%	35%	35%	35%	35%	34%	-2.7%	27	35%	6
Spartanburg	42%	41%	40%	40%	40%	40%	-5.0%	15	41%	34
Sumter	39%	38%	37%	37%	37%	37%	-3.8%	19	38%	16
Union	43%	43%	41%	40%	41%	41%	-6.2%	10	42%	39
Williamsburg	37%	37%	37%	36%	36%	36%	-2.1%	30	36%	11
York	42%	41%	41%	41%	41%	42%	0.2%	39	41%	37
South Carolina	45%	45%	44%	44%	44%	45%	-0.4%		45%	

Source: S.C. Department of Commerce calculation of South Carolina Department of Revenue data and US Census Estimates of Population.