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TOUGH TIMES IN SMALL PLACES:

North Carolina's rural communities are more susceptible to the impact of state and federal budget decisions than their urban counterparts

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Executive Summary

■ North Carolina's rural counties are significantly less well-positioned than urban counties to sustainably fund their core governmental operations at current service levels in a time of austerity budgeting at the state and federal levels.

■ North Carolina's rural counties exhibit troubling signs of more widespread economic hardship than do urban counties, in the form of high shares of residents living in poverty, a higher share of residents who have no form of either public or private health insurance, and lower overall wealth as indicated both by county median income and assessed property values.

■ Due to widespread economic hardship, low or negative average population growth, and a significantly higher reliance on intergovernmental revenues, North Carolina's rural counties are more sensitive to changes in state and federal revenue and expenditure decisions than higher-wealth, faster-growing urban counties.

■ Any decline in external funding support to county government in this slow and uneven economic recovery – whether on the revenue or expenditure side of the budget equation – will create a budget gap that lower-wealth counties highly dependent on intergovernmental revenues will be hard-pressed to fill without cutting or eliminating local jobs and core services that support the county's most vulnerable residents.

Overview

Every North Carolina community, urban or rural, offers its people a unique mix of economic and social opportunities and challenges. Wherever barriers to opportunity and economic hardship exist, local governments have long filled a singular role by investing in community development and increasing access for individuals and families to education and other supports necessary for a vibrant and growing middle class.

While federal and state budgets have been strained through the Great Recession, local governments have struggled just as hard to remain fiscally sound while meeting the needs of the communities they serve – needs that are equally as pressing and immediate as the state and national issues that often receive more media attention. When choice is even a factor, people choose where they live for complex reasons, but that one decision alone should not dictate a person's access to a quality education, a good job, a safe home and neighborhood, and the ability to build assets and work towards a better future for themselves and their families.

Local governments are uniquely positioned to expand individuals' access to economic and educational opportunities through targeted investments in schools, health, transit, and housing. These investments not only provide economic and social opportunities for individuals and families across categories of income and race, they also form the foundation of any successful, long-term community economic development strategy.

Too often lost in annual budget debates is the fact that local governments are far from self-supporting. While local government taxes – particularly the property tax and local option sales taxes – constitute a significant share of revenues for governmental operations, local revenues account for just one-fifth of annual public school funding, on average, in North Carolina counties. In historically rural counties, local revenues averaged 19 percent of total 2010-2011 funding for public schools, compared to 22 percent in historically urban counties. Complicating this issue are various legal and economic constraints on local governments' ability to raise revenue when costs are shifted to them from the state or federal level. If North Carolina lawmakers continue to pursue a fiscally unsustainable, cuts-only approach to state budgeting, the strain on local government budgets will effectively force negative outcomes such as job losses and reductions or eliminations of services and supports for individuals and families that will weaken economic recovery. The results of sustained and dramatic budget pressures on local governments have already manifested across North Carolina and beyond in the form of severe personnel and core-service cutbacks in hundreds of jurisdictions.[1]

This report seeks to contrast the fiscal state of rural and urban counties two years after the official end of the Great Recession. Analysis of fiscal, demographic, and economic data on all 100 North Carolina counties shows that as county population density decreases, county dependence on shared state and federal revenue increases. Compounding this issue is the reality that North Carolina's most rural counties are far less wealthy than their urban counterparts, as evidenced by county median income, total assessed property value, and a variety of other indicators. Less wealth corresponds with a smaller tax base for counties, which are already restricted to a handful of possible revenue-generation options under state and federal law.

Decreased support to local governments from state or federal government could effectively "force" a cuts-only approach to budgets in rural, less-wealthy counties due to lack of available revenue options – whether or not that approach is desired by elected officials or community leaders. This would undermine community-level economic development and recovery efforts as well as the quality and accessibility of schools, roads, public transportation, public health, family services, aging services, libraries, and more.

Scope of Analysis

This report examined latest-available data reported by North Carolina county governments to the N.C. Local Government Commission with the N.C. Department of State Treasurer as well as numerous other sources, including the N.C. Department of Commerce Division of Employment Security; the N.C. Department of Health and Human Services; the N.C. Rural Center; the U.S. Bureau of the Census; the University of North Carolina School of Government; and the N.C. Department of Public Instruction.

This report intentionally considered only county general fund budgets, which are the primary source of local funding for governmental operations such as K-12 education, health and human services, public safety, and county government administration.[2] Often, county infrastructure and public utility functions are managed in funds separate from a county's general fund, which makes accurate side-by-side comparison of general funds between counties possible more straightforward.

Municipal governments are omitted from the scope of this analysis. While there are only 100 counties in North Carolina, there are 552 incorporated cities and towns with a range of individual fiscal structures. More importantly, the majority of state and federal funds directed to local governments via revenue or expenditure channels pass through county governments before continuing on to municipal governments. This pass-through has the effect of making county government Annual Financial Information Reports (AFIRs) a more streamlined tool for assessing the magnitude of non-local public funding in a given area.[3] Beyond these issues, it is generally true that fiscal or budgetary actions that affect counties, either positively or negatively, impact municipal governments similarly, though perhaps to a different extent. In addition, revenue options are constrained for municipalities as much as, if not more than, they are for counties. Consequently, the conclusions of this report may be broadly generalized to apply to municipal governments although they were not included in the scope of analysis.

This report does not designate counties as strictly "urban" or "rural". Instead, the report compared population density (persons per square mile) as reported by the 2010 U.S. Decennial Census with a range of other county fiscal and economic data. This method allowed for analysis of counties on a spectrum of population density rather than establishing a "cutoff" density between urban and rural counties. However, state statute defines rural counties as having fewer than 250 persons per square mile as reported by the 2000 U.S. Decennial Census. By law, 85 North Carolina counties qualify as "rural" and the remaining 15 as "urban." At the time of publication this law had not been revised, and subsequently, state agencies and commissions have not yet adopted new classifications of rural and urban counties based on the latest Census data. Applying the same 250 persons per square mile criteria to the 2010 Census data would shift four historically rural North Carolina counties into an "urban" designation.[4] To address this issue, this report uses the terms "rural" and "urban" in relative terms, whereby "rural counties" means counties of very low to moderate population density and vice versa. Where reference is made to the current statutory definition of the 85 "rural" and 15 "urban" counties, the phrase "historically rural" or "historically urban" is used.[5]

In order to measure the financial condition of local governments and make comparisons across rural and urban counties, the authors of this report used correlation analysis to identify the degree to which fiscal and economic variables are related to county density levels, county dependence on intergovernmental revenues, and county poverty rates. As a caveat, the results from the correlation analysis do not imply causation due to the possibility of confounding factors. The results of the correlation analysis used in this report are only a measurement of the direction and strength of the relationship between the variables. See *Appendix A* for more information on the methodology used in this report and detailed results of the correlation analysis.

North Carolina's Changing Demographics

Data from the 2010 U.S. Decennial Census clearly shows that population-dense urban communities in North Carolina are faster-growing, younger, and wealthier than many rural communities, which are stagnating, aging, and considerably poorer than their urban neighbors. These demographic changes carry serious economic and social implications for the future of many rural North Carolina communities, including how evenly these communities will recover from the Great Recession. Rural communities in North Carolina have a larger relative share of residents over the age of 65, while urban communities have a much higher percentage of residents under the age of 18.[6,7]

Aging Counties Remain Vulnerable Even After Medicaid Swap

In 2008, North Carolina commenced phasing out county responsibility for funding a share of Medicaid expenses in exchange for one cent of local sales tax revenue. This "Medicaid swap" was advantageous to county governments in that they exchanged a relatively slow-growing source of revenue for a rapidly growing category of expenses. Despite the fact that there is no longer a "county share" of Medicaid putting pressure on county budgets, counties remain economically and programmatically susceptible to changes made to health and human services spending at the state and federal levels for many reasons, including the demands of a quickly-growing older population.

In the absence of economic expansion or significant population growth, local governments in many rural communities will have to serve the needs of a rapidly growing older population while facing shrinking revenues. The latest Census population projections for North Carolina anticipate that the state's population over the age of 65 will double by 2030, and while the proportion of older residents living in rural areas is expected to decrease over time, more than half of North Carolina's older adults currently live in rural communities.[8]

Poverty and economic hardship are of serious concern in all of North Carolina's urban communities. However, county-level data from multiple sources show positive trends in growth and economic expansion in urban communities that coincide with both a more robust county tax base that can fund government operations and a lower reliance on intergovernmental revenues to support current service levels. U.S. Census data show that the average population growth from 2000 to 2010 for all 85 historically rural North Carolina counties was 14.7 percent—7.7 percentage points lower than the average population growth for all 15 urban counties (22.4 percent).

Wealth and Growth Disparities Directly Impact County Financial Health

Central to this report is a measure of county financial position called the intergovernmental ratio. The intergovernmental ratio is one of multiple financial indicators useful for assessing the financial condition of local governments and addresses the extent to which a unit of local government relies on other governments for resources. It is calculated by dividing total intergovernmental revenue (revenue that comes from state or federal government) by total revenue. A high intergovernmental ratio may indicate that a local government's financial health is too reliant on support from other governments.[9] Overreliance on intergovernmental support heightens counties' sensitivities to state and federal budget cuts during economic downturns.

TABLE 1: Types of Intergovernmental Revenues Received by Counties

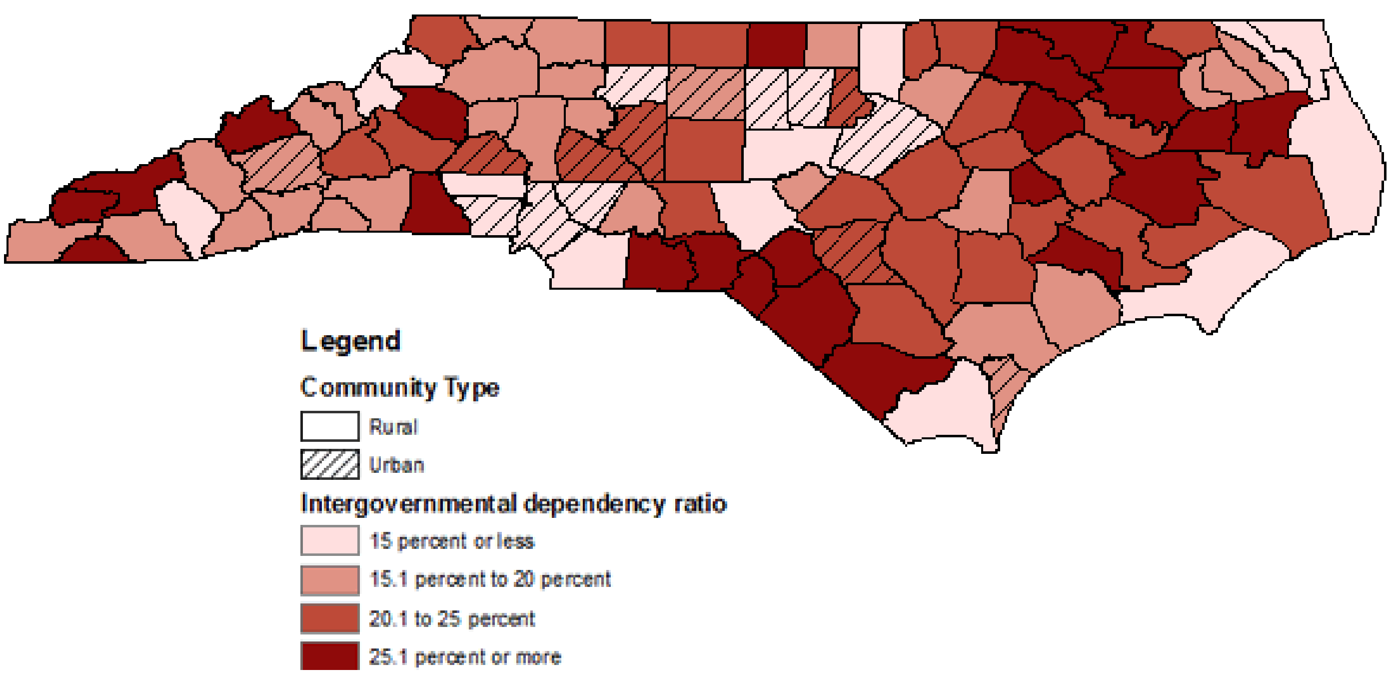
(items in bold are significant sources of IGR for counties)

STATE	FEDERAL
Share of NC Education Lottery proceeds	**Categorical grants, primarily for health and human services**
Facilities, jail, and arrest fees via courts	Payments for goods and services
Distributions of excise taxes on beer and wine	Equitable sharing of federal forfeited property
Payments of court costs	Federal payments in lieu of taxes
State payments in lieu of taxes	

Source: N.C. Local Government Commission, "Financial Information for North Carolina Counties."

North Carolina's rural counties are much more reliant on intergovernmental revenues than urban counties. As county population density decreases, county dependence on revenues generated outside the county's own tax base increases.[10]

County Dependence on Intergovernmental Revenues Highest in Rural Counties



Both in terms of median income and the assessed value of property subject to county taxes, most of North Carolina's urban counties have a considerably larger, more valuable property tax base upon which to rely than rural counties do. Similarly, as county population density decreases, so do county assessed property values.[11]

Additionally, residents of North Carolina's more rural counties tend to earn less income than residents of more populous counties. As county population density decreases, so does county median income.[12]

This report does not examine the influence of unemployment on county economic standing because seasonally-adjusted labor market data is not generated at the county level. However, rural counties exhibit numerous signs of widespread and lasting economic distress directly and indirectly related to unemployment levels as well as the housing crisis. Average median income in historically rural North Carolina counties was $39,082 –16.8 percent lower than the average median income of $45,658 in historically urban counties.[13] As county population density decreases, county poverty rates tend to increase.[14] Perhaps most telling is the fact that less than half the assessed value of all county-taxable property in the entire state—$466 billion as of 2010—lies within the 85 historically rural North Carolina counties. The remaining 52 percent—$513 billion as of 2010—lies in historically urban counties.

A side-by-side comparison of rural Hyde County, which has the lowest population density of any North Carolina county, and urban Mecklenburg County, which includes the city of Charlotte, clearly illustrates the magnitude of the differences in intergovernmental revenue and other wealth disparities. The implication of these factors is that any decline in external funding support to county government in this slow and uneven economic recovery—whether on the revenue or expenditure side of the budget equation—will create a budget gap that lower-wealth, highly-dependent counties will be hard-pressed to bridge without cutting or eliminating local jobs or core services supporting the county's most vulnerable residents.

TABLE 2: Intergovernmental Revenues Partially Offset Wealth Disparities Between Rural and Urban Counties

2010	Hyde County	Mecklenburg County
County population per square mile, rounded	10	1,756
Total intergovernmental revenues (IGR)	$7.5 million	$196.5 million
IGR as percent of total revenues from all sources	36.9%	13.5%
Total assessed value of county-taxable property	$1.1 billion	$99.8 billion
Total property tax revenues	$5.7 million	$840.4 million
Property tax as percent of total revenues from all sources	28.2%	57.6%
Property tax revenues per capita	$1,059	$940
County median income	$35,206	$52,363
Percent of residents living in poverty	21.9%	15.6%

Sources: 2010 Annual Financial Information Reports for Hyde County, NC, and Mecklenburg County, NC. Office of the State Treasurer, Local Government Commission; 2010 Decennial Census; and 2010 U.S. Census SAIPE.

Patterns in County Public Spending

While shared revenues from other governments are vital to counties, other governments also spend money on county- and municipal-level programs and services via appropriations. Public education and human services spending dominates most county general fund budgets, accounting for 46 percent of total county general fund spending, on average. To place this fact in context, the next largest category for many county governments is debt service, averaging less than 9 percent of total county spending.[15]

Public Education

In 2010, counties with higher intergovernmental ratios spent considerably fewer county general fund dollars as a percent of total spending on K-12 education than did less dependent counties.[16] This was due to several factors, including increased federal spending on education via the American Recovery and Reinvestment Act of 2009 (ARRA) as well as higher per capita state education funding to rural and low-wealth counties per current statutory allocation formulas.[17]

Federal Recovery Dollars Buoyed County School Spending Through Recession

The impact of federal funding to local educational authorities (LEAs) under the American Recovery and Reinvestment Act of 2009 (ARRA) and its subsequent extensions can be clearly seen in statistical profile data from the N.C. Department of Public Instruction.[18] In the 2003-2004 school year, approximately 12 months into recovery from the 2001 recession, federal funds for North Carolina LEAs averaged 11 percent of total LEA revenues and represented between 5 and 21 percent of LEA budgets. In the 2010-2011 school year, federal funds as a percent of total LEA revenues averaged 17 percent—59 percent higher than in 2003-2004—and represented from 10 to 28 percent of total LEA budgets.

As it was intended to do, increased federal funding for public education under ARRA supplanted both state and local funds, though not to the same extent. Moving into FY2012-13, federal recovery funds for education have been largely exhausted and will not be renewed, which will require state and local lawmakers to confront significant local budget gaps. More than $250 million in temporary federal aid, which currently supports between 4,000 and 5,000 local school jobs, will disappear after September 2012, and as directed by the 2011-2013 state budget, local school districts must identify $74 million in additional discretionary cuts to already bare budgets in the current school year.[19]

While average state funding share for public education decreased by 6 percent between 2003-2004 and 2010-2011 and average local share decreased by 8 percent, the range of local funding share increases or decreases is extremely wide and therefore not well-described by the average. For example, in Union County, the local funding share for public education dropped 40 percent—from 14 percent of total funds in school year 2003-2004 to only 9 percent in 2010-2011. At the same time, state funding for Union County schools dipped 7 percent, from 71 percent to 66 percent, and federal funding increased 74 percent, from 15 to 25 percent of total Union County school revenues. See *Table B-2, Local Educational Authority Funding by Source, by County*, 2010-2011 School Year for details on the significance of non-local educational funding.

Health and Human Services

However, counties with high intergovernmental ratios spent considerably more general fund dollars on health and human services. In 2010, counties' spending on health and human services was higher in counties that were more dependent on intergovernmental revenues.[20] While there are many possible reasons for this phenomenon, one possibility is that Medicaid beneficiaries comprise a large share of the population in rural communities, with some counties having as many as one in four people eligible for public health insurance coverage through the program.[21]

Federal Spending

Despite the significance of federal funding for education in rural counties, federal spending across all categories tends to favor urban counties.[22] As population density increases, federal spending also increases.[23] North Carolina's two most populous counties, Mecklenburg and Wake, together accounted for more than 22 percent of the total assessed property value in the entire state and nearly 15 percent of total federal spending.[24] In 2010, federal spending for urban counties in North Carolina stood at $10,199 per person compared to $9,161 per person in rural counties.[25]

Local Government Jobs Vital to Rural Economies

North Carolina's local governments represented only 1.7 percent of total employers in North Carolina in 2010, but employed 11.5 percent of the state's total workforce. Statewide, these 434,156 local government workers earned a lower average weekly wage than employees in either the private sector or in state or federal government.[26] In historically rural counties, local governments employ a much larger share of the total county workforce – an average of 16.7 percent – than in historically urban counties where the significance of the local government workforce is in line with the statewide average at 11.3 percent.[27] Local government workers in North Carolina earned $16.7 billion in wage income in 2010. If local governments cut jobs in response to budget pressures, it will drive up local unemployment rates and further strain county budgets as those who have lost their livelihoods turn to public assistance to mitigate their economic hardship.

Addressing Urban-Rural Funding Disparities by Budgeting for Adequacy

North Carolina lawmakers should commit to adequately funding shared local government responsibilities – particularly in education, health, and transportation. The costs of maintaining these investments in critical public structures also grow over time and cannot be sustained indefinitely with local funding alone. State lawmakers should be cognizant of the needs of their communities and take care not to take actions that create funding shortfalls for these public structures at the local level.

In order to address the disparity in resources for public structures in rural communities, North Carolina lawmakers must strive to budget for adequacy. Adequacy in public budgeting is a matter of more than just achieving budgetary balance for a given year; it is key to creating and sustaining economic opportunity across the spectrum of North Carolina's communities, rural and urban alike.

As elected officials and government administrators know well, financial indicators alone are not indicative of the adequacy of a local government's taxation and spending decisions in the larger context of a community's short- and long-term needs. For example, the N.C. Local Government Commission and the University of North Carolina School of Government's interperiod equity ratio assesses whether a unit of local government "lived within its means" in a given year.[28] This fiscal indicator shows whether total government expenditures were less than, or greater than, total revenues, but it is silent as to whether the amount of money raised and spent was adequate enough to meet demand for governmental functions and services, let alone whether it yielded the kind of community outcomes desired by both citizens and lawmakers.

For example, in 2010, urban Wake County's budget was in balance with an interperiod equity rating of 0.95, meaning that the county spent 95 percent of its total revenues in that year. However, the county's waiting list for children eligible for child care subsidies was 5,322 as of the close of the county's fiscal year in June 2011 and included children who had been eligible and waitlisted for up to 18 consecutive months.[29] State law dictates that children from families that meet certain income requirements are eligible for financial assistance for child care expenses, but unless funds are available to pay child care providers, many eligible children end up on long waitlists and their parents' ability to participate fully in the workforce is subsequently constrained. This particular example is common in other North Carolina counties and serves to illustrate that a balanced budget is in no way synonymous with an adequate budget, and that inadequate budgets are an impediment to economic opportunity.

Conclusion

Local governments are part of the fabric of communities across North Carolina. They play a critical role in the quality of life of individuals and families by delivering high quality public services and by directing and investing in community development. However, local investments that support and enhance local economies have been declining due to state budget cuts and shrinking tax revenues due to the lackluster recovery from recession.

These fiscal strains are enhanced for North Carolina's most rural county governments, which are dealing with higher poverty rates, faster aging populations, and lower wealth compared to the most urban county governments in the State. County dependence on intergovernmental revenue increases as county population density decreases, and, the weakened fiscal condition of local government budgets—especially rural counties—will likely worsen if state lawmakers continue on the unsustainable path of a cuts-only approach to state budgeting.

North Carolina's state policymakers have a unique role to play in supporting economic opportunity in all of the state's 100 counties by investing in the schools, infrastructure and well-being that strengthen local economies. Choices made at the state level will continue to impact North Carolinians in their communities, and those impacts should be considered when deciding how to move the state forward. The state budget is foremost among the tools available to policymakers to build opportunity in all communities. An adequate, equitable state budget, combined with an adequate, stable and fair revenue system will allow state and local governments alike to meet the needs of individuals and families during both good and bad times, forging a pathway towards greater prosperity for all.

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1 Stenberg, Carl W. "Coping with Crisis: How are Local Government Reinventing Themselves in the Wake of the Great Recession?" International City/County Management Association: December 2011. Available online at http://icma.org/en/icma/knowledge_network/documents/kn/Document/303228/Coping_with_Crisis

2 Eleven North Carolina counties are home to multiple local educational authorities (LEAs): Buncombe, Cabarrus, Catawba, Columbus, Davidson, Halifax, Iredell, Orange, Randolph, Sampson, and Surry. For purposes of this analysis, school funding for counties with multiple LEAs has been combined into one total for all LEAs within the county.

3 One notable exception to this practice is federal Title I and Title II education funding, which is sent directly to LEAs from the U.S. Department of Education. LEAs are technically units of local government unto themselves, distinct from the county or city in which they exist. In many rural North Carolina counties there is only one LEA per county, while in more populous counties there may be two or more.

4 North Carolina §. "143B-437.45 (6)." 2008. Available online at http://ncleg.net/gascripts/statutes/statutelookup.pl?statute=143B-437.45

5 North Carolina § 143B-437.45 (6) provides the historical definition of a rural county as a county with a density of fewer than 250 people per square mile based on the 2000 United States decennial census. Under current law, 85 of North Carolina's 100 counties are "rural." However, applying the current law definition of rural to 2010 U.S. Decennial Census data decreases that number to 81. The following counties shifted from "rural" to "urban" based on the 250 person per square mile statutory definition: Pitt, Lincoln, Henderson, and Union.

6 The correlation coefficient of U.S. Decennial Census county population density (persons per square mile) and population over 65 is -0.45 and is statistically significant at 0.00. A correlation describes only the direction and strength of a relationship between two variables and should not be interpreted to suggest causality.

7 The correlation coefficient of U.S. Decennial Census county population density (persons per square mile) and population under the age of 18 is 0.28 and is statistically significant at 0.00. A correlation describes only the direction and strength of a relationship between two variables and should not be interpreted to suggest causality.

8 U.S. Department of Commerce, Bureau of the Census, Population Division. "State Interim Population Projections by Age and Sex 2004–2030." 2005/ Washington, DC. Available online at http://www.census.gov/population/www/projections/statepyramid.html

9 Rivenbark, William C., Roenigk, Dale J., and Allison, Gregory S. "Communicating Financial Condition to Elected Officials in Local Government." Popular Government. Fall 2009. Available online at http://sogpubs.unc.edu/electronicversions/pg/pgfal09/article1.pdf

10 The correlation coefficient of U.S. Decennial Census county population density (persons per square mile) and county intergovernmental revenue dependency is -0.37 and is statistically significant at 0.00. A correlation describes only the direction and strength of a relationship between two variables and should not be interpreted to suggest causality.

11 The correlation coefficient of U.S. Decennial Census population density and assessed property value as a percent of total 100-county property values is 0.86 and is statistically significant at 0.00. A correlation describes only the direction and strength of a relationship between two variables and should not be interpreted to suggest causality.

12 The correlation coefficient of U.S. Decennial Census population density and median income is 0.48 and is statistically significant at 0.00.

A correlation describes only the direction and strength of a relationship between two variables and should not be interpreted to suggest causality.

13 When the current law statutory definition of "rural" counties is applied to 2010 U.S. Decennial Census data on population density, the disparity in average median income between rural and urban North Carolina counties is nearly unchanged at 5 percent—$38,531 for rural counties, and $46,218 for urban counties.

14 The correlation coefficient of county population density and county poverty rate is -0.27 and is statistically significant at 0.01. A correlation describes only the direction and strength of a relationship between two variables and should not be interpreted to suggest causality.

15 It is worth noting that many counties' debt service is partially, if not completely, offset by debt proceeds on a yearly basis.

16 The correlation coefficient of county population density and percent of county general fund expenditures on public education is 0.47 and is statistically significant at 0.00. A correlation describes only the direction and strength of a relationship between two variables and should not be interpreted to suggest causality.

17 North Carolina Department of Public Instruction, Allotment Policy Manual. Available online at http://www.dpi.state.nc.us/docs/fbs/allotments/general/2010-11policymanual.pdf

18 North Carolina Department of Public Instruction, North Carolina Public Schools Statistical Profile. Available online at http://apps.schools.nc.gov/pls/apex/f?p=1:1:876397576149063

19 McLenaghan, Edwin. "North Carolina's Disappearing Educators." N.C. Budget and Tax Center: September 2011. Available online at http://www.ncjustice.org/?q=node/956

20 The correlation coefficient of county intergovernmental revenue dependency and percent of county general fund expenditures on health and human services is 0.63 and is statistically significant at 0.00. A correlation describes only the direction and strength of a relationship between two variables and should not be interpreted to suggest causality.

21 N.C. Budget and Tax Center analysis of data acquired through a special data request to the N.C. Department of Health and Human Services, Division of Medical Assistance, for county-level data on 2010 Medicaid enrollment and expenditures.

22 The U.S. Census Consolidated Federal Funds Report collects data on the amount of virtually all federal expenditures, including grants, loans, direct payments, insurance, procurement, salaries and wages and other awards (such as price supports and research awards).

23 U.S. Bureau of the Census, 2008 Consolidated Federal Funds Report: County Areas

24 North Carolina Department of State Treasurer, Local Government Commission. "Annual Financial Information Reports." Available online at http://www.nctreasurer.com/DSTHome/StateAndLocalGov/AuditingAndReporting/HistoricalData.htm

25 United States Department of Agriculture, Economic Research Service. "State Fact Sheets: North Carolina." 2011. Available online at http://www.ers.usda.gov/StateFacts/NC.HTM

26 N.C. Budget and Tax Center analysis of data provided by the N.C. Department of Commerce, Division of Employment Security. This data shows local government worker average weekly wages for 2010 at $740, compared to $786 for private sector workers, $857 for state workers, and $1,134 for federal workers. This data is available online at http://esesc23.esc.state.nc.us/d4/QCEWSelection.aspx

27 North Carolina Department of Commerce, Division of Employment Security, Quarterly Census of Employment and Wages (QCEW). There is a great deal of variation in the size of the local government workforce to total county labor market in the 20 most population-dense counties as determined by 2010 Census data, ranging from just 5.7 percent of total Durham County workforce up to 19.8 percent in Cabarrus County. For historically rural counties, Watauga County has the smallest local government workforce in relation to total county labor market at 8 percent, and Swain County has the highest at 47.1 percent, but most fall within 10 to 20 percent of total county workforce (median 15.5%, standard deviation of 6%).

28 Interperiod equity for local governmental activities (general fund) budgets is calculated as total resource inflow divided by total resource outflow (total expenses). Total resource inflow includes program revenues plus total general revenues and net transfers. North Carolina Department of State Treasurer, Local Government Commission. "Financial Condition Analysis Model." Available online at http://lgreports.nctreasurer.com/lgcreport/doc/How%20to%20Interpret%20Results.pdf

29 N.C. Budget and Tax Center analysis of data acquired via special request to the Wake County Department of Human Services, Division of Child Care Subsidies.

Appendix A: Methodology and Correlation Tables

Data Collection

The authors of this report collected population density, people per square mile, for the year 2010 as reported by the U.S. Bureau of the Census. In lieu of adopting the historical, dichotomous definition of a rural or urban county, population density is used to determine the degree of a county's *ruralness* and *urbanness*.[i] Thus, the 100 counties are ranked on a density spectrum.[ii]

The correlation analysis outlined in this report explores the relationship of county density level, county dependence on intergovernmental revenues, and county poverty rate with a variety of other fiscal and economic indicators. This data was obtained from FY2009-10 Annual Financial Information Reports received and reported by the Local Government Commission (LGC) within the Office of the State Treasurer.[iii] The intergovernmental ratio is the percent of total county revenues attributable to state and federal sources.

The authors of this report also collected other LGC fiscal variables, including county general fund expenditures on education, health and human services, public safety and general government. Additional variables—such as population growth, median household income, and poverty rate—were collected from other reputable data sources including the U.S. Bureau of the Census; N.C. Department of Commerce Division of Employment Security; N.C. Department of Health and Human Services; N.C. Rural Center; the University of North Carolina School of Government; and the N.C. Department of Public Instruction.

Following the data collection stage, the authors coded the data and ran correlation analyses manually in Microsoft Excel. See tables A-1 through A-3 below for selected results of the correlation analysis.

Analysis

This report used bivariate correlation analysis to identify the degree to which the fiscal and economic variables are related to county density levels. Correlation analysis computes a correlation coefficient r that identifies how much one variable tends to change when another variable changes. There is no relationship between each pair of variables if r equals zero. When r is positive, there is a positive relationship in which one variable increases as the other variable increases. When r is negative, there is an inverse relationship in which one variable decreases as the other variable increases.

The second step in correlation analysis is to identify the significance of the relationship between the two variables. The significance of the relationship is expressed in probability levels, denoted as p. The smaller the p-level, the more significant the relationship is between the two variables. For the purposes of this report, p-levels at or below .05 indicate a statistically significant relationship.

As a caveat, the results from the correlation analysis do not imply causation due to the possibility of confounding factors. The results of the correlation analysis used in this report are only a measurement of the direction and strength of the relationship between the variables.

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i North Carolina § 143B-437.45 (6) provides the historical definition of a rural county as a county with a density of fewer than 250 people per square mile based on the 2000 United States decennial census.

ii The historical, dichotomous definition of rural is subject to limitations. By nature, this definition permits classification into only two categories—either rural or urban—and does not reflect the continuum or the range of variation that exists within rural and urban areas. The authors of this report attempt to overcome this limitation by ranking the counties by density level without establishing an official rural or urban boundary.

iii Per state law, North Carolina local governments report their annual financial data to the Local Government Commission, which in turn calculates several measures to gauge the fiscal health of local governments.

Correlation Tables A-1, A-2, and A-3

The correlation coefficient for all 100 counties for the variables in the table below paired with county population density is given below. Positive correlation coefficients indicate that the variable increases with population density; negative coefficients indicate that the variable decreases as population density increases.

TABLE A-1, POPULATION DENSITY CORRELATION ANALYSIS

Variable Paired with County Population Density	Correlation Coefficient (r^2)	Statistical Significance (p)	Is relationship significant?
2010 county median income	0.48	0.00	YES
Percent of county population under the age of 18, 2010	0.28	0.00	YES
Percent of county population over the age of 65, 2010	-0.45	0.00	YES
County population growth, 2000-2010	0.36	0.00	YES
Percent of county residents living in poverty, 2010	-0.27	0.01	YES
Education spending as percent of total county general fund spending, 2010	0.47	0.00	YES
Health & human services spending as percent of total county general fund spending, 2010	-0.10	0.00	YES
Justice and public safety spending as percent of total county general fund spending, 2010	-0.37	0.00	YES
General government spending as percent of total county general fund spending, 2010	-0.22	0.03	YES
Intergovernmental ratio, 2010	-0.37	0.00	YES
County assessed value as percent of total taxable assessed property, 2010	0.86	0.00	YES
Federal spending by county, 2008	0.83	0.00	YES
Percent of working-age county population without any form of health insurance*	-0.28	0.01	YES

* The American Community Survey 3-year data sample has health insurance estimates for 84 North Carolina counties. Omitted counties include: Alleghany, Avery, Camden, Chowan, Clay, Gates, Graham, Hyde, Jones, Mitchell, Pamlico, Perquimans, Swain, Tyrrell, Washington, and Yancey. Correlation is based on N=84, not N=100 as in all other items.

DATA	SOURCE
Population density (persons per square mile), 2010	U.S. Bureau of the Census, 2010 Decennial Census: Table SF-1
Intergovernmental Ratio, 2010	North Carolina Office of State Treasurer, State and Local Government Division, Annual Financial Information Reports (AFIR)
Percent of total county workforce employed by local government, 2010	North Carolina Department of Commerce, Division of Employment Security, Quarterly Census of Employment and Wages (QCEW)
Education spending as a percent of total county general fund spending, 2010	North Carolina Office of State Treasurer, State and Local Government Division, Annual Financial Information Reports (AFIR)
Health & human services spending as a percent of total general fund spending, 2010	North Carolina Office of State Treasurer, State and Local Government Division, Annual Financial Information Reports (AFIR)
Assessed value of county-taxable property, 2010	North Carolina Office of State Treasurer, State and Local Government Division, Annual Financial Information Reports (AFIR)
Federal expenditures, 2008	U.S. Bureau of the Census, Consolidated Federal Funds Report: County Areas
Median household income, 2010	U.S. Bureau of the Census, Small Area Income and Poverty Estimates (SAIPE)
Poverty rate, 2010	U.S. Bureau of the Census, Small Area Income and Poverty Estimates (SAIPE)
Percent of Working-Age Adults with No Form of Health Insurance	U.S. Bureau of the Census, American Community Survey (ACS) 3-year estimates, 2008-2010

The correlation coefficient for all 100 counties for the variables in the table below paired with county intergovernmental revenue dependence is given below.

TABLE A-2, INTERGOVERNMENTAL REVENUE DEPENDENCE CORRELATION ANALYSIS			
Variable Paired with County IGR Dependence	Correlation Coefficient (r^2)	Statistical Significance (p)	Is relationship significant?
2010 county median income	-0.62	0.00	YES
Percent of county population under the age of 18, 2010	-0.06	0.55	NO
Percent of county population over the age of 65, 2010	0.22	0.01	YES
County population growth, 2000-2010	-0.57	0.00	YES
Percent of county residents living in poverty, 2010	0.51	0.00	YES
Education spending as percent of total county general fund spending, 2010	-0.53	0.00	YES
Health & human services spending as percent of total county general fund spending, 2010	0.63	0.00	YES
County assessed value as percent of total taxable assessed property, 2010	-0.41	0.00	YES
Federal spending by county, 2008	-0.27	0.01	YES
Percent of working-age county population without any form of health insurance*	0.29	0.01	YES

The correlation coefficient for all 100 counties for the variables in the table below paired with county poverty rate is given below.

TABLE A-3, POVERTY RATE CORRELATION ANALYSIS			
Variable Paired with County Poverty Rate	Correlation Coefficient (r^2)	Statistical Significance (p)	Is relationship significant?
Percent of county population under the age of 18, 2010	-0.08	0.43	NO
Percent of county population over the age of 65, 2010	0.08	0.43	NO
County population growth, 2000-2010	-0.57	0.00	YES
Education spending as percent of total county general fund spending, 2010	-0.30	0.00	YES
Health & human services spending as percent of total county general fund spending, 2010	0.42	0.00	YES
Intergovernmental ratio, 2010	0.51	0.00	YES
County assessed value as percent of total taxable assessed property, 2010	-0.34	0.00	YES
Federal spending by county, 2008	-0.24	0.02	YES
Percent of working-age county population without any form of health insurance*	0.47	0.00	YES

Table B-1, Key County Economic and Fiscal Indicators

TABLE B-1, COUNY FISCAL AND ECONOMIC INDICATORS

County	Population density (persons per square mile), 2010	Intergovernmental Ratio, 2010	Percent of total county workforce employed by local government, 2010	Education spending as a percent of total county general fund spending, 2010	Health & human services spending as a percent of total general fund spending, 2010	Assessed value of county-taxable property (Assessed value as a percent of total taxable NC property), 2010	Federal expenditures, 2008	Median household income, 2010	Poverty rate, 2010	Percent of Working-Age Adults with No Form of Health Insurance, 2010
Alamance	356.5	19.2%	10.5%	27.6%	24.6%	$12,053,469,202 (1.2%)	$819,549	$41,519	18.5%	23.2%
Alexander	143.1	20.1%	15.3%	15.3%	26.6%	$2,558,155,514 (.3%)	$166,875	$40,441	16.9%	26.1%
Alleghany	47.5	23.8%	17.1%	23.1%	18.2%	$1,813,034,398 (.2%)	$107,359	$32,210	23.0%	-
Anson	50.7	25.9%	20.2%	14.8%	22.1%	$1,437,085,721 (.1%)	$193,739	$32,268	22.6%	24.5%
Ashe	64.0	22.1%	13.4%	11.6%	23.9%	$3,761,322,270 (.4%)	$200,374	$31,965	20.0%	27.8%
Avery	72.0	11.8%	13.0%	24.1%	15.6%	$4,226,628,319 (.4%)	$138,593	$35,568	23.5%	-
Beaufort	57.7	25.2%	12.6%	25.7%	24.8%	$4,262,129,245 (.4%)	$483,246	$38,194	20.7%	24.4%
Bertie	30.4	26.3%	12.3%	16.3%	24.1%	$1,096,759,045 (.1%)	$206,747	$30,586	27.0%	22.9%
Bladen	40.2	17.7%	14.1%	14.6%	27.9%	$2,591,093,848 (.3%)	$302,593	$31,637	22.3%	26.8%
Brunswick	126.8	14.2%	15.8%	18.8%	12.7%	$33,337,968,392 (3.4%)	$798,667	$44,186	16.5%	26.5%
Buncombe	362.9	14.6%	7.9%	22.2%	22.7%	$28,913,350,441 (3%)	$1,757,374	$42,846	17.1%	22.5%
Burke	179.3	20.1%	11.9%	29.1%	22.1%	$6,760,883,877 (.7%)	$497,010	$38,541	18.7%	23.7%
Cabarrus	492.1	9.8%	19.8%	42.1%	13.1%	$21,376,585,486 (2.2%)	$758,123	$49,355	12.5%	21.2%
Caldwell	176.1	26.4%	13.0%	25.7%	29.5%	$5,489,636,178 (.6%)	$444,005	$36,860	18.4%	25.4%
Camden	41.5	18.9%	19.8%	16.1%	10.1%	$1,165,439,576 (.1%)	$61,199	$59,522	9.7%	-
Carteret	131.3	13.9%	15.8%	34.4%	15.7%	$19,218,885,365 (2%)	$491,886	$43,356	14.1%	24.4%
Caswell	55.8	33.5%	27.7%	14.8%	37.4%	$1,481,096,422 (.2%)	$159,177	$37,115	20.8%	22.0%
Catawba	387.1	23.0%	10.2%	27.9%	26.9%	$14,760,754,721 (1.5%)	$773,351	$41,782	14.5%	23.2%
Chatham	93.1	11.9%	13.2%	40.3%	14.4%	$8,418,599,730 (.9%)	$269,478	$53,958	14.2%	22.1%
Cherokee	60.3	22.6%	14.7%	16.8%	19.8%	$4,087,957,896 (.4%)	$228,078	$32,963	18.1%	27.7%

TABLE B-1, COUNY FISCAL AND ECONOMIC INDICATORS

County	Population density (persons per square mile), 2010	Intergovernmental Ratio, 2010	Percent of total county workforce employed by local government, 2010	Education spending as a percent of total county general fund spending, 2010	Health & human services spending as a percent of total general fund spending, 2010	Assessed value of county-taxable property (Assessed value as a percent of total taxable NC property), 2010	Federal expenditures, 2008	Median household income, 2010	Poverty rate, 2010	Percent of Working-Age Adults with No Form of Health Insurance, 2010
Chowan	85.8	15.3%	14.7%	17.0%	17.1%	$1,448,388,822 (.1%)	$133,042	$36,176	21.1%	-
Clay	49.3	32.0%	23.5%	8.1%	22.6%	$1,506,600,913 (.2%)	$92,967	$35,314	18.8%	-
Cleveland	211.3	19.9%	14.5%	18.3%	34.7%	$6,655,088,404 (.7%)	$643,709	$38,392	20.9%	23.0%
Columbus	62.0	32.5%	14.6%	14.6%	29.0%	$3,314,301,603 (.3%)	$524,921	$32,518	26.9%	28.6%
Craven	146.0	20.3%	14.6%	21.1%	28.9%	$7,017,327,158 (.7%)	$1,281,276	$41,791	17.5%	19.8%
Cumberland	489.7	23.5%	16.0%	30.9%	30.0%	$20,660,466,462 (2.1%)	$3,307,968	$43,356	18.2%	19.5%
Currituck	89.9	6.9%	20.9%	16.0%	6.4%	$8,238,987,125 (.8%)	$305,979	$53,939	11.1%	20.8%
Dare	88.5	9.7%	11.8%	18.2%	12.7%	$17,540,906,095 (1.8%)	$194,788	$50,203	12.3%	26.8%
Davidson	294.7	20.3%	14.1%	31.2%	20.3%	$12,950,818,770 (1.3%)	$719,472	$40,618	17.3%	22.9%
Davie	156.1	15.9%	15.6%	25.8%	20.2%	$4,256,582,715 (.4%)	$222,513	$46,957	14.0%	16.7%
Duplin	71.7	25.2%	12.9%	18.3%	24.5%	$3,699,978,301 (.4%)	$363,385	$34,672	23.7%	36.2%
Durham	935.7	20.9%	5.7%	31.4%	23.6%	$29,080,078,128 (3%)	$3,287,143	$48,023	18.4%	20.9%
Edgecombe	111.9	27.7%	18.7%	19.5%	34.4%	$3,108,215,550 (.3%)	$463,058	$33,146	24.5%	24.5%
Forsyth	859.2	15.1%	8.0%	45.2%	15.9%	$34,024,666,974 (3.5%)	$2,183,721	$44,443	16.7%	21.4%
Franklin	123.3	14.0%	16.9%	30.9%	18.0%	$4,039,622,224 (.4%)	$302,277	$45,592	16.0%	23.0%
Gaston	578.8	12.9%	12.6%	33.1%	20.8%	$14,690,965,927 (1.5%)	$1,121,537	$40,332	19.9%	23.3%
Gates	35.8	22.7%	35.5%	33.8%	12.5%	$927,438,436 (.1%)	$87,622	$43,010	17.5%	-
Graham	30.3	33.1%	19.1%	9.4%	28.1%	$873,253,819 (.1%)	$68,558	$31,863	22.5%	-
Granville	112.7	13.2%	12.6%	28.6%	17.3%	$3,682,644,720 (.4%)	$398,005	$45,828	15.5%	19.1%
Greene	80.3	31.1%	19.6%	12.2%	29.0%	$997,971,294 (.1%)	$122,318	$38,428	23.7%	24.1%

TABLE B-1, COUNY FISCAL AND ECONOMIC INDICATORS

County	Population density (persons per square mile), 2010	Intergovernmental Ratio, 2010	Percent of total county workforce employed by local government, 2010	Education spending as a percent of total county general fund spending, 2010	Health & human services spending as a percent of total general fund spending, 2010	Assessed value of county-taxable property (Assessed value as a percent of total taxable NC property), 2010	Federal expenditures, 2008	Median household income, 2010	Poverty rate, 2010	Percent of Working-Age Adults with No Form of Health Insurance, 2010
Guilford	756.4	14.9%	7.5%	38.1%	24.0%	$44,756,489,173 (4.6%)	$3,080,399	$42,415	17.9%	22.0%
Halifax	75.5	29.9%	19.9%	16.5%	32.8%	$3,551,396,361 (.4%)	$553,986	$30,861	26.2%	21.8%
Harnett	192.7	12.0%	20.0%	24.2%	11.6%	$6,897,782,633 (.7%)	$540,612	$40,956	16.7%	21.7%
Haywood	106.6	19.7%	19.5%	22.6%	21.4%	$7,174,171,946 (.7%)	$559,637	$39,987	14.6%	26.2%
Henderson	286.1	16.2%	13.3%	25.3%	21.9%	$13,131,496,405 (1.3%)	$710,130	$43,589	15.8%	25.5%
Hertford	69.9	26.1%	12.6%	29.8%	25.0%	$1,201,064,686 (.1%)	$201,149	$32,410	26.1%	20.9%
Hoke	120.2	15.1%	22.5%	10.9%	20.8%	$2,443,291,513 (.2%)	$177,495	$43,679	19.0%	28.0%
Hyde	9.5	36.9%	15.7%	7.9%	16.9%	$1,128,107,495 (.1%)	$57,934	$35,206	21.9%	-
Iredell	277.8	19.3%	12.2%	33.8%	18.3%	$20,533,846,446 (2.1%)	$747,266	$46,576	13.3%	20.7%
Jackson	82.1	14.5%	10.6%	15.2%	21.9%	$11,152,784,345 (1.1%)	$211,780	$36,741	19.3%	22.5%
Johnston	213.4	18.3%	18.7%	35.2%	16.8%	$11,683,906,904 (1.2%)	$725,639	$46,922	16.1%	24.0%
Jones	21.6	35.7%	26.9%	13.8%	38.9%	$728,075,824 (.1%)	$100,969	$38,578	18.4%	-
Lee	227.0	13.4%	9.5%	33.7%	20.8%	$4,794,622,783 (.5%)	$358,531	$41,999	18.6%	26.8%
Lenoir	148.5	27.3%	14.1%	32.3%	20.8%	$3,707,759,057 (.4%)	$593,540	$36,455	23.2%	27.9%
Lincoln	262.7	11.2%	17.9%	23.0%	14.5%	$8,624,723,958 (.9%)	$320,973	$45,332	15.0%	24.6%
McDowell	65.8	21.2%	13.6%	22.1%	25.7%	$3,139,402,545 (.3%)	$266,568	$34,383	19.9%	23.0%
Macon	46.2	19.4%	21.3%	30.3%	13.8%	$9,207,420,448 (.9%)	$261,942	$36,229	19.3%	30.2%
Madison	53.1	20.7%	15.7%	13.1%	34.2%	$1,885,542,179 (.2%)	$179,110	$36,158	19.7%	18.1%
Martin	102.1	21.0%	11.7%	23.4%	20.7%	$1,826,592,182 (.2%)	$223,323	$34,814	23.4%	27.6%
Mecklenburg	1755.5	13.5%	10.1%	29.8%	22.4%	$99,762,972,147 (10.2%)	$4,239,185	$52,363	15.6%	21.9%

TABLE B-1, COUNY FISCAL AND ECONOMIC INDICATORS

County	Population density (persons per square mile), 2010	Intergovernmental Ratio, 2010	Percent of total county workforce employed by local government, 2010	Education spending as a percent of total county general fund spending, 2010	Health & human services spending as a percent of total general fund spending, 2010	Assessed value of county-taxable property (Assessed value as a percent of total taxable NC property), 2010	Federal expenditures, 2008	Median household income, 2010	Poverty rate, 2010	Percent of Working-Age Adults with No Form of Health Insurance, 2010
Mitchell	70.4	24.0%	16.8%	17.2%	26.9%	$1,829,189,789 (.2%)	$137,607	$35,032	18.5%	-
Montgomery	56.5	26.0%	13.0%	19.0%	21.4%	$2,287,675,451 (.2%)	$186,741	$34,608	24.6%	27.3%
Moore	126.5	13.6%	10.8%	41.5%	14.2%	$11,687,211,319 (1.2%)	$615,001	$47,705	16.6%	22.2%
Nash	177.3	24.1%	12.6%	27.1%	26.2%	$6,932,577,402 (.7%)	$652,314	$42,315	15.6%	20.8%
New Hanover	1058.1	13.7%	12.3%	31.4%	16.3%	$33,751,610,263 (3.4%)	$1,248,653	$46,129	18.1%	21.8%
Northampton	41.2	23.5%	19.2%	11.6%	32.2%	$1,859,738,866 (.2%)	$236,195	$32,168	22.5%	22.3%
Onslow	233.1	20.8%	14.2%	23.6%	23.5%	$12,023,229,390 (1.2%)	$2,164,960	$41,969	15.8%	21.7%
Orange	336.2	14.4%	9.5%	30.7%	15.2%	$15,481,216,206 (1.6%)	$1,474,886	$51,434	17.4%	15.8%
Pamlico	39.1	21.1%	16.0%	18.0%	24.5%	$1,385,043,625 (.1%)	$111,716	$41,442	15.2%	-
Pasquotank	179.2	14.0%	19.1%	19.7%	15.1%	$3,326,661,498 (.3%)	$399,426	$39,381	22.9%	25.1%
Pender	60.0	20.5%	19.5%	25.8%	17.3%	$4,713,278,664 (.5%)	$291,674	$43,573	16.7%	24.9%
Perquimans	54.4	20.6%	29.6%	15.4%	13.3%	$1,696,815,597 (.2%)	$110,514	$40,772	16.4%	-
Person	100.6	20.7%	16.0%	21.2%	29.9%	$3,933,944,216 (.4%)	$235,492	$42,621	16.4%	20.5%
Pitt	257.9	18.1%	18.5%	33.0%	23.8%	$11,554,751,000 (1.2%)	$945,768	$39,519	21.6%	22.0%
Polk	86.3	16.1%	16.3%	19.5%	15.0%	$2,723,848,535 (.3%)	$136,685	$44,756	14.4%	24.4%
Randolph	181.1	20.4%	10.9%	27.1%	21.7%	$10,219,845,108 (1%)	$631,871	$39,648	18.1%	23.8%
Richmond	98.4	20.0%	14.9%	29.1%	20.1%	$2,794,549,699 (.3%)	$370,357	$31,568	28.1%	28.9%
Robeson	141.3	26.7%	15.3%	13.6%	35.7%	$5,403,202,007 (.6%)	$971,281	$30,627	31.5%	35.2%
Rockingham	165.6	22.6%	13.6%	18.3%	23.5%	$6,103,353,640 (.6%)	$652,826	$38,063	18.5%	21.4%
Rowan	270.7	20.2%	11.4%	29.5%	23.0%	$118,057,606,56 (1.2%)	$942,082	$38,658	20.1%	24.7%

TABLE B-1, COUNY FISCAL AND ECONOMIC INDICATORS

County	Population density (persons per square mile), 2010	Intergovernmental Ratio, 2010	Percent of total county workforce employed by local government, 2010	Education spending as a percent of total county general fund spending, 2010	Health & human services spending as a percent of total general fund spending, 2010	Assessed value of county-taxable property (Assessed value as a percent of total taxable NC property), 2010	Federal expenditures, 2008	Median household income, 2010	Poverty rate, 2010	Percent of Working-Age Adults with No Form of Health Insurance, 2010
Rutherford	120.2	21.4%	15.5%	24.4%	19.7%	$5,688,470,667 (.6%)	$423,066	$35,057	25.0%	26.6%
Sampson	67.1	24.0%	17.4%	23.8%	26.7%	$3,480,598,736 (.4%)	$434,947	$37,047	21.4%	28.6%
Scotland	113.4	27.5%	15.4%	28.8%	26.4%	$1,903,272,306 (.2%)	$280,825	$31,805	27.2%	22.5%
Stanly	153.3	19.9%	13.4%	25.6%	21.0%	$4,238,668,711 (.4%)	$2,663,106	$42,854	15.4%	21.5%
Stokes	105.6	18.1%	24.1%	34.2%	23.2%	$3,595,874,129 (.4%)	$233,576	$43,178	14.3%	14.0%
Surry	138.4	16.4%	14.1%	35.9%	19.9%	$5,347,036,691 (.5%)	$493,935	$36,622	19.3%	26.1%
Swain	26.5	36.6%	47.1%	5.9%	34.1%	$1,412,128,963 (.1%)	$138,587	$36,109	18.5%	-
Transylvania	87.4	16.5%	14.0%	22.8%	17.8%	$5,965,665,900 (.6%)	$229,756	$40,652	15.9%	24.3%
Tyrrell	11.3	26.1%	24.9%	11.8%	20.3%	$487,119,759 (.05%)	$47,684	$31,732	28.7%	-
Union	318.7	11.2%	18.3%	36.2%	12.2%	$22,971,011,926 (2.3%)	$576,122	$64,486	9.2%	19.3%
Vance	179.2	24.5%	13.5%	35.7%	20.5%	$2,689,471,212 (.3%)	$354,064	$34,000	24.3%	25.1%
Wake	1078.8	9.3%	7.3%	38.1%	17.9%	$119,000,143,799 (12.2%)	$5,346,073	$61,594	12.0%	17.2%
Warren	48.9	23.1%	27.4%	13.5%	25.6%	$2,527,074,570 (.3%)	$161,524	$32,574	27.1%	25.9%
Washington	38	36.4%	24.2%	12.7%	23.2%	$797,999,000 (.1%)	$115,053	$33,293	22.4%	-
Watauga	163.4	12.6%	8.0%	44.2%	9.6%	$8,737,294,961 (.9%)	$220,733	$38,923	24.8%	18.5%
Wayne	221.7	23.0%	12.2%	28.2%	27.5%	$6,524,360,987 (.7%)	$1,100,492	$40,274	19.7%	24.4%
Wilkes	91.9	20.6%	15.9%	25.0%	28.4%	$5,503,924,776 (.6%)	$428,805	$34,886	19.9%	24.1%
Wilson	220.6	25.0%	12.8%	19.7%	35.6%	$6,351,469,031 (.6%)	$561,426	$36,645	22.9%	26.8%
Yadkin	114.7	31.9%	15.9%	22.0%	18.1%	$2,780,840,096 (.3%)	$241,006	$41,095	15.1%	18.9%
Yancey	57	19.5%	2.6%	20.9%	24.9%	$2,627,233,723 (.3%)	$144,952	$36,934	20.3%	-

Table B-2, LEA Funding by Source, by County

TABLE B-2, LOCAL EDUCATIONAL AUTHORITY FUNDING BY SOURCE AND COUNTY, 2010-11							
County	Total 2010 LEA Funds, All Sources	Federal Funds		State Funds		Local Funds	
Alamance	$ 173,127,798	$ 28,198,744	**16.3%**	$ 109,487,009	**63.2%**	$ 35,442,045	**20.5%**
Alexander	41,709,926	6,149,766	**14.7%**	29,892,681	**71.7%**	5,667,479	**13.6%**
Alleghany	16,291,600	2,774,686	**17.0%**	10,341,913	**63.5%**	3,175,001	**19.5%**
Anson	37,292,196	7,573,407	**20.3%**	24,666,757	**66.1%**	5,052,032	**13.5%**
Ashe	29,225,032	5,081,059	**17.4%**	19,925,383	**68.2%**	4,218,590	**14.4%**
Avery	22,715,532	3,755,403	**16.5%**	14,331,717	**63.1%**	4,628,412	**20.4%**
Beaufort	63,587,967	11,783,646	**18.5%**	39,072,250	**61.4%**	12,732,071	**20.0%**
Bertie	27,880,459	4,765,443	**17.1%**	19,827,053	**71.1%**	3,287,963	**11.8%**
Bladen	48,833,622	12,646,982	**25.9%**	30,224,862	**61.9%**	5,961,778	**12.2%**
Brunswick	106,454,648	17,835,997	**16.8%**	59,289,444	**55.7%**	29,329,207	**27.6%**
Buncombe	256,750,926	40,248,751	**15.7%**	149,291,187	**58.1%**	67,210,988	**26.2%**
Burke	102,984,608	16,867,765	**16.0%**	71,851,801	**45.5%**	14,265,042	**38.5%**
Cabarrus	260,198,791	36,141,062	**13.9%**	159,636,170	**61.4%**	64,421,559	**24.8%**
Caldwell	100,887,014	17,918,188	**12.9%**	67,117,975	**61.8%**	15,850,851	**25.3%**
Camden	16,179,663	1,657,708	**18.6%**	12,366,304	**59.0%**	2,155,651	**22.3%**
Carteret	72,794,246	10,365,161	**17.8%**	41,702,780	**66.5%**	20,726,305	**15.7%**
Caswell	27,716,993	4,513,058	**10.2%**	20,538,591	**76.4%**	2,665,344	**13.3%**
Catawba	195,310,805	34,310,415	**17.6%**	121,810,343	**62.4%**	39,190,047	**20.1%**
Chatham	72,991,574	11,189,562	**16.3%**	39,216,545	**74.1%**	22,585,467	**9.6%**
Cherokee	32,935,654	6,051,714	**15.7%**	20,882,733	**63.0%**	6,001,207	**21.4%**
Chowan	23,125,241	3,903,272	**20.8%**	14,732,838	**62.4%**	4,489,131	**16.8%**
Clay	13,089,798	1,824,054	**23.0%**	9,601,497	**59.0%**	1,664,247	**18.0%**
Cleveland	136,775,201	23,819,640	**15.3%**	86,671,235	**53.7%**	26,284,326	**30.9%**
Columbus	77,090,948	16,446,385	**21.3%**	51,096,834	**66.3%**	9,547,729	**12.4%**
Craven	115,046,113	24,486,674	**16.9%**	72,700,946	**63.7%**	17,858,493	**19.4%**
Cumberland	428,244,607	75,744,740	**13.9%**	254,526,013	**73.4%**	97,973,854	**12.7%**
Currituck	35,159,152	4,128,551	**17.4%**	20,058,030	**63.4%**	10,972,571	**19.2%**
Dare	53,227,156	5,786,822	**20.6%**	25,788,519	**66.4%**	21,651,815	**13.0%**
Davidson	199,831,968	36,134,272	**18.1%**	130,493,570	**65.3%**	33,204,126	**16.6%**
Davie	51,678,432	8,755,513	**21.3%**	33,839,220	**63.2%**	9,083,699	**15.5%**
Duplin	75,052,421	15,183,968	**17.7%**	50,695,651	**59.4%**	9,172,802	**22.9%**
Durham	294,874,201	48,189,550	**11.7%**	160,751,420	**57.0%**	85,933,231	**31.2%**

TABLE B-2, LOCAL EDUCATIONAL AUTHORITY FUNDING BY SOURCE AND COUNTY, 2010-11							
County	**Total 2010 LEA Funds, All Sources**	**Federal Funds**		**State Funds**		**Local Funds**	
Edgecombe	59,141,595	10,612,546	**10.9%**	41,411,477	**48.4%**	7,117,572	**40.7%**
Forsyth	456,342,013	68,922,846	**14.8%**	263,689,264	**69.1%**	123,729,903	**16.1%**
Franklin	68,419,746	10,710,231	**25.1%**	45,164,954	**54.6%**	12,544,561	**20.3%**
Gaston	239,407,304	46,113,676	**28.1%**	149,572,147	**56.7%**	43,721,481	**15.2%**
Gates	19,145,380	2,655,556	**16.9%**	13,080,293	**65.5%**	3,409,531	**17.6%**
Graham	12,364,511	2,296,225	**20.2%**	8,656,267	**67.5%**	1,412,019	**12.2%**
Granville	70,739,977	11,351,742	**16.3%**	46,955,911	**54.5%**	12,432,324	**29.1%**
Greene	31,990,861	6,179,996	**17.9%**	22,100,337	**70.0%**	3,710,528	**12.0%**
Guilford	628,164,361	87,938,669	**15.1%**	346,520,645	**57.8%**	193,705,047	**27.1%**
Halifax	78,199,880	18,817,318	**24.1%**	48,163,000	**61.6%**	11,219,562	**14.3%**
Harnett	143,632,109	22,727,972	**19.3%**	99,575,025	**62.5%**	21,329,112	**18.3%**
Haywood	66,737,943	10,456,751	**13.9%**	39,795,303	**68.3%**	16,485,889	**17.8%**
Henderson	106,798,436	19,705,170	**18.6%**	68,196,424	**70.0%**	18,896,842	**11.4%**
Hertford	31,553,281	5,953,708	**16.0%**	21,187,253	**66.4%**	4,412,320	**17.6%**
Hoke	66,349,370	12,290,178	**19.3%**	46,272,381	**69.1%**	7,786,811	**11.6%**
Hyde	11,009,566	1,710,433	**14.0%**	7,587,793	**55.2%**	1,711,340	**30.8%**
Iredell	200,417,979	24,473,188	**12.2%**	126,197,352	**63.0%**	49,747,439	**24.8%**
Jackson	33,407,279	6,346,319	**15.0%**	20,506,600	**63.4%**	6,554,360	**21.6%**
Johnston	263,448,501	26,979,768	**22.1%**	164,061,482	**60.1%**	72,407,251	**17.9%**
Jones	13,755,661	2,265,279	**15.8%**	9,963,306	**69.3%**	1,527,076	**14.8%**
Lee	82,461,257	14,041,700	**15.7%**	50,746,130	**59.6%**	17,673,427	**24.7%**
Lenoir	76,423,749	14,215,347	**18.5%**	51,159,417	**63.9%**	11,048,985	**17.7%**
Lincoln	91,559,874	15,466,446	**18.9%**	59,668,185	**67.1%**	16,425,243	**14.0%**
McDowell	53,762,009	8,926,410	**11.6%**	35,594,827	**60.4%**	9,240,772	**28.0%**
Macon	40,476,858	7,706,802	**18.5%**	23,912,502	**69.7%**	8,857,554	**11.7%**
Madison	24,370,487	3,811,143	**15.5%**	16,908,618	**68.9%**	3,650,726	**15.5%**
Martin	37,087,305	6,292,173	**12.4%**	25,093,791	**63.7%**	5,701,341	**24.0%**
Mecklenburg	1,075,979,371	170,928,015	**19.0%**	629,394,896	**61.4%**	275,656,460	**19.6%**
Mitchell	22,227,332	3,113,071	**10.2%**	15,450,227	**62.3%**	3,664,034	**27.5%**
Montgomery	37,006,912	6,663,653	**16.5%**	25,019,339	**72.4%**	5,323,920	**11.1%**
Moore	101,211,723	16,774,206	**17.0%**	60,496,652	**61.5%**	23,940,865	**21.4%**
Nash	144,366,614	24,680,892	**18.6%**	91,531,235	**66.9%**	28,154,487	**14.5%**

TABLE B-2, LOCAL EDUCATIONAL AUTHORITY FUNDING BY SOURCE AND COUNTY, 2010-2011 SCHOOL YEAR							
County	Total 2010 LEA Funds, All Sources	Federal Funds		State Funds		Local Funds	
New Hanover	211,761,053	34,136,459	**16.9%**	117,883,328	**65.2%**	59,741,266	**17.9%**
Northampton	26,023,434	5,480,682	**19.0%**	17,392,670	**59.1%**	3,150,082	**21.9%**
Onslow	180,539,971	29,986,320	**15.6%**	111,173,126	**69.4%**	39,380,525	**15.0%**
Orange	190,475,556	19,381,128	**10.2%**	92,805,494	**48.7%**	78,288,934	**41.1%**
Pamlico	15,725,518	2,886,782	**16.6%**	10,159,873	**66.2%**	2,678,863	**17.2%**
Pasquotank	53,578,630	10,090,675	**15.9%**	32,905,779	**58.5%**	10,582,176	**25.6%**
Pender	65,031,410	10,155,939	**14.0%**	39,396,501	**69.5%**	15,478,970	**16.5%**
Perquimans	17,655,122	3,347,304	**18.0%**	11,609,375	**67.6%**	2,698,443	**14.4%**
Person	43,227,101	6,838,131	**16.6%**	27,681,464	**59.8%**	8,707,506	**23.7%**
Pitt	191,291,233	34,020,266	**17.1%**	115,937,660	**63.4%**	41,333,307	**19.5%**
Polk	23,819,932	3,175,897	**16.1%**	14,754,684	**55.7%**	5,889,351	**28.2%**
Randolph	188,330,691	35,097,513	**18.6%**	119,573,543	**63.5%**	33,659,635	**17.9%**
Richmond	64,728,506	13,904,582	**16.6%**	43,521,603	**61.6%**	7,302,321	**21.8%**
Robeson	208,526,515	53,137,754	**11.1%**	137,519,797	**55.3%**	17,868,964	**33.6%**
Rockingham	115,121,062	18,685,562	**9.6%**	76,426,358	**45.1%**	20,009,142	**45.2%**
Rowan	170,056,981	25,731,054	**18.4%**	101,452,628	**64.6%**	42,873,299	**17.0%**
Rutherford	79,969,255	16,513,914	**18.8%**	49,987,308	**61.4%**	13,468,033	**19.8%**
Sampson	96,965,916	19,510,307	**20.1%**	64,265,401	**66.3%**	13,190,208	**13.6%**
Scotland	65,592,185	14,383,255	**19.0%**	39,507,142	**65.8%**	11,701,788	**15.3%**
Stanly	75,236,914	11,553,426	**15.8%**	50,562,138	**64.0%**	13,121,350	**20.1%**
Stokes	60,752,815	8,909,238	**17.8%**	39,698,514	**60.6%**	12,145,063	**21.6%**
Surry	96,021,077	15,991,639	**16.7%**	61,952,846	**64.5%**	18,076,592	**18.8%**
Swain	18,260,142	3,231,990	**16.9%**	12,627,924	**65.5%**	2,400,228	**17.6%**
Transylvania	32,588,333	4,544,065	**24.5%**	19,279,698	**56.9%**	8,764,570	**18.6%**
Tyrrell	9,038,745	1,463,377	**21.5%**	6,764,797	**67.2%**	810,571	**11.3%**
Union	301,083,203	33,001,566	**25.5%**	186,088,143	**65.9%**	81,993,494	**8.6%**
Vance	65,842,693	13,571,132	**16.2%**	42,321,145	**66.4%**	9,950,416	**17.4%**
Wake	1,115,166,511	138,347,752	**15.1%**	671,309,565	**59.7%**	305,509,194	**25.2%**
Warren	26,664,433	5,433,050	**20.7%**	17,120,647	**62.5%**	4,110,736	**16.8%**
Washington	20,921,740	4,137,645	**19.8%**	14,089,828	**68.3%**	2,694,267	**11.9%**
Watauga	40,245,647	5,790,327	**21.0%**	22,818,452	**61.1%**	11,636,868	**18.0%**
Wayne	149,934,869	27,012,783	**21.9%**	101,503,039	**60.2%**	21,419,047	**17.8%**
Wilkes	77,258,957	14,723,126	**15.4%**	52,497,404	**67.2%**	10,038,427	**17.4%**
Wilson	97,323,896	18,930,770	**14.7%**	60,688,754	**65.3%**	17,704,372	**20.0%**
Yadkin	48,779,514	7,534,169	**16.2%**	32,855,155	**65.4%**	8,390,190	**18.4%**
Yancey	22,710,247	3,892,500	**15.0%**	15,300,500	**65.2%**	3,517,247	**19.8%**

Appendix C: Data Sources

Data	Description	Source
North Carolina County and Municipal Financial Information	County financial information comes from the annual audits and the Annual Financial Information Report (AFIR) filed with the Local Government Commission (LGC). Population data is obtained from the NC Office of State Budget, Planning and Management web site, and real estate tax data comes from the NC Department of Revenue. http://www.nctreasurer.com/dsthome/StateAndLocalGov/lgcreport	North Carolina Department of the State Treasurer, State & Local Government Finance Division
County and Municipal Financial Information	Financial information for North Carolina counties comes from the annual audits and the Annual Financial Information Report (AFIR) filed with the Local Government Commission (LGC). Population data is obtained from the NC Office of State Budget, Planning and Management web site, and real estate tax data comes from the NC Department of Revenue. The Annual Financial Information Report is a joint project between the LGC and the US Census Bureau. http://www.nctreasurer.com/DSTHome/StateAndLocalGov/AuditingAndReporting/HistoricalData.htm	North Carolina Department of the State Treasurer, State & Local Government Finance Division
U.S. Decennial Census	Required by the U.S. Constitution, the Decennial Census is a survey of population, demographic, and housing indicators that occurs every ten years. The data can be compared across states, counties, census tracts, communities, and population groups. http://www.census.gov/prod/www/abs/decennial/	United States Department of Commerce, Bureau of the Census
U.S. Census, American Community Survey (ACS)	The American Community Survey is an annual survey that collects economic, social, and housing information. The data can be compared across states, counties, census tracts, communities, and population groups. Data is released every three or five years for areas with a population 65,000 or fewer and 20,000 or fewer, respectively. http://www.census.gov/acs/www/	United States Department of Commerce, Bureau of the Census

Data	Description	Source
U.S. Census Small Area Income and Poverty Estimates (SAIPE)	The U.S. Census Bureau, with support from other Federal agencies, created the Small Area Income and Poverty Estimates (SAIPE) program to provide more current estimates of selected income and poverty statistics than those from the most recent decennial census. The main objective of this program is to provide updated estimates of income and poverty statistics for the administration of federal programs and the allocation of federal funds to local jurisdictions. Estimates for 2010 were released in November 2011. These estimates combine data from administrative records, intercensal population estimates, and the decennial census with direct estimates from the American Community Survey to provide consistent and reliable single-year estimates. These model-based single-year estimates are more reflective of current conditions than multi-year survey estimates. http://www.census.gov/did/www/saipe/	United States Department of Commerce, Bureau of the Census
Quarterly Census Employment and Wages (QCEW)	The Quarterly Census of Employment and Wages program publishes a quarterly count of employment and wages reported by employers covering 98 percent of U.S. jobs, available at the county, MSA, state and national levels by industry. http://esesc23.esc.state.nc.us/d4/QCEWSelection.aspx	North Carolina Department of Commerce, Division of Employment Security
Local Area Unemployment Statistics (LAUS)	The Local Area Unemployment Statistics program produces monthly and annual employment, unemployment, and labor force data for Census regions and divisions, States, counties, metropolitan areas, and many cities, and place of residence. http://esesc23.esc.state.nc.us/d4/LausSelection.aspx	North Carolina Department of Commerce, Division of Employment Security
North Carolina Public Schools Statistical Profile	The North Carolina Public Schools Statistical Profile is a collection of statistical information about North Carolina's elementary and secondary schools. It was initiated in 1975. The purpose of this profile is to provide general statistical data to the public, professional educators, and the General Assembly. The profile includes information on public school pupils, personnel, and finances. http://apps.schools.nc.gov/pls/apex/f?p=1:1:876397576149063	North Carolina Department of Public Instruction

Data	Description	Source
U.S. Census Consolidated Federal Funds Report	The Consolidated Federal Funds Report collects data on the amount of virtually all Federal expenditures, including grants, loans, direct payments, insurance, procurement, salaries and wages and other awards (such as price supports and research awards). Data represent actual expenditures (or outlays) with some exceptions. For example, contract amounts may represent obligations, loans and insurance can include cash and contingent liability values, and grants to individuals may reflect benefit commitments. Expenditures are reported by responsible department or agency, and classified by affected program (such as Federal Emergency Management Agency disaster relief grants or Food and Nutrition Services Women Infants and Children (WIC) Program). The Bureau of Economic Analysis, Office of Management and Budget, U.S. Congress, state governments and private researchers use the data to measure and assess Federal expenditures in state and sub-state areas. These analysts use the data on an expenditure basis for studies that evaluate Federal revenues from state areas versus Federal expenditure to those areas. http://www.census.gov/govs/cffr/index.html	United States Department of Commerce, Bureau of the Census