2014
Community Assessment

CATAWBA COUNTY SCHOOLS
EARLY HEAD START

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Acknowledgments

The Catawba County Schools Early Head Start Community Assessment (2014) was produced by the Western Piedmont Council of Governments (WPCOG) in cooperation with the Catawba County School System. GIS Analyst Tom Bell, MSG, GISP, and Data Analyst, Taylor Dellinger, GISP wrote the assessment and designed the report's mapping products. The following staff persons at WPCOG also assisted in creating the report: GIS Technician Todd Stroupe, Planner Laurie Locicero, Planner Shelley Stevens, former WPCOG Planner Dr. John Kenny and Administrative Assistant Erin Todd.

Special assistance was given by the North Carolina Center for State Health Statistics, which allowed WPCOG to use its birth certificate data for geographic and racial/ethnic analysis. Catawba County Schools Early Head Start staff also provided data and assisted with the survey used in the assessment.

Executive Summary

Catawba County Schools Early Head Start (CCS-EHS) is a federally-funded program which promotes the development of infants and toddlers age zero to two who live in low-income households. The program also encourages healthy prenatal outcomes for economically disadvantaged expectant mothers.

This report provides CCS-EHS staff and the administration of Catawba County Schools with a thorough assessment of the current state of the physical, social and economic welfare of families with very young children in Catawba County. Further, it provides an understanding of the factors which affect this population. The report presents data to reveal the extent of challenges faced by these families and includes a generous number of maps to illustrate the degree to which various needs are present in communities throughout the County. The report is intended as a tool to assist leaders of CCS-EHS in understanding and targeting their client population effectively.

An "Assessment of Community Needs" was also performed in 2011 using data up to 2010. The 2014 *Assessment* intends to use information from the previous report to compare findings and identify trends at both the County and community level. Comparisons are made throughout the Assessment, particularly in the maps, many of which contain an inset to indicate changes during the past four years.

One major Catawba County demographic trend appears to stand out regarding disadvantaged families with very young children. This trend is a decline in births over the past several years. Since 2005 the number of Catawba County births occurring annually has fallen steadily from 1,942 in 2005 to 1,778 in 2012 (-8.4%). Interestingly, the decline is occurring across all major races and ethnicities. Comparing 2005-08 to 2009-12, births to Asian residents changed by -6.2%, African-American residents by -1.3%, White non-Hispanic residents by -13.2% and Hispanic residents by -16.2%. The sharp drop in births to Hispanic residents is a contrast to the rapid growth in Catawba County's Latino population from 1990 through 2010.

By most measures, the economic difficulties which were increasingly experienced by minority and lower-income families during the first decade of the 2000s have continued since 2010. The number of persons employed in Catawba County, after falling by 24,108 (-23.7%) from 2000 to 2009, rebounded modestly (2,789) by 2012. Median household income, however, has not rebounded and has continued to fall rapidly. When adjusted for inflation to 2012 dollars, Catawba County median household income has declined steadily from $55,863 in 1999 to $41,420 in 2012, a drop of $14,443 (-25.6%). Minority families are more likely to rent than own their homes; and median income for families who rent (also adjusted for inflation) declined from $39,344 in 1999 to $27,577 in 2008-12 (-29.9%).

Poverty rates have continued to increase in Catawba County. From Census 2000 to the 2008-12 (5-year estimates) American Community Survey (ACS), the number of people (all ages) in poverty rose from 12,688 to 22,934 (+80.1%). More than one-in-four

(25.4%) of children age 0-4 are in poverty as of 2008-12, as are the majority (53.9%) of very young children in single-parent households. Geographic analysis indicates that areas of highest poverty in the County continue to include southern sections of Hickory and portions of Long View, where poverty rates for all children exceed 50%. Other areas experiencing higher child poverty rates are eastern parts of Newton (43.5%), and an area stretching along the Lincoln County border from southern Bandys westward to eastern Maiden, where the childhood poverty rate is 39.0%.

Programs to provide public assistance to disadvantaged families with very young children have grown dramatically since 2000. The number of County residents receiving food stamps has grown from 5,322 in 2000 (or 3.8% of the population) to 30,855 in 2013 (or 19.5% of the population), an increase of 479.8%. Expenditures for the program have grown from $5.5 million in 2000 to $44.8 million in 2013 (+714.5%), adjusted for inflation to 2013 dollars. The use of free or reduced lunch (87.3% of which is free) has also expanded in the County. In all three school systems combined, 63.5% of Catawba County students participated in 2012-13, with five elementary schools exceeding 85%.

Unemployment and increased levels of child poverty has encouraged participation in health-related programs aimed at assisting families with young children. The number of children receiving health coverage from Medicaid rose from 7,142 in 2000 to 18,003 in 2012 (+152.1%), while enrollment in NC Health Choice (which subsidizes child health insurance premiums for lower-income families who exceed poverty standards) has grown from 1,058 in 2000 to 2,986 in 2012 (182.2%). These programs combined cover 53.8% of children in Catawba County.

Thanks to Medicaid and NC Health Choice many health indicators of pregnant mothers and very young children have continued to improve, including declines in the rate of teenage pregnancy and a decrease in childhood obesity. Recent figures on prenatal health are complex. Though abortion rates tend to rise with increased poverty, abortions performed on Catawba County women have fallen substantially, from 11.1 per 1,000 women in 2008 to 6.6 per 1,000 women in 2011, while the number of Catawba County births has simultaneously declined as well. Recent figures indicate that the percent of mothers smoking during pregnancy has increased in Catawba County from 14.7% in 2009 to 16.2% in 2012, reversing a trend of fewer smoking expectant mothers. The death rate of infants in the County has dropped from 0.8% in 1999 to 0.6% in 2012.

Catawba County children age 5-17 in 2008-12 averaged a disability rate of 4.3%, or 1,169 children, a percentage lower than the State (5.7%) and nation (5.2%). Of these children, 73.6% reported their disability to be cognitive. Disabilities were most commonly reported among the County's African-American children (6.7%), followed by Hispanic children (4.6%), White non-Hispanic children (4.3%) and Asian-American children (1.7%).

The availability of child care and the means to afford it greatly affect the families of very young children. Geographically, almost all areas of the County which have high

concentrations of minority children and child poverty continue to be within one mile of a four- or five-star rated day care center, which are the highest ratings reflecting staff education and the richness of program offerings. There are now no one- or two-star day care centers in the County, likely due to the fact that Federal and State day care subsidies no longer allow participation by a facility rated at fewer than three stars. This subsidy program allows disadvantaged children to attend day care, and consequently participation is growing rapidly, from 209 children in 2009 to 1,442 in 2012.

Transportation access is a challenge for many lower-income families with very young children. In 2008, the County implemented a full-fledged bus system with service to most areas of poverty and minority concentrations. After falling through 2012, ridership increased in 2013 and appears to be growing in 2014. Disadvantaged families also use the bus system to visit grocery stores, giving them access to lower cost, healthier food than can be found at local convenience stores.

In order to gain a sense of perspective on the future of Early Head Start, a survey was conducted of individuals from three groups who have a relationship with the program: parent/guardians of children enrolled in CCS-EHS, Early Head Start staff members and professionals from programs throughout the County who work for the interests of very young children. The parents/guardians responded to the survey by stressing their lack of experience and need for training, particularly understanding what to expect in childhood development, as well as managing child behaviors. Parents/guardians also stressed the difficulty of gaining and keeping employment. They also expressed needs for transportation, mentioning that a subsidy to use the bus system would be helpful in allowing their participation. Some parents also felt that middle-income families would miss this worthwhile program due to exceeding income requirements.

Early Head Start staff members did note that transportation for parents/guardians remains an issue, and they tended to agree with parents for more training in development and managing child behavior. Other agencies praised CCS-EHS as providing a much-needed service, especially in bringing stability to a troubled families often undergoing economic turmoil.

The final portion of the report provides a geographically-based “Early Head Start Comprehensive Need Index” for Catawba County. The index consists of a weighted combination of 12 sub-county economic, social and demographic characteristics of disadvantaged very young children in Catawba County. This geographic distribution of need is intended to assist CCS-EHS management in selecting areas to focus outreach efforts and in deciding how to allocate resources wisely. Generally, the map identified higher levels of need for Early Head Start services in south-central and southeastern Hickory (including the Highland and Ridgeview communities), portions of Long View, eastern portions Newton and an area situated between east Maiden and Sherrills Ford.

Introduction

The Catawba County School System is aware of the challenges posed by economic hardship and demographic change to families of very young children throughout the County. Assisting these families to raise physically and mentally healthy infants and toddlers is the goal of the Catawba County Schools-Early Head Start (CCS-EHS) program. In order to understand the needs of CCS-EHS' clients, Catawba County Schools secured the services of the Western Piedmont Council of Governments (WPCOG) to examine the challenges facing young families in the areas of income, employment and health. This report is the product of that examination, and is an update of the 2011 *Catawba County Early Head Start Community Assessment*.

Organization and Methodology

Specific Aims

This analysis seeks to determine geographic areas of Catawba County, North Carolina to concentrate outreach and services provided by the CCS-EHS program. This goal was accomplished by examining various demographic data from birth certificates, the US Census Bureau, the NC Department of Public Instruction and other sources.

Background and Significance

Launched nationally in 1995, Early Head Start programs were created to provide continuous child development and family support for families with children younger than four years old. The Catawba County Schools Early Head Start program was created under the funding of the American Recovery and Reinvestment Act of 2009 (ARRA). A statement from the CCS-EHS states "the purpose of the program is to enhance children's physical, social, emotional, and intellectual development; to support parents' efforts to fulfill their parental roles; and to help parents move toward self-sufficiency." Elements of the program include 90-minute personal visits with enrolled children at the parent or guardian homes, group meetings held twice a month at selected locations, health screenings and access to resource networks.

A community assessment for the CCS-EHS program is required periodically by the federal government. For this project the Planning Agency (WPCOG) followed the community assessment matrix from the Early Childhood Learning and Knowledge Center as an approach to achieve the goals of the assessment and the Early Head Start Program. This approach also paints a picture of the community and describes the diverse needs of families who may receive services.[1] The assessment will assist Catawba County Schools Early Head Start staff to meet the goals of the CCS-EHS program.

[1] This document is available online at http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/operations/mgmt-admin/community/data-coll/manage_cop_00104_093005.html

Research Design and Methods

In February 2014, birth certificate data for all births during the most recent five calendar years (2008 through 2012) was sought and received from the North Carolina State Center for Health Statistics (NCSCHS). Specific birth certificate data included date of birth, gender of child, residential address (street, city, state, and zip), father's birthplace (by state), mother's birthplace (by state), county of residence, race/ethnicity of mother and race/ethnicity of father. These data were geocoded and analyzed by staff at the Western Piedmont Council of Governments using ArcGIS 10.1.2 software, but individual addresses were not included in the final product, in accordance with the limits on the data stipulated by NCSCHS. The data from these individual records will be destroyed. The results will indicate areas of low family income, areas where marital status of mother tends to be single, and areas of high concentrations of ethnic/racial minorities. These areas satisfy the requirements of the Early Head Start program to serve low-income, single-parent and minority households respectively.

This report is an update to the 2011 version of the *Catawba County Early Head Start Community Assessment*, which also included birth certificate data. In the 2011 report, birth certificate data from 2005-2009 were analyzed. In order better to understand the demographics of very young children in Catawba County in this report, the 2008-2012 data are compared to the older 2005-2009 data in both maps and text. It is worth noting that two of the years – 2008 and 2009 – overlap, and are present in both populations. Nonetheless, the data are kept in their five-year grouping because doing so allows the birth certificates to be matched directly with the most recent and most accurate sub-county Census information. Most Census data in the report, especially on a Census Tract level, are derived from the five-year sampling conducted by the Census Bureau's American Community Survey (ACS).

Other data sources which were analyzed geographically in order to identify areas which indicated high need of Early Head Start Services include:

- US Census and US Census American Community Survey (ACS), geographic distribution throughout Catawba County, including income, child disability, birth rates, average age, participation in food stamp program, Women/Infant/Children (WIC) program participants, race/ethnicity, languages spoken at home, education attainment, vehicle ownership, child disability and working mothers.
- NC Department of Public Instruction (DPI), geographic distribution (by school districts) throughout Catawba County, including percent of students receiving free/reduced school lunch, educational attainment of parents, race/ethnicity of children, and enrolled children with physical/mental disabilities.
- NC Department of Natural Resources (NCDENR) including geographic distribution throughout Catawba County of air and water quality, including fine particulate matter and ozone.
- NC Department of Commerce including average wages, types of occupations and occupational trends.

- NC Department of Transportation including vehicle ownership and availability of public transportation.
- NC State Center for Health Statistics (NCSCHS), geographic distribution throughout Catawba County of (where possible, otherwise for Catawba County as whole versus the State) including birth defects, proportion of mothers who smoke, fetal/infant mortality, births to unmarried mothers and child mortality rates and causes.

As with maps derived from birth certificate data, comparisons to other maps are made between the most recent data and data from the previous *Assessment*. In maps using Census-derived information, newer data from the 2008-2012 ACS is compared with data from the 2006-2010 ACS.[2]

Report Organization

The assessment consists of ten sections, of which the first eight generally correspond to the "Community Assessment Matrix" for Early Head Start community assessments provided by the Early Childhood Learning and Knowledge Center. Data for Section 1 through Section 6 include the above public sources, as well as birth certificate data. Section 7 consists of a brief overview of the current racial, ethnic and familial makeup (as of April 2014) of the CCS-EHS client population. Section 8 lists a brief summary of the educational qualifications and linguistic skills of the CCS-EHS staff.

Section 9 shows of the results of a community assessment survey which was given to CCS-EHS staff members, parents/guardians of children enrolled in CCS-EHS and community agencies which also work to serve very young children. A fuller description of the survey can be found in the introduction to Section 9.

Section 10 includes the results of the Early Head Start Community Need Index, a comprehensive assessment of need for Early Head Start services throughout Catawba County, which displays the total measure of need in any area for Early Head Start services. The full methodology of the Comprehensive Need Index can be found in Section 10.

[2] The older Census data is one year later than the older birth certificate data, and also one year later than Census data used in the 2011 *Assessment*. The reason for this discrepancy is that the Census boundaries were redrawn in 2010, and thus the 2006-2010 data were released within the new boundaries, while the 2005-2009 data were in the old (Census 2000) boundaries. In order to perform a geographic comparison accurately between the newer and older Census data (or with any of the birth certificate data), all data had to be released using the newer boundaries. As a result, the time comparison displaying sub-county changes in demographics is longer for the birth certificates (a three-year difference) than for Census data (a two-year difference).

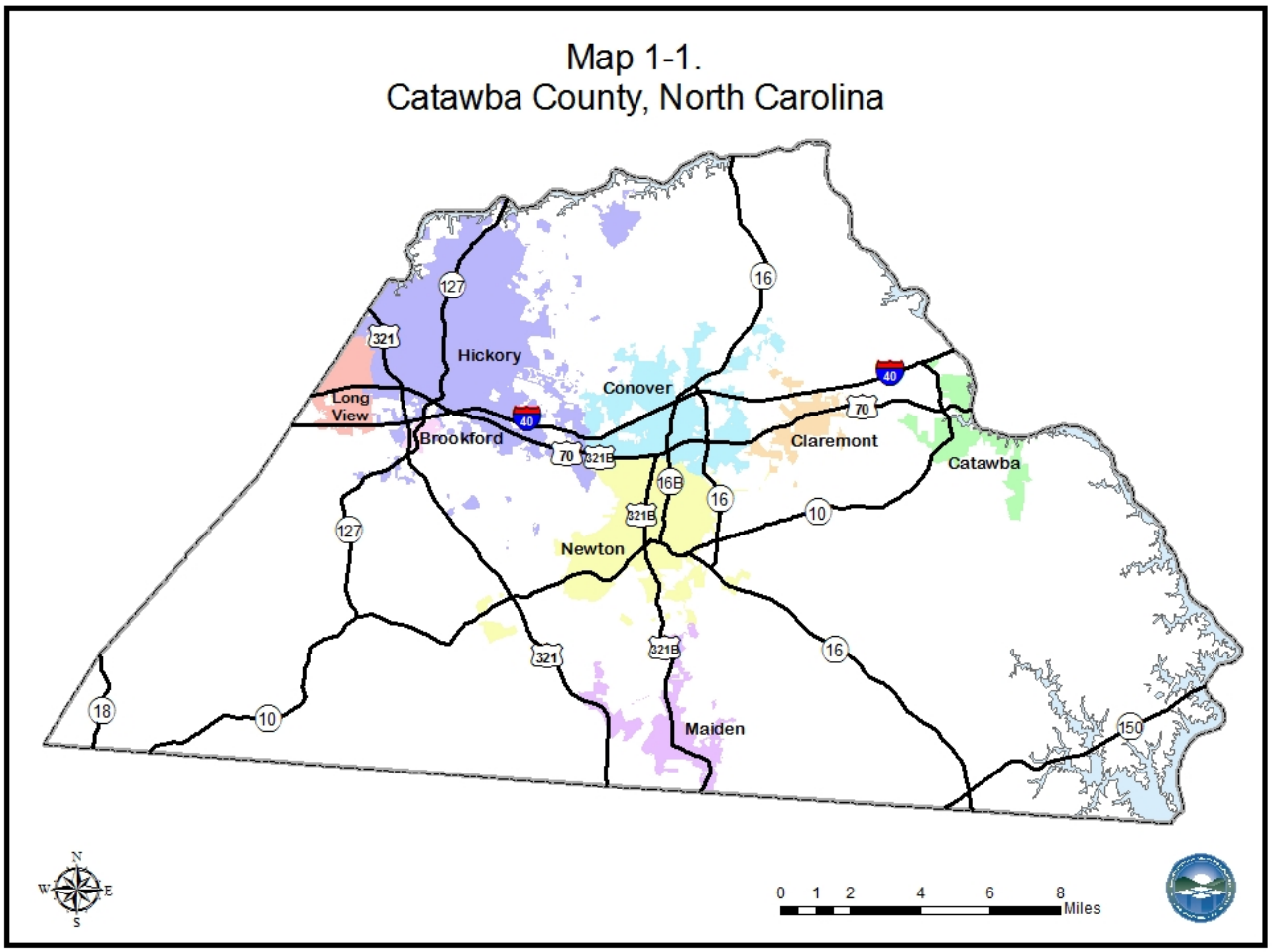
Section One
General Area Description and Demographics

Geographic Description

Catawba County, North Carolina, was established on December 12, 1842. Located in western North Carolina, the County encompasses 405 square miles. Catawba County's three lakes and its geographic location at the foot of the Blue Ridge Mountains exert a strong influence on climate and quality of life. The average year round temperature is 68.8°F. Lake Hickory covers 4,100 acres and 272.1 miles of shoreline, while Lake Lookout Shoals covers 1,270 acres and 39.1 miles of shoreline. Lake Norman, the largest manmade lake in North Carolina, covers 32,510 acres and boasts 520 miles of shoreline. Catawba County's elevation ranges from 705 feet above sea level on the surface of Lake Norman, to 1,780 feet at the summit of Baker Mountain, and averages 995 feet.

Catawba County is home to over 155,000 residents. Inside the County are eight municipalities: Brookford, Catawba, Claremont, Conover, Hickory, Long View, Maiden and Newton (Map 1-1.) Hickory is the largest municipality with over 40,000 residents, while Newton, the County Seat, has more than 12,000 residents.

Map 1-1.
Catawba County, North Carolina



Catawba County is the central county of the Hickory-Lenoir-Morganton Metropolitan Statistical Area, the State's seventh largest Metro with a population of approximately 365,000. There are 44 public schools in the County with more than 24,000 students. Catawba County is home to Lenoir-Rhyne University, a liberal arts institution with an enrollment of 2,000 students, and Catawba Valley Community College, a member of the North Carolina Community College System.

Governing Structure

Catawba County was one of the first counties in North Carolina to adopt the county manager form of government on March 1, 1937. The Catawba County Board of Commissioners has five members elected on an at-large basis to staggered four-year terms. Within Catawba County are three school systems: Catawba County, Hickory and Newton-Conover. The Catawba County School Board serves as the governing body for the Catawba County Schools Early Head Start program.

Population and Related Trends

Catawba's population grew 19.7% during the 1990s as the County and the Hickory region experienced significant employment gains (Table 1-1). Estimates from the North Carolina Office of Management and Budget indicate that the economic downturn after 2000 with its additional job losses have significantly slowed population growth in Catawba County. Between 2000 and 2010, the County's total population grew by just 12,672 persons, or an average of 1,267 per year. In comparison, during the 1990s Catawba increased by 2,327 persons per year, while in the 1980s the County grew by 1,320 persons per year. NC Office of Management and Budget estimates suggest even slower population growth for Catawba County since 2010. Between 2010 and 2012 the County's population increased by only 995 persons to 155,353.

Table 1-1.
Hickory-Lenoir-Morganton MSA Population, 1990-2012

County	1990 Pop.	Chg. 80-90	% Inc.	2000 Pop.	Chg. 90-00	% Inc.	2010 Pop.	Chg. 00-10	% Inc.	2012 Pop.	Chg. 10-11	% Inc.
Alexander	27,544	2,545	10.2	33,603	6,059	22.0	37,198	3,595	10.7	37,361	163	0.4
Burke	75,740	3,236	4.4	89,148	13,408	17.7	90,912	1,767	2.0	90,051	-861	-0.9
Caldwell	70,709	2,963	4.3	77,415	6,706	8.7	83,029	5,321	6.8	82,590	-439	-0.5
Catawba	118,412	13,204	12.5	141,685	23,273	19.7	154,358	12,672	8.9	155,353	995	0.6
MSA Total	**292,405**	**21,948**	**8.1**	**341,851**	**49,446**	**16.9**	**365,497**	**23,355**	**6.8**	**365,355**	**-142**	**-0.0**

Source: US Census Bureau, 2014; NC Office of Management and Budget, 2014.

Data in Table 1-1 reveal that population totals throughout the entire region have been impacted by employment losses. Alexander and particularly Caldwell County, like Catawba, grew at a much slower rate from 2000-2010 than during the 1990s. Census 2010 results showed Burke County with little net population change between 2000 and 2010. Current estimates from the NC Office of Management and Budget indicated that Burke and Caldwell

Counties have actually lost population since 2010 (Table 1-1). This population loss is due to a net out-migration of persons from these counties.

Table 1-2 shows population projections for the Hickory MSA counties from 2010 to 2030. Catawba County's total population is expected to grow from 154,358 in 2010 to 168,743 in 2030. Catawba is the only Hickory MSA County predicted to gain population over the next 20 years, according to projections from NC Office of Management and Budget.

Table 1-2.
Hickory-Lenoir-Morganton MSA Population Projections, 2010-2030

County	2010	2015	2020	2025	2030	Change 2010-2030	% Change 2010-2030
Alexander	37,198	36,853	36,272	35,926	35,718	-1,480	-4.0
Burke	90,912	88,793	87,462	86,667	86,192	-4,720	-5.2
Caldwell	83,029	81,794	80,860	80,287	79,935	-3,094	-3.7
Catawba	154,358	157,659	161,355	165,050	168,743	14,385	9.3
MSA Total	**365,497**	**365,099**	**365,949**	**367,930**	**370,588**	**5,091**	**1.4**

Source: NC Office of Management and Budget, 2014.

Racial and Ethnic Composition

The population of all major racial and ethnic groups increased in Catawba County from 2000 to 2012 (Table 1-3). As a percentage of the whole, the percentage of African Americans has increased from 8.4% in 2000 and 2010 to an estimated 8.7% in 2012, according to results from the American Community Survey (ACS). The White non-Hispanic population fell from 82.1% to 77.6% of the County's population, while Asian residents in 2012 constituted 3.8% of the population. The slow or in some cases negative growth in African-Americans and White non-Hispanic populations is also occurring in neighboring counties in the Hickory Metro, as young adults in both races may be leaving the area to seek higher education and employment opportunities elsewhere.

Table 1-3.
Catawba County Population Change by Race and Hispanic Origin, 2000-2012

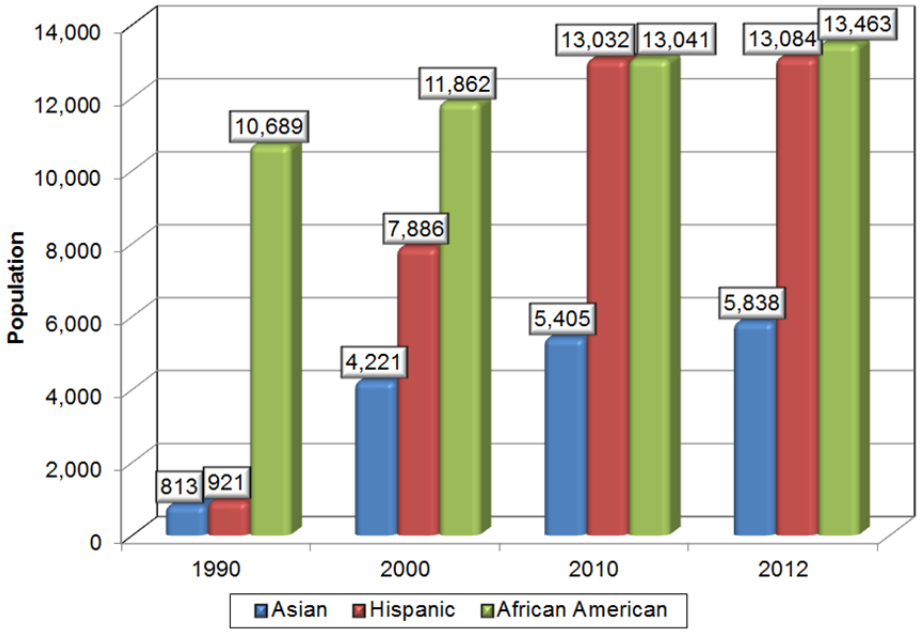
Population Group	2000 Pop	% of Pop	2010 Pop	% of Pop	Change 2000-2010	% Chg. 2000-2010	2012 ACS Population Estimate	% of Pop
Total Population	**141,685**	**100.0**	**154,358**	**100.0**	**12,673**	**8.9**	**154,339**	**100.0**
One Race	140,068	98.9	151,481	98.1	11,413	8.1	152,720	99.0
White	120,422	85.0	126,151	81.7	5,729	4.8	128,226	83.1
Black or African American	11,862	8.4	13,041	8.4	1,179	9.9	13,463	8.7
American Indian	365	0.3	489	0.3	124	34.0	412	2.7
Asian, Native Hawaiian & Other Pacific Islander	4,221	3.0	5,405	3.5	1,184	28.1	5,838	3.8
Some Other Race	3,198	2.3	6,395	4.1	3,197	100.0	4,781	3.1
Two or More Races	1,617	1.1	2,877	1.9	1,260	77.9	1,619	1.0
Hispanic or Latino (any race)	7,886	5.6	13,032	8.4	5,146	65.3	13,084	8.5
Not Hispanic or Latino	133,799	94.4	141,326	91.6	7,527	5.6	141,255	91.5
White, Not Hispanic	116,326	82.1	120,388	78.0	4,062	3.5	119,729	77.6

Source: US Census Bureau, 2014. The 2012 Census Bureau population estimate differs slightly from the North Carolina Office Budget and Management Estimate.

Catawba's Asian population has kept pace with overall County growth, although immigration of the Hmong (who make up the majority of the County Asian population) from Thailand to the United States ceased in 2004. It appears that significant numbers of Hmong families choose to move to Catawba County from other portions of the United States, and there is also significant natural growth in the County Hmong population (see Section 2, below).

Hispanics have been the fastest-growing single ethnic group in Catawba County since 2000 (Figure 1-1). The County's Latino population from 2000 to 2010 grew by 65.3%, a rate significantly lower than the State (111.1%), but higher than the nation (43.0%) during that period, and the Hispanic population rose from only 813 persons in 1990 to become the County's second-largest ethnic/racial minority in 2010 with 13,032 residents. ACS estimates for 2012 indicate little Hispanic population change since the 2010 Census.

Figure 1-1 Catawba County Minority Population, 1990-2012



Source: US Census Bureau, 2014.

Gender and Ages

In 2010 a total of 78,755 or 51.0% of Catawba County's population were female while 75,603 or 49.0% were male, according to results from the 2010 Census. By comparison, in 2000 72,172 or 50.9% of Catawba County's population were women while 69,513 were men.

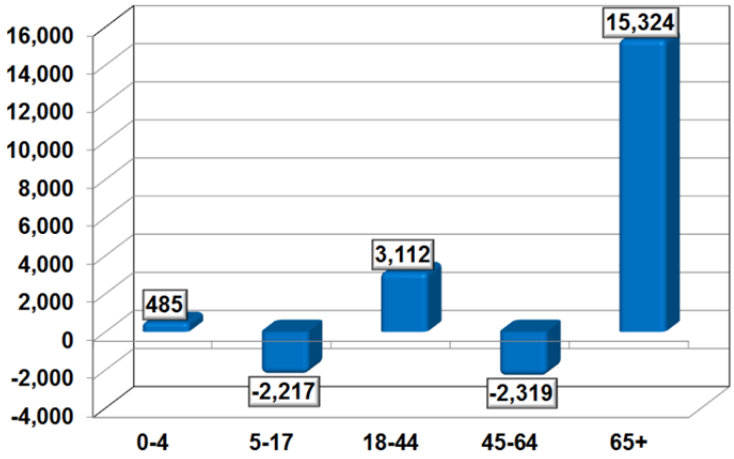
Catawba County's population increased 8.9% from 2000 to 2010 (Table 1-4, page 9). All age groups had population gains between 2000 and 2010, except the preschool (0-4) population, which fell 0.5% to 9,670. The County's school age (5-17) population increased by 2,447 (9.9%) between 2000 and 2010 while 3,512 (19.2%) were added to the elderly population. The biggest population gain, however, was in the older labor force (age 45-64), which grew 26.6% from 34,105 in 2000 to 43,171 in 2010.

Table 1-4. Catawba County Population by Age Group, 1990-2030									
Age	**1990**	**2000**	**2010**	**Change 2000-10**	**% Chg. 2000-10**	**2020**	**2030**	**Change 2010-30**	**% Chg. 2010-30**
0-4	7,855	9,715	9,670	-45	-0.5	9,088	10,155	485	5.0
5-17	20,611	24,678	27,125	2,447	9.9	25,524	24,908	-2,217	-8.1
18-44	51,085	54,926	52,619	-2,307	4.2	52,533	55,731	3,112	5.9
45-64	24,757	34,105	43,171	9,066	26.6	44,580	40,852	-2,319	-5.4
65+	14,104	18,261	21,773	3,512	19.2	29,630	37,097	15,324	70.4
Total	**118,412**	**141,685**	**154,358**	**12,673**	**8.9**	**161,355**	**168,743**	**7,388**	**4.8**

Source: North Carolina Office of State Budget and Management, 2014.

Between 2010 and 2030 the NC Office of State Budget and Management predicts Catawba County's total population will grow from 154,358 to 168,743. The preschool (0-4), younger labor force (18-44) and elderly are projected to gain population between 2010 and 2030 (Figure 1-2). The school age (5-17) and the older labor force are expected to lose population over the next two decades. The preschool (0-4) population is anticipated to grow 5.0% (485 children) to 10,155 by 2030. The number of school-age children is expected to fall from 27,125 in 2010 to 24,908 in 2030.

Figure 1-2 Catawba County Projected Age Group Population Change, 2010-2030



Source: NC Office of State Budget and Management, 2014.

The biggest percentage population gains in Catawba County through 2030 will be in the elderly groups (65 year old and older), thanks to aging of the baby boomers. This population group is predicted to grow 70.4% over the next 20 years to 37,097 persons. The younger labor force (18-44) could increase by 3,112 workers (5.9%) between 2010 and 2030. It is likely that the majority of this growth will come from the in-migration of Hispanics into Catawba County.

The Catawba County Schools Early Head Start and the Catawba Head Start programs are particularly interested in looking at trends in the 0-4 age group. Table 1-5 displays Catawba County population estimates by individual age for the 0-4 group from 2000 to 2010. The largest estimated increase was in the number of three-year olds, which grew from 1,763 in 2000 to 2,023 in 2010. The number of two year-olds grew 5.8% to 1,969. The four-year old age cohort increased by 100 to 1,994. Little net

Table 1-5. Catawba County 0 to 4 Age Group Population Estimates, 2000-2010				
Age Group	**2000**	**2010**	**Change 2000-2010**	**% Change 2000-2010**
Less than 1	1,946	1,820	-126	-6.5
1-year olds	1,870	1,864	-6	-0.3
2-year olds	1,861	1,969	108	5.8
3-year olds	1,763	2,023	260	14.7
4-year olds	1,894	1,994	100	5.3
Total	**9,334**	**9,670**	**336**	**3.6**

Source: 2000 and 2010 Census, US Census Bureau.

change was noted in the number of one year olds between 2000 and 2010. The number of newborns (less than one-year old) was 6.5% less (126) in 2010 than in 2000. The decrease in births in 2010 compared to 2000 was most likely caused by the economic recession which caused younger adults to leave the region to seek job opportunities elsewhere.

Catawba County population projections to 2030 by individual age for the 0-4 group are displayed in Table 1-6. Population gains are expected in the number of newborns, 1-year olds and 2-year olds. A small (10 to 15 person) population decrease is anticipated in the number of 3-year olds and 4-year olds between 2010 and 2030.

Table 1-6.
Catawba County 0 to 4 Age Group Population Projections, 2010-2030

Age Group	2010	2015	2020	2025	2030	Change 2010-30	% Change 2010-30
Less than 1	1,820	1,774	1,854	1,981	2,073	253	13.9
1-year olds	1,864	1,765	1,832	1,954	2,054	190	10.2
2-year olds	1,969	1,796	1,813	1,925	2,036	67	3.4
3-year olds	2,023	1,809	1,799	1,896	2,008	-15	-0.7
4-year olds	1,994	1,811	1,790	1,872	1,984	-10	-0.5
Total	**9,670**	**8,955**	**9,088**	**9,628**	**10,155**	**485**	**5.0**

Source: North Carolina Office of State Budget and Management 2014.

Household Composition

More than 59,000 households live in Catawba County as of 2010, the latest estimate available from the American Community Survey (Table 1-7). About 65.9% of all households are classified as "families." Of these households, a total of 15,651 (26.4% of all households) have children under 18-years old, while 6,229 (10.5% of all households) have one or more children under age six (Catawba County data for households with zero- to four-year olds was not available.

Table 1-7.
Catawba County Household Characteristics, 2012

Household Type	Number of Households	Percent of All Households
Total Households	59,291	100.0
Family Households (Families)	39,069	65.9
With Own Children Under 18 Years	15,651	26.4
With Own Children Under 6 Years	6,229	10.5
Married-Couple Family	29,229	49.3
With Own Children Under 18 Years	9,848	16.6
With Own Children Under 6 Years	3,683	6.2
Male Householder, no wife present, family	3,295	5.6
With Own Children Under 18 Years	1,915	3.2
With Own Children Under 6 Years	622	1.0
Female Householder, no husband present, family	6,545	11.0
With Own Children Under 18 Years	3,888	6.6
With Own Children Under 6 Years	1,917	3.2
Nonfamily Households	20,222	34.1

Source: 2012 American Community Survey, US Census Bureau.

The Census Bureau identifies three types of families: married couples; male householder with no wife present; and female householder with no husband present. Nearly half of all households in Catawba County are married couples. The ACS estimates that there are 3,295 male householders with no wife present households, and 6,545 female householders with no husband present households in Catawba County. Of the 6,229 households with children under six, 3,683 are married couple families, 622 are male householder no wife present, and 1,917 are female householder, no husband present households. This means than 40.8% of householders with children under six in Catawba County are single-parent households.

Area Description and Demographics Overview

Throughout the past decade, Catawba County has continued to grow in overall population, though much more slowly than in the 1990s. The County grew more racially and ethnically diverse between 1990 and 2010. Census results show a strong influx of Hispanic residents, while the proportion of African-Americans and Asians remained generally constant since 2000, and the proportion of non-Hispanic whites decreased. Though the number of children did see an increase from 2000 to 2010, the rate of increase was very low and the population of children age zero to five declined as a percentage of the whole population. Of all households with young children, about two in five were led by a single parent.

Section Two:
Catawba County Schools Early Head Start-Eligible Children and Families: Demographic, Economic and Social Characteristics

Assessment Maps

Included in this *Assessment* are a series of maps which indicate selected variables of Early Head Start-eligible children and families. These maps depict, by geographic area, concentrations of persons within Catawba County who may be in need of the services provided by the Catawba County Schools-Early Head Start (CCS-EHS) program.

Maps included in Section Two use one of two systems to divide Catawba County geographically. The first, and most common, type of division is by Census Tract (Census 2010 boundaries). Some statistics included in the *Assessment* are provided by the US Census Bureau, and Census Tracts are the primary sub-county geographical division in which data are available for the years examined. A base layout of Census Tracts can be seen in Map 2-1, which lists the names of the Tracts, as well as the location of municipalities in the County.

When possible, the Census Tract division system described above has been enhanced by data detailed at the Census Block Group level. In these cases, the Block Groups are subdivisions of the Census Tracts, so Map 2-1 can still be used for reference.

The second system of County division is by elementary school district. Some school district data have been provided by the NC Department of Public Instruction, while other data have been geographically configured to correspond with these districts. In a manner similar to the previous map, Map 2-2 can be used as a reference for elementary school districts, and will provide a point of reference between the districts and municipal locations in the County.

Analysis of Birth Certificate and Demographic Data

The North Carolina Center for Health Statistics provided complete Catawba County birth certificate data during calendar years 2008 through 2012 for purposes of the *Assessment*. This data revealed 9,055 births from 2008-2012 in the County and included the following variables: date of birth, home address of newborn child, race/ethnicity of mother, race/ethnicity of father, mother's state/country of birth and father's state/country of birth. Although NCCHS regulations prohibit researchers from displaying individual family locations in a public document, the addresses were used to analyze relevant variables to Census Tract, Block Group and Elementary School District levels.

The data provided by the birth certificates have been used primarily to analyze the demographics and locations of births throughout Catawba County. This is relevant to a County-wide analysis of the Early Head Start program for several reasons:

- CCS-EHS' mission to serve low-income infants, toddlers, pregnant women and their families. As seen in the examination of Census and other data below, there is a

significant correlation between economic need and racial/ethnic minority status. Thus it is helpful to determine areas with high minority infant and toddler populations.

- Another principle of the Early Head Start program is to support the culture and language of each family. With sizeable Hispanic, Hmong and African-American populations, it will be helpful for CCS-EHS personnel to see the geographic concentrations of each minority group as well as economic, health and other factors associated with each ethnic community.

This report is a follow-up to the 2011 *Catawba County Early Head Start Community Assessment*, which also included birth certificate data. In the 2011 report, birth certificate data from 2005-2009 were analyzed. In order better to understand the demographics of very young children in the Hickory Metro in this current report, the 2005-2009 data are compared to the 2008-2012 data in both maps and text. It is worth noting that two of the years – 2008 and 2009 – overlap, and are present in both populations. Nonetheless, the data are kept in five-year groupings because birth certificates can be matched most directly with Census information. Most Census data in the report, especially on a Census Tract level, are derived from the five-year sampling conducted by the Census Bureau's *American Community Survey* (ACS). The advantage of this grouping of data is that in any given Census Tract birth certificate data from 2008-2012 can be compared to Census ACS data from the identical time period.

Minority Births County-Wide

Map 2-3 displays the density of minority births per square mile by Census Block Group, from 2008 to 2012, using birth certificate data. The highest concentration was 204.9 births per square mile in Census Tract 104.02, Block Group 1, which is located just north of Hickory High School (heavily multi-family area). Generally, higher concentrations of minority births occurred in south-central and eastern sections of Hickory, from Ridgeview to areas just east of NC 127 in Hickory, as well as sections of Long View. Census Block Groups in Newton ranged from 36.5 to 75.0 minority births per square mile, while Conover, especially areas north of US 70, displayed significantly lower concentrations. The lowest density of minority births in the County, 0.5 per square mile, occurred near Lake Norman in southeastern Catawba County. Other Census Block Groups with low minority births per square included southwestern Catawba County (0.7 - 1.0), west of Maiden (1.5), block groups near Bandy's High School in southeast Catawba County (0.7 - 1.0), and the northern section of the Oxford community (1.3).

Overall, the analysis revealed two trends with respect to Catawba County minority births. First, fewer minority births occurred between 2010 and 2012 compared to 2005 to 2007. Countywide, the total number of unduplicated minority births fell from 4,633 in 2005-09 to 4,452 in 2008-12 (-181 or -3.9%). Though falling, the rate of decline was slower than that observed in white, non-Hispanic births, which fell from 5,152 from 2005-09 to 4,603 from 2008-2012 (-549 or -10.7%). Since minority births fell more slowly than white non-Hispanic births, their percentage rose from 47.4% in 2005-09 to 49.2% of all births in 2008-12.

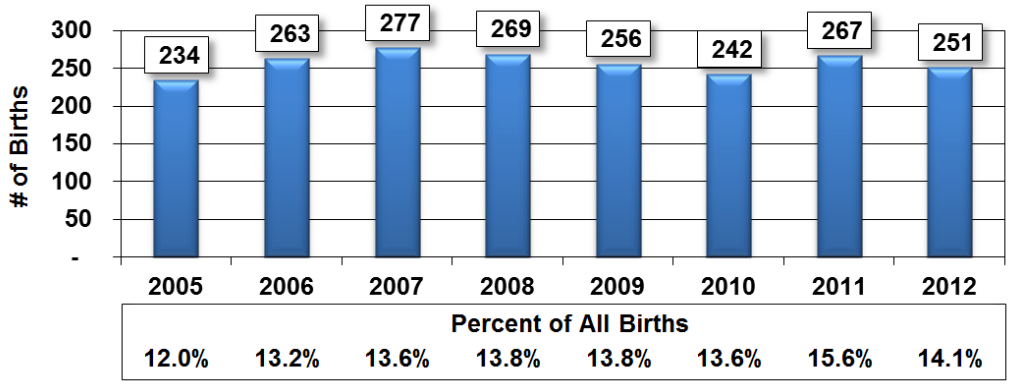
The second trend is noticeable changes in the geographic distribution of minority births throughout Catawba County. Traditional areas of high minority populations, such as southern

Hickory and eastern Newton, experienced markedly lower minority birth rates. This trend was especially notable in the Ridgeview area of Hickory, which fell from 237.0 minority births per square mile in 2005-09 to 187.9 in 2008-2012 (-20.7%). Meanwhile, many areas of traditionally lower minority populations experienced increases in minority births, such as the Saint Stephens community from Kool Park Road northward to Snow Creek Road (40.9 to 48.6 minority births per square mile, +18.8%), as well as the Block Group lying south of the central portion of Maiden (8.7 to 13.0 minority births per square mile, +49.4%). This trend shows increasing diversity of Catawba County's resident population.

African-American Young Children (0-4)

From 2005 to 2012, the number of African-American children born in Catawba County has remained relatively stable, ranging between 234 and 277 births each year (Figure 2-1). As a percentage of all births in the County, however, African-American births rose from 12.0% of all births in 2005 to 15.6% of births in 2011, before falling slightly to 14.1% in 2012. This finding is consistent with stagnant growth in the total African-American County population, as seen in Figure 1-1 on page 8.

Figure 2-1. Catawba County African-American Births by Year, and Percentage of All Births by Year, 2005 to 2012



Source: NC Center for Health Statistics, 2014. Births included infants with one or two African-American birth parents.

Map 2-4 displays African-American children as a percent of all births from 2008-12, with the births grouped by 2010 Census tract boundaries. The map also allows comparison of the 2008-12 data with earlier data from 2005-09 in order to identify geographic areas of population change. An examination of the Map 2-4 indicates that concentrated areas of African-American births continue to be located in south-central Hickory (Ridgeview), where African-Americans accounted for 56.1% of all births from 2008-12. Other areas of southern and eastern Hickory, as well as the municipalities of Long View and Newton, experienced births of African-American children which constituted more than 15% of total births.

The inset located on the right side of Map 2-4 indicates where the number of African-American births in Catawba County grew or declined between 2005-09 and 2008-12. Several tracts which have historically had large African-American populations experienced population decreases, such as south-central and southeastern Hickory, as well as northern Long View and western Newton. Other areas with traditionally small African-American populations

experienced growth in the number of black births, including areas around Conover north of Interstate 40, portions of Viewmont in Hickory, as well as Claremont. Data results suggest that African-American families are relocating to different geographic areas in the County. Overall from 2005-2009 to 2008-2012, ten tracts within the County grew in the number of African-American births, 19 declined and two experienced no change, while the overall African-American births declined by 17 births, or -1.3% countywide.

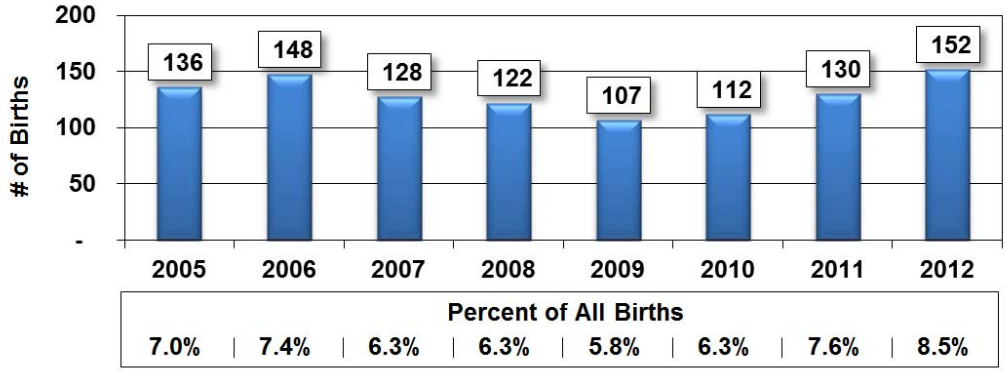
Possible reasons behind the decrease of African-American births may include a lack of in-migration of young African-American families, as well the County's job losses since 2000. Educational achievement for African-Americans in Catawba County is lower than for the overall population, and strong employment losses have continued from 2000 through 2013 in Catawba County the textiles and furniture industries, which traditionally have employed large numbers of persons without college degrees.

Asian Young Children (0-4)

The majority of Asians (79.3%) in Catawba County classify themselves as Hmong (62.9%), Vietnamese (10.0%) or Indian (6.4%).[1] The Hmong people arriving in McDowell, Burke and Catawba Counties beginning in the late 1970s, were allies of the United States during the Vietnam War. After the war ended, the Hmong were persecuted severely by the victorious Communists and eventually were granted asylum in the United States as a token of gratitude, and local churches helped Hmong refugees settle in the Catawba Valley.

The number of Asian births per year in Catawba County from 2005 to 2012 can be seen in Figure 2-2. After dipping from 148 births in 2006 to 107 in 2009, Asian births have rebounded, rising to 152 in 2012.

Figure 2-2. Catawba County Asian Births by Year, and Percentage of All Births by Year, 2005 to 2012



Source: NC Center for Health Statistics, 2014. Births included infants with one or two Asian birth parents.

Map 2-5 indicates the distribution of Asian births in the County from 2008-12 by Census Tract, and compares this with the percentage of Asian births in those tracts between 2005 and 2009. The movement of Asian families with very young children from Census Tract 107 (portions of Long View and Hickory), which was discussed in the 2011 version of this report, appears to be

[1] US Census 2010. Table QT-P8, "Race Reporting for the Asian Population by Selected Categories" for Catawba County, NC.

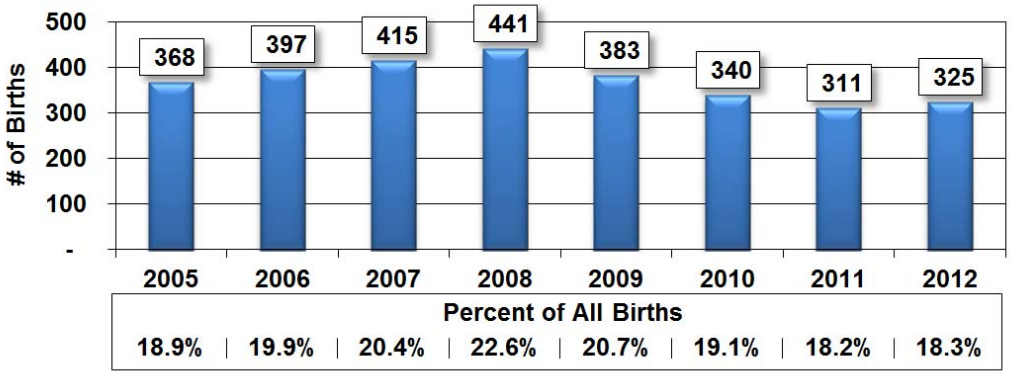
continuing. Census Tract 107 now has a lower percentage of Asian births (4.7%) than the County average (6.9%). The only tract experiencing no Asian births from 2008-12 was in northwest Hickory (Tract 105.02). Perhaps fewer younger Asian families reside in Tract 107 in 2014 than in 2011

The highest percentage of Asian births in Catawba County continues to be in the northern Oxford area, mostly to the west of NC Highway 16, where Asian populations settled in the mid-2000s. It is noteworthy to mention, however, that the number of Asian births in that area have not increased during the past five-year period (2008-12). Other notable areas experiencing increases in Asian births include the area surrounding Startown Road north of NC Highway 10 (8.3% to 12.6% of all births), as well as near Lake Hickory east of NC 127 in the Cloninger Mill area (4.1% to 10.2% of all births).

Hispanic Young Children (0-4)

After reaching a peak of 441 births in 2008, the number of Hispanic births in Catawba County has decreased over the past years, and averages about 70 fewer births per year as of 2012 compared to the late 2000s (Figure 2-3). As of 2012, however, the number of Hispanic births (325) still surpasses African-American births (251), which means that Hispanics still have the largest number of minority births in the County. Hispanic births are the only minority category to decline in both real numbers and percentage of all births since 2008.

Figure 2-3. Catawba County Hispanic Births by Year, and Percentage of All Births by Year, 2005 to 2012



Source: NC Center for Health Statistics, 2014. Births included infants with one or two Hispanic birth parents.

Map 2-6 displays the distribution of Hispanic births in Catawba County from 2008 to 2012 according to Census Tract boundaries, and compares this with the percentage of Hispanic births from 2005-09. After the explosive growth seen throughout the County during the early 2000s, this map shows a decline of Hispanic births in most areas of the County. Areas in Catawba County retaining a high percentage of Hispanic births include southeastern Hickory centered near the intersection of Tate Boulevard and McDonald Parkway (45.0% of all births), as well as the next Census Tract north from there, lying in Hickory between Highland Avenue and Springs Road. Most rural areas of the County tended to experience Hispanic birth rates of fewer than 10% of all births.

The inset at right of Map 2-6 indicates that Hispanic births declined in 22 of 31 tracts between 2005-09 and 2008-12, with fewer births throughout central and northern Hickory, as well as all of Newton and in most rural areas of the County. There were areas of growth, however, with a notable increase experienced in Tract 103.01, which includes the northern section of the Saint Stephens community along Lake Hickory. In Tract 103.01 Hispanic births grew from 22.2% of all births to 29.2% of births.

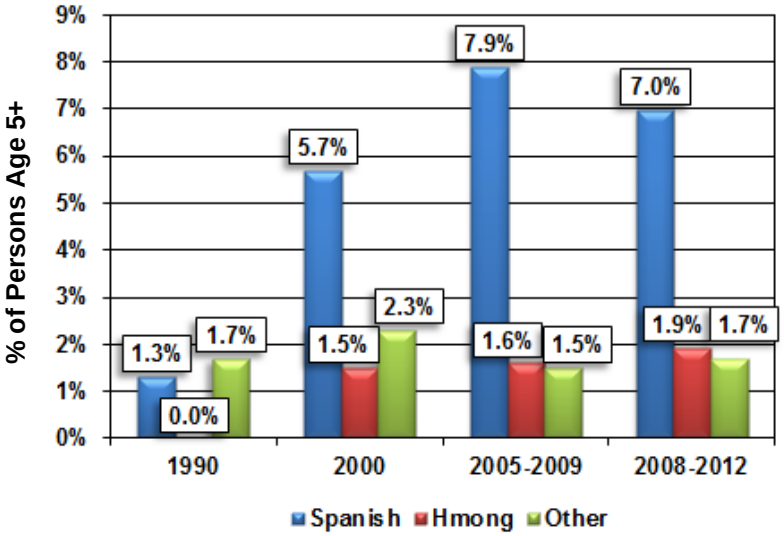
Though overall Hispanic births have retreated from the strong growth of the 1990s and early 2000s, the number of births since 2010 appears to have stabilized. Considering the particularly high proportion of young Hispanic children in poverty in Catawba County -- 814 of 1,694 Hispanic children age 0-4, or 48.1%, live in poverty -- the needs of this very young population appear to remain significant.[2]

Minority Languages County-Wide

The significance of diverse racial and ethnic backgrounds in Catawba County families for the Early Head Start program leads to consideration of how many individuals primarily speak languages other than English. Overall, the percentage of persons speaking primarily English in Catawba County in 2005-09 was slightly higher (89.4%) than North Carolina as a whole (89.2%), and was considerably higher than the national average (79.5%).[3]

Figure 2-4 shows these households, broken down by language, from 1990 to 2008-12. The percentage of persons living in Catawba County speaking Spanish has experienced significant growth from 1.3% 1990 to 7.9% in 2005-09, and then dropping off by 2008-12 to 7.0%. Considering that Hispanic births continue to constitute over 18% of all births in Catawba County, the number of Spanish-speaking individuals and families may continue to grow, although it is increasingly likely that Hispanic children raised in the County will learn English in addition to Spanish.

Figure 2-4. Percentage of Catawba County Residents Age 5+ Primarily Speaking Language Other than English at Home, by Language, 1990-2012



Source: 1990 and 2000 Census and 2005-09 (5-Year) American Community Survey, US Census Bureau, 2014.

The percentage of persons speaking primarily Hmong at home grew from 0.0% in 1990 to 1.5% in

[2] US Census 5-Year American Community Survey (2008-12), Table 170101I "Poverty Status in the Past 12 Months by Sex by Age (Hispanic or Latino)."

[3] US Census 5-Year American Community Survey (2008-12), Table B16001 "Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over"

2000 and then remained stable throughout the 2000s. Surprisingly, the proportion of people who speak Hmong has experienced some growth, up to 1.9% in 2008-12, although the Hmong birth rate has declined slightly. The increase in persons speaking the Hmong language may be a result of an influx of Hmong to Catawba County from other larger Hmong concentrations in the United States (such as Minneapolis or Fresno, CA), or perhaps the growth is a result of efforts to preserve the group's unique culture and language within the Hmong community.

Map 2-7 shows by Census Tract the estimated percentage of Catawba County population age 5+ which speak English at a level other than "very well." [4] Percentages of County residents not able to speak English "very well" has remained stable since 2000, and as of 2008-12 was 7,797 persons, or 5.4% of all persons age 5 and over. Concentrations of these persons remain highest in locations with higher minority populations, including the area near Hickory High School (11.0%) and the Ridgeview area (14.0%), as well as the Census Tract 103.03 encompassing portions of the St. Stephens Elementary district (14.0%). In all of these areas, however, the percentage of persons unable to speak English "very well" fell from 2006-10 to 2008-12. During the same time, however, populations rose in other parts of the County, including portions of Conover and Claremont (2.3% to 8.3%), the Mountain View community (4.4% to 8.0%), and in north Saint Stephens area near Lake Hickory (1.6% to 4.5%). Both eastern and western portions of Newton grew slightly in persons not speaking English "very well," as did the Census tract 114.01 which includes portions of Claremont (7.0% to 8.4%).

Minority Births by Elementary School District

Table 2-1 on page 20 indicates the percent of minority births from 2008-12 by each elementary school district in the County, both by type of racial/ethnic minority, as well total minorities. Overall, 49.2% of children born in all of Catawba County from 2008-12 were racial or ethnic minorities. Of the three school systems in Catawba County, minorities constituted a majority of births in two, making up 61.5% of births inside the boundaries of the Hickory Public Schools system and 59.7% in Newton-Conover Schools. Within the boundaries of the Catawba County School system, 42.7% of all births during this time were minorities. Throughout all three school systems, Hispanic births constituted the largest minority group, accounting for 19.8% of all births from 2008-12. Hickory Public Schools, however, experienced nearly as large a proportion of African-American births (24.1%) as Hispanic births (24.3%)

The percentage of all minority births by elementary school district from 2008 to 2012 can be observed in Map 2-8. The map allows the geographic comparison of these births with those occurring from 2005 to 2009. As seen along the left margin of the map, minorities as a percentage of all births increased from 2005-09 to 2008-12 in all three school systems. The largest percentage increase in minority births in any elementary school district County-wide occurred at Claremont Elementary, where minority births rose from 40.0% of all births in 2005-09 to 49.0% of all births in 2008-12 (increasing from 124 to 165 births). The inset along the right side Map 2-8 indicates the change in numbers of births within each elementary district.

[4] The percentage of persons not speaking English "very well" is not directly comparable to the percentage of persons who primarily speak a language other than English at home. That is, a person might be able to speak English "very well," and simply choose not to speak English at home.

Table 2-1. Minorities as % of Births by Elementary School District for Catawba County, 2008-2012						
Elementary School District	**Total Births**	**Percent Hispanic**	**Percent African-American**	**Percent Asian**	**Percent All Minority *(unduplicated)****	**Percent White / Non-Hispanic**
Balls Creek Elementary	433	11.3%	4.8%	4.8%	28.6%	71.4%
Banoak Elementary	196	4.1%	7.7%	5.6%	34.2%	65.8%
Blackburn Elementary	401	11.2%	9.0%	11.2%	41.6%	58.4%
Catawba Elementary	347	13.5%	13.8%	2.6%	41.2%	58.8%
Claremont Elementary	337	15.1%	11.6%	13.1%	49.0%	51.0%
Clyde Campbell Elem.	254	18.1%	8.7%	11.0%	44.5%	55.5%
Lyle Creek Elementary	372	19.4%	8.3%	14.8%	48.9%	51.1%
Maiden Elementary	387	13.2%	12.4%	3.9%	37.2%	62.8%
Mountain View Elementary	399	5.0%	8.5%	7.5%	30.6%	69.4%
Oxford Elementary	397	9.1%	7.6%	10.6%	37.5%	62.5%
Sherrills Ford Elementary	288	3.1%	5.9%	1.0%	16.0%	84.0%
Snow Creek Elementary	328	25.0%	4.9%	5.5%	43.0%	57.0%
St Stephens Elementary	694	37.3%	17.1%	6.8%	39.0%	61.0%
Startown Elementary	378	11.4%	10.3%	11.6%	40.7%	59.3%
Tuttle Elementary	293	10.2%	4.8%	5.5%	33.1%	66.9%
Webb A Murray Elem.	305	34.1%	16.7%	5.2%	62.0%	38.0%
Catawba County Schools	**5,809**	**16.4%**	**10.0%**	**7.6%**	**42.7%**	**57.3%**
Jenkins Elementary	339	16.2%	25.4%	4.7%	51.3%	48.7%
Longview Elementary	420	25.7%	27.6%	6.9%	71.2%	28.8%
Oakwood Elementary	389	29.3%	20.1%	2.8%	57.3%	42.7%
Southwest Elementary	455	24.6%	23.3%	8.6%	65.3%	34.7%
Viewmont Elementary	434	24.7%	24.0%	4.1%	59.9%	40.1%
Hickory City Schools	**2,037**	**24.3%**	**24.1%**	**5.5%**	**61.5%**	**38.5%**
North Newton Elementary**	341	39.3%	17.9%	5.9%	68.9%	31.1%
South Newton Elementary	369	25.5%	22.0%	3.3%	61.0%	39.0%
Shuford Elementary	507	23.7%	14.4%	6.7%	52.5%	47.5%
Newton-Conover Schools	**1,217**	**28.6%**	**17.7%**	**5.4%**	**59.7%**	**40.3%**
All 3 School Systems	**9,063**	**19.8%**	**14.2%**	**6.9%**	**49.2%**	**50.8%**

* Minority status determined by one or both parents. A birth can be classified as more than one minority race or ethnicity. Unduplicated minority count consists of births in which at least one parent is a racial minority, Hispanic, or "Unknown." The total count for this column is unduplicated, and within it each individual minority birth is counted only once, even if a birth is included among multiple minority categories. Accordingly, the "all minority" count can be greater or smaller than the sum of individual minority category totals. ** Prior to 2013-2014 this same district was occupied by Thornton Elementary School.

Source: NC State Center for Health Statistics (Birth Statistics 2008-2012); Catawba County GIS (School District Boundaries), 2014.

In several cases, such as the St. Stephens Elementary district, minority births as a percent of all births increased (66.5% to 68.9%), but the actual number of minority births decreased (510 to 478) due to fewer children being born overall in that district. Accordingly, it is useful to compare the inset map, which indicates whether the actual number of minority births increased

or declined, with the large map of 2-8, which displays the percentage changes of births in each school district.

Catawba County Schools

The number of babies born within the boundaries of Catawba County School system from 2005-09 to 2008-12 fell by 480 or -7.6%. During that time, the proportion of minorities rose from 40.4% of children born in 2005-09 to 42.7% in 2008-12. It is noteworthy for the Catawba County Schools that minority births fell in both number and as a percent between 2005-09 and 2008-12 in portions of eastern Catawba County.

For the Catawba County School system, minority births appear to be shifting away from the eastern part of the County and toward elementary districts in the south and center of the County, including Maiden, Startown and Claremont. Catawba system elementary districts in the southwestern part of the County appear to be growing in proportion of minority births as well, including Mountain View and Banoak. Between 2005-09 and 2008-12 the Banoak district experienced a strong reduction in births overall (-14.1%), but the proportion of minorities of the births that did occur climbed from 27.6% to 34.2%.

Hickory Public Schools

Similar to the County school system, the total number of babies born within the Hickory Public schools declined from 2005-09 to 2008-12 by 205 births (-9.1%). Likewise, the number of minority births fell in every Hickory elementary school district except Southwest. Significant declines in minority births occurred in the Oakwood (-55, from 278 to 223) and Long View (-43, from 342 to 299) districts. As a percentage of all births which did occur, however, minority births rose slightly in every elementary school district except Oakwood.

Newton-Conover Schools

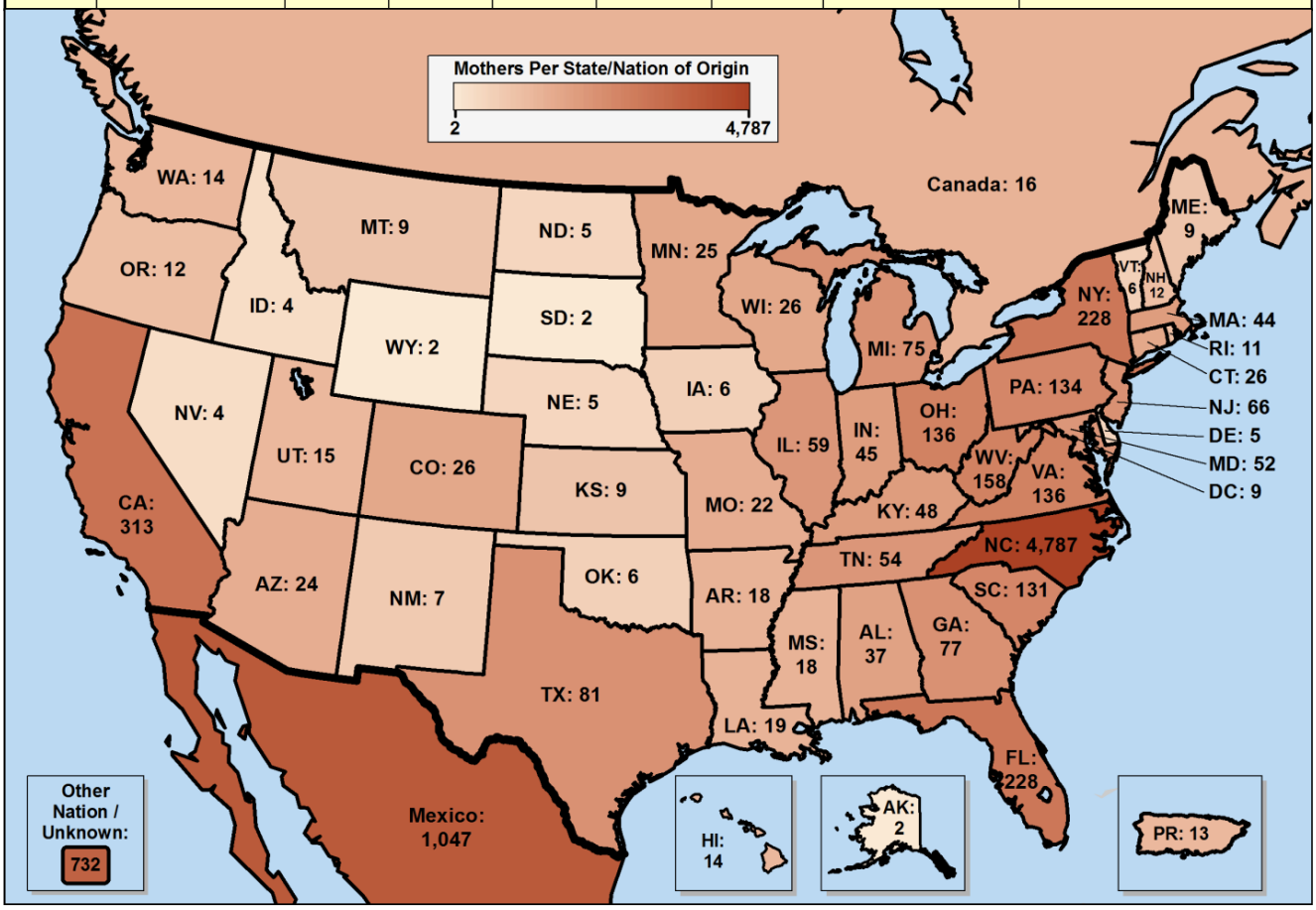
The number of overall births occurring within the boundaries of the Newton-Conover School system from 2005-09 to 2008-12 fell by only 41 (-3.3%), a much smaller percentage decline than the other two school systems. The overall number of minority births fell at an even lower rate, by only -2.0%. In fact, the number of minority births rose slightly in two elementary schools (21 in Shuford and 7 in South Newton), while falling at North Newton (-43). As a percentage of all births minorities grew in all three elementary districts. Minorities account for 68.9% of all births occurring in North Newton Elementary district, 61.0% in South Newton and 52.5% in Shuford. In all three elementary school districts Hispanic births occurred more than African-American births, which in turn occurred more than Asian births.

International and Intranational Immigration

Table 2-2 on page 22 indicates the most common state or foreign nation of birth for mothers of babies born between 2008 and 2012 in Catawba County.[5] The results in the table reflect

[5] For purposes of this chart, the state or nation of the mother's birth was chosen, because 2,502 (27.6%) of Catawba County birth certificates listed "Unknown/Other" as the father's place of origin.

Table 2-2. Most Common States/Nations of Mother's Birth, from Catawba County Birth Certificates, 2008-2012 (Total Births = 9,069)								
Rank	State / Nation	2008	2009	2010	2011	2012	Total Births	Percent of All Births
1	NC	976	956	969	903	983	4,787	52.8%
2	Mexico	275	236	164	204	168	1,047	11.5%
3	CA	69	55	62	62	65	313	3.5%
4	FL	51	46	40	45	46	228	2.5%
5	NY	57	48	37	45	41	228	2.5%
6	WV	39	36	21	35	27	158	1.7%
7	OH	31	33	27	22	23	136	1.5%
8	VA	29	35	21	29	22	136	1.5%
9	PA	26	30	33	20	25	134	1.5%
10	SC	24	27	29	25	26	131	1.4%
11	TX	14	12	14	17	24	81	0.9%
12	GA	18	18	17	14	10	77	0.8%
13	MI	19	12	17	16	11	75	0.8%
14	NJ	13	12	11	12	18	66	0.7%
15	IL	11	11	17	14	6	59	0.7%



several demographic trends affecting Catawba County. Just over half (52.8%) of all Catawba County women giving birth between 2008 and 2012 were themselves born in North Carolina. As seen in Table 2-2, the number of mothers from North Carolina had been falling, from 976 in 2008 down to 903 in 2011, but experienced a surge in 2012 to 983. Time will tell if this spike is an anomaly or a trend.

The next most common origin for mothers was Mexico, which at 11.5% was represented more often than the next five US states combined. Nonetheless, the number of mothers from Mexico fell sharply from 275 in 2008 down to 168 in 2012 (-38.9%). Considering that the number of Hispanic children born during this time did not undergo as steep a drop (falling only 26.3%), it may be that more Hispanic children are being born to mothers who themselves were born in the United States.

Though mothers born in Mexico declined from 2008 to 2012, mothers from California remained steady throughout the period. Of the 313 children born to mothers from California, 71 were Hispanic (22.7%), while nearly half (151, or 48.2%) were Asian. The proportion of Hispanic babies born to mothers from Florida was generally low (13.2%), as was the proportion of Hispanic babies born to mothers from New York State (19.7%). Hispanic babies made up less than one-third of children born to mothers who were themselves born in Texas (32.1%). Overall, children born to Catawba County mothers who were themselves born in other US states represent a much lower proportion of Hispanic children (11.6%) than in the age 0-4 population nationwide (33.3%).[6]

Analysis of Employment, Income, Poverty and Public Assistance

This section examines the financial status of Catawba County families who are eligible for Early Head Start. The report includes County-wide and localized analysis of employment, income data, distribution and attributes of lower income families and levels of reliance on various forms of public assistance.

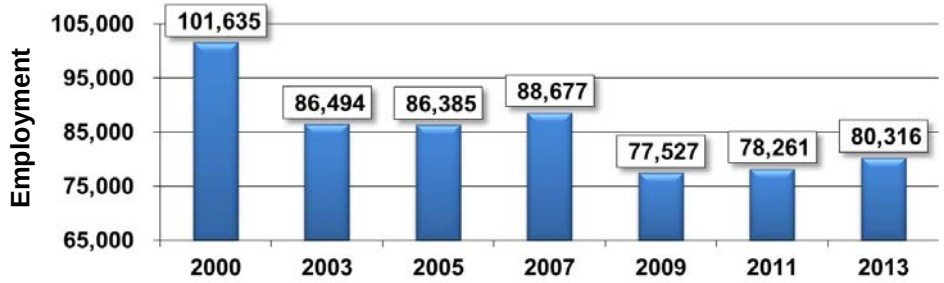
Employment

Catawba County experienced significant employment losses during the first decade of the 2000s (Figure 2-5). Nearly one of every four jobs were lost, falling from 101,635 jobs in 2000 to 77,527 positions in 2009, a drop of 24,108 jobs, or -23.7%. A closer look reveals that the majority of losses occurred during two recessions. During the first recession between 2000 and 2004 Catawba County lost 15,141 jobs. Employment recovered slightly between 2003 and 2007 before falling by another 11,150 positions from 2007 to 2009. Since 2009, however, employment has increased gradually through 2013, adding back 2,789 positions.

From 2000 to 2009, manufacturing employment fell by half (-49.8%), from 43,054 to 21,626. One of the county's largest manufacturing industries during this period, furniture, lost 6,464 jobs (-45.4%). Another traditionally large manufacturing industry, textiles, also fell sharply, from 8,764 jobs in 2000 to 1,949 jobs in 2009 (-77.8%, or a drop of 6,815 positions).

[6] US Census 5-Year American Community Survey (2008-12), Table B01001I and "Sex by Age: Hispanic and Latino"

Figure 2-5. Catawba County Employment, 2000-2013



Source: NC Department of Commerce, Division of Labor and Economic Analysis, 2014. 2013 figures are from Q3 (latest available).

Since 2009, however, Catawba County manufacturing employment has remained stable, as of 3rd Quarter 2013 dropping by only 380 jobs, or -1.8%. Though manufacturing plays a much reduced role in the employment of Catawba County in 2013, it still accounts for over a quarter of all jobs (26.4%, or 21,246), much higher than the NC statewide average of 11.2% of total positions. From 2009 to 2013, furniture manufacturing has remained steady (+41 jobs or +0.5%), while textiles has continued to decline (-382 jobs, or -19.6%). The County's manufacturing industries are now more diversified, with significant employment in paper product manufacturing (1,372 jobs), plastics (1,857 jobs), and electrical equipment manufacturing (2,180 jobs, mostly in fiber-optic cable production). Manufacturing employees earn an average salary of $40,924 per year, which is 13.4% higher than the County's average wage for all positions ($36,088). Great disparity, however, exists between types of manufacturing: for instance, textile workers average $30,420 per year, while electrical equipment manufacturing workers earn an average of $64,584 annually. [7]

With the loss of one out of every two manufacturing jobs, it is useful to identify the areas in the County where manufacturing workers live. Using Census estimates from the 2008-12 American Community Survey, Map 2-9 shows the percent of employed persons working in manufacturing, and compares them with 2006-10 ACS manufacturing employment. Generally, areas of high manufacturing employment tend to coincide with areas of higher-than-average poverty, especially southeastern Hickory (45.5% manufacturing), Census Tract 107 in portions of Hickory and Long View (35.0% manufacturing) and western Newton (32.5% manufacturing). Comparing the data since 2006-10, it appears that some manufacturing employees are shifting away from living in low-income areas, and are increasing in higher income areas in the County, particularly towards Claremont and Conover. Should this trend continue manufacturing employment may not be considered as a strong factor in determining the relative need of an area in future *Community Analysis*. In this assessment, however, manufacturing will be used, due to the very heavy loss of jobs experienced in these areas over the past decade.

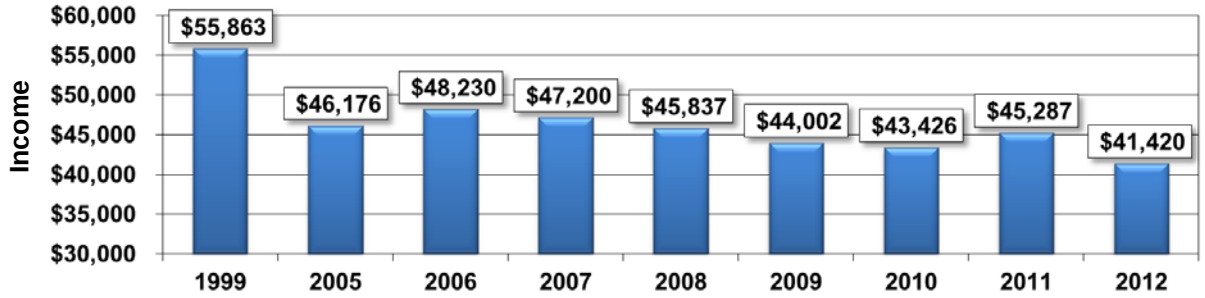
Income

From 1999 to 2012, median household income in Catawba County, when adjusted for inflation, fell by 25.6%, or $14,443 (Figure 2-6, page 25). The largest drop occurred between 1999 and

[7] Figures are from the Quarterly Census of Economic Welfare (QCEW) as reported by the NC Department of Commerce, Division of Labor and Economic Analysis, 2014.

2005, which was also the period of heaviest job losses in the County (Figure 2-5, page 24). Since 2005, income has not rebounded, but has actually dropped nearly an additional $4,000.

Figure 2-6. Catawba County Median Household Income, 1999 and 2005-2012
(*adjusted for inflation to 2012 dollars*)



Source: 2000 Census (Table P053); US Census 1-Year ACS Averages (2005-2012) (Table B19013). Figures adjusted for inflation based on rates from the US Bureau of Labor Statistics.

The loss of Catawba County's household income from 1999 to 2012 is much more severe than in the State and the nation: While Catawba County median household income has decreased by 25%, North Carolina median household income fell by -16.4% ($54,000 to $45,150) while median household income in the United States dropped by -11.1% ($57,804 to $51,371) (adjusted for inflation). In 1999, Catawba County's median household income was 3.5% higher than the State median household income, but as of 2012, it was 8.3% lower than the State's median household income, and 19.4%, or $9,951, below the national median household income.

Catawba County households earn income in different ways (Table 2-3). Of the 58,040 households in Catawba County in 2012, a sum of 44,900 (77.4%) earned income through "Earnings" (which include job earnings, as well as unemployment benefits and Supplemental Security Income (SSI)). Nearly one-third of Catawba households (32.6%) collected social security benefits, and about one-sixth (15.9%) received other retirement income.

Table 2-3
Catawba County Sources of Earned or Retirement Income for Households, 2009 and 2012

Type of Household Income	2009		2012	
	Number of Households	% of All Households*	Number of Households	% of All Households*
Total Households	58,040	100.0%	59,291	100.0%
With Earnings	44,900	77.4%	46,086	77.7%
With Social Security	18,555	32.0%	19,339	32.6%
With Other Retirement Income	9,062	15.6%	9,422	15.9%

*Adding percentages for each category together will exceed 100% since households can receive income through more than one source.

Source: US Census, American Community Survey (Table DP03), 2009 and 2012.

These figures reveal interesting trends in Catawba County's population. It is helpful to note that the median age of Catawba County residents has been rising dramatically, from 36.1 years in 2000 to 41.0 years in 2012. Part of this rise in median age is due to the overall aging of the "Baby Boom" generation, but in Catawba County is it also intensified by a substantial

drop in population of young adults (age 25-44) during the past decade.[8] Given this rise in median age, it would be expected that the proportion of households receiving Social Security income would rise (32.0% to 32.6%). It is surprising, however, that the percentage of households receiving earnings also rose (77.4% to 77.7%). This appears to indicate that more persons are remaining in the workforce and delaying retirement.

It is also noteworthy that only about half as many households receive "Other Retirement Income" (pensions, savings) as receive Social Security benefits. Accordingly, it would seem that about half of all households receiving Social Security have no other retirement savings, and this result may help to explain why many older residents appear to be remaining in the workforce. From the perspective of Early Head Start, these economic strains on older adults are relevant in light of the growth of grandparents who raise grandchildren, especially among minority populations.

The estimated median household income for each Catawba County Census Tract, averaged from 2008 through 2012, is displayed in Map 2-10. The map also shows the median household income for each tract from 2006-10, adjusted for inflation to 2012 dollars. An examination of this map indicates several trends:

- Median household income varied greatly between geographic areas. Census Tracts with lower median household income included south and southeast sections of Hickory (as low as $25,636) and east Newton ($31,645), as well as Long View (Tract 107), which experienced the lowest median household income in Catawba County ($22,121). Median household income was lowest in areas with high proportions of minority residents.
- Areas of higher median household income within the County included the Census Tracts near Sherrills Ford ($74,750), Conover along Interstate 40 ($52,400), and Mountain View ($57,792). The tract experiencing the highest median household income was the area of northeast Hickory near Lake Hickory, where it was $78,846.
- In the 2011 *Early Head Start Community Assessment* it was noted that areas with a median household income below $40,000 in 2000 tended to decline in income through 2009, while areas in which median household income exceeded $40,000 tended to increase in income. In examining the newer median household income figures from 2006-10 to 2008-12, the following trends appears to be occurring:
    - Areas which possessed less than $40,000 median household income in 2006-10 tended to continue in losing income through 2008-12. Of the eight tracts in 2006-10 which earned less than $40,000, six of them (75%) fell in income through 2008-12. The exceptions were the tracts of south-central Hickory, where income rose from $24,290 to $27,074 (11.5%), and Tract 106 encompassing the part of northwest Hickory and Long View, where income rose from $36,442 to $38,950 (6.9%).
    - For tracts where median household income exceeded $40,000 in 2006-10, most had declined in income by 2008-12. Among these tracts which lost income, it

[8] From 2000 to 2010, the number of Catawba County residents age 25-44 experienced a -7.7% drop (or 3,951 persons).

was noteworthy that median household income declines were strongest in areas with high concentrations of young adults and families. This included Tract 118.01, encompassing the Mountain View community, where income fell from $68,671 to $57,792 (loss of $10,879 or 15.8%), as well as Tract 101.02, (parts of Conover and Claremont) where income fell from $65,870 to $52,440 (-$13,430 or -20.4%). It is interesting to note, however, that median household income increased in the vicinity of Lake Norman and Sherrills Ford, which is populated in large part by retirees who live by the lake and by Charlotte-Metro-based professionals and their families. From 2006-10 to 2008-12, Tract 115.03 increased in median household income from $65,017 to $74,750 (15.0% or $9,733).

Poverty Trends

Determining a family's poverty status is an important factor in determining eligibility for the Early Head Start Program. The federal government sets thresholds for poverty based on family size. For instance, the 2012 poverty threshold for a single parent with one child was $15,825. For a family of two parents and two children, the poverty threshold was $23,283.

Catawba County has experienced a significant increase in the number of people living in poverty over the past decade. From 2000 to 2008-12, the overall number of people in poverty has nearly doubled from 12,688 to 22,934 (10,246 or 80.1%). A closer look at poverty among different ages from 2005-09 to 2008-12 can be seen in Table 2-4. Since 2005-09, the number of persons in poverty has increased across all age groups, and particularly among children. As of 2008-12, a total of 8,233 Catawba County children of all ages lived in poverty, more than one in five (22.8%). The poverty rate for very young children was even higher, 25.4%, or 2,405 small children.

Table 2-4.
Catawba County Poverty Estimates, 2005-09 and 2008-12

Category	2005-09		2008-12		Change 2005-09 to 2008-12	
	Persons in Poverty	Percent	Persons in Poverty	Percent	Change	Percent Change
All Ages	18,678	12.2%	22,934	15.1%	4,256	22.8%
Children Ages 0-17	6,394	17.2%	8,233	22.8%	1,839	28.8%
Children Ages 0-4	2,036	19.5%	2,405	25.4%	369	18.1%
Children Ages 0-17 in Single-Parent-Led Households	3,262	31.3%	4,905	43.1%	1,643	50.4%
Children Ages 0-4 in Single-Parent-Led Households	990	33.6%	1,573	53.9%	583	58.9%

Source: US Census American Community Survey, 5-Year (2005-09 & 2008-12), Tables B17001 and B17006.

Single parents in the County experienced particularly adverse financial situations, and children in these circumstances faced an elevated poverty risk in 2008-12. Forty-one percent of children living with a single parent lived in poverty. Of these children, most of those who were very young (age 0-4) faced hardship, since 58.9% lived under the poverty level. Though

poverty increased among all children, the poverty rate for children in single-parent households grew very strongly from 2005-09 to 2008-12, increasing by 583 children or 58.9% during this time.

As noted in Table 2-4, in both 2005-09 and 2008-12, the proportion of children in poverty was higher in single-parent households than it was in the general child population. Census 2000 data indicated that 28.1% of all households with children age 0-17 were led by single parents. The percentage of households with children age 0-17 reached 30.0% in 2005-09, and by 2008-12 equaled at 31.9% of households, or 5,330 single-parent households. Map 2-11 indicates single-parent homes as a percent of all homes, by Census Tract. Generally, areas with higher poverty rates and higher minority populations also had more households led by a single parent. The area with the highest percentage of single-parent households was south-central Hickory (Ridgeview), where single-parent homes constituted 70.2% of all family households with children.

Several areas of Catawba County saw a substantial drop in the proportion of families headed by a single adult. In particular, single-adult-led homes in parts of Long View dropped from 76.8% of all families with children to 57.0%. A portion of northwest Hickory saw a decline in proportion of single-adult-led homes as well, from 38.3% of homes in 2006-10 to 29.6% in 2008-12. In fact, although the County increased slightly in number and proportion of single-parent-led families, nearly half of the County's Census Tracts (14 of 31, or 45.2%) experienced a reduction in their proportion of single-parent households.

The percentage of all persons in poverty for Catawba County, averaged for the years 2008 to 2012, is shown in Map 2-12, by Census Tract. The results included in the map are very similar to the Census Tracts in Map 2-10 which showed lower household median income. The County's highest poverty rates, ranging from 31.0% to 33.7% of the population, are found in four contiguous tracts running from southeastern Hickory westward to Long View. These areas have traditionally experienced higher than average poverty rates, and although they generally saw a small increase in percentage of persons in poverty, the actual number of persons in poverty decreased in three of the four tracts, as can be observed in the inset map on Map 2-12. The inset map indicates, however, that in almost all other areas of Catawba County, poverty increased in both percentage and actual populations. A significant exception was observed in two tracts constituting the Sherrills Ford area, both of which fell in percentage and actual numbers of persons in poverty.

As noted above in Table 2-4 (page 28), children age 17 and under were more likely to live in poverty than the general population. Map 2-13 displays by Census Tract the percent of children age 0-17 in poverty averaged for the years 2008-2012, as well as their poverty rates for 2006-2010. Over two-thirds of tracts in Catawba County experienced an increase in the percent of children living in poverty, with very similar areas of poverty concentration as were found for the total population in Map 2-12. When examining traditionally higher-poverty areas of southwestern Hickory and Long View, the proportion of children in poverty grew, nearing or exceeding 50% in several tracts, but the actual number of children in poverty declined in these areas as the overall population of children decreased. In other areas of the County, however, the number and proportion of children in poverty grew, in both urban and rural settings.

Growth in childhood poverty was seen in Tract 116.02, which includes the area from eastern Maiden to the intersection of NC Highway 16 and 150. This Census Tract had also seen large increases in poverty for all ages, as well as a large increase in single-parent families. [9]

Public Assistance

The number of persons in Catawba County relying on various forms of public assistance in the past decade has risen dramatically. Economic conditions continue to impact the number of County households receiving SNAP (Supplemental Nutrition Assistance Program) benefits (Table 2-5). In 2012 an estimated 9,263 Catawba County households (about one out of eight) households received these benefits, a 54.4% increase since 2009.

Table 2-5.
Catawba County Sources of Public Assistance Income, by Households, 2009 and 2012

Households	2009		2012		Change 2009-2012	
	# of Households	% of all Households	# of Households	% of all Households	# of Households	% Change
With Supplemental Security Income	1,509	2.6%	2,746	4.6%	1,237	82.0%
With Food Stamps / SNAP Benefits	5,999	10.3%	9,263	15.6%	3,264	54.4%

Source: 2009 American Community Survey and 2012 (1 Year-Estimates DP03) American Community Survey, US Census Bureau.

A closer look at the growth in the SNAP program in Catawba County reveals a substantial increase in financial hardships experienced by many residents (Table 2-6, page 30). This table also examines the need for food stamps in Catawba County compared with North Carolina. From 2000 to 2013, the number of persons receiving food stamps in the County rose over four-fold, from 5,322 to 30,855, while program expenditures increased from $4.1 million to an estimated $44.8 million. Also in 2000, Catawba County had a smaller percentage of its population (3.8%) receiving food stamps than the State (6.3%). By 2013, however, the County's percentage of recipients (19.5%) exceeded the proportion of North Carolina residents on the program (16.7%). Results in Table 2-6 nearly one in five Catawba County residents was receiving food stamp assistance in 2013.

Another valuable measure to assess the economic needs of Catawba County families with children is by measuring the proportion of elementary students who receive free or reduced lunch at school.[10] Eligibility is determined on a sliding scale based on household income and family size. For example, in 2012-13, a two-person household (mother and child), was eligible for reduced-price lunch if the family's income was below $27,991, and for free lunch if their income was below $19,669.

[9] This report does not include a map showing the countywide distribution of children in poverty ages 0-4. The Census Bureau does supply a Census Tract table with estimates of children age 0-4 in poverty: "B17001. Poverty Status in the Past 12 Months by Sex and Age." The margins of error, however, for each tract generally approach or exceed the entire number of young children indicated therein, and mapping that data would provide unreliable information to CCS-EHS.

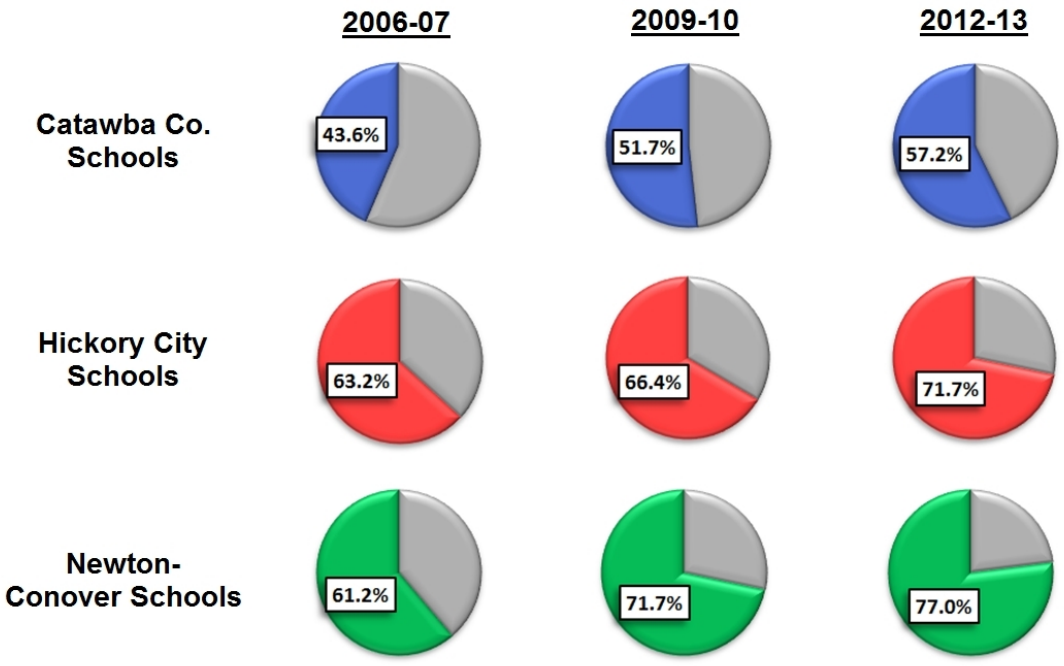
[10] Data on free and reduced lunch in Catawba County was provided by the NC Department of Public Instruction, 2014. Statistics listed in this assessment regarding free and reduced lunches include only elementary school students enrolled at schools with traditional school districts. It does not include data from non-traditional or alternative schools.

Table 2-6. Catawba County and North Carolina SNAP Program Recipients, 2000-2013						
Year	Catawba Co. Recipients	% of Population	Expenditures ($ millions)	NC Recipients	% of Population	Expenditures ($ millions)
2000	5,322	3.8%	$4.1	506,736	6.3%	$381.6
2003	9,751	6.6%	$10.7	624,167	7.4%	$677.0
2006	14,123	9.4%	$15.6	842,363	9.5%	$932.7
2008	15,891	10.2%	$19.7	942,265	10.2%	$1,156.2
2010	23,457	14.8%	$38.5	1,294,732	13.6%	$2,137.5
2013	30,855	19.5%	$44.8 (est.)	1,670,428	16.7%	$2,743.3

Source: NC Department of Health and Human Services, via NC State Office of Budget and Management (NC LINC), 2014. 2013 County cost estimate from NC Division of Social Services budget estimates at http://www.ncdhhs.gov/dss/budget/estimates.htm . These figures are not adjusted for inflation.

The percentage of children in the free/reduced lunch program for the Catawba County, Hickory, and Newton-Conover Schools are shown in Figure 2-7. In 2012-2013, a majority of elementary students in Catawba County Schools (57.2%) were receiving free or reduced lunch, while the proportion in Hickory Schools (66.4%) and Newton-Conover Schools (77.0%) was at or over two-thirds of students. Throughout the County, 7,637 elementary students received free or reduced lunch. Nine hundred and seventy-three (12.7%) of these received reduced-price lunches, while 6,664 students (87.3%) received free lunches during the 2012-2013 school year.

Figure 2-7.
Percent of Elementary Students Receiving Free or Reduced Lunch, in Catawba County, NC, by School System (2006-07, 2009-10, 2012-13)



Source: NC Department of Public Instruction, 2014.

Map 2-14 reveals the percentage of students throughout the County who received free or reduced school lunch during the 2012-2013 school year by elementary school district. It also displays, for purposes of comparison, the percent of program recipients in the 2009-10 school year. The map is a useful tool to examine economic need by elementary school district of families with children.

Between 2009-10 and 2012-13, the percent of elementary school students receiving free or reduced lunches increased in 17 of 19 elementary school districts throughout the County.[11] The 2012-13 percent of recipients was highest at Long View Elementary (100.0%), followed closely by Southwest Elementary (91.7%). Recipients were also greater than 70% of all students at Thornton (now North Newton) (87.4%), South Newton (86.4%), St. Stephens (85.3%), Webb A. Murray (84.8%) and Catawba Elementary (70.1%).

Less than half of students received free or reduced lunch at only six elementary schools county-wide, generally correlating with higher income communities. The lowest percentage of students receiving free and reduced lunch included Sherrills Ford (29.4%) followed by Clyde Campbell (35.2%), Mountain View (43.8%), Tuttle (45.3%), Jenkins (46.3%) and Snow Creek (47.5%) It is interesting to note that there appeared little correlation between the relatively high-income areas around Conover and the two elementary schools, both of which had free/reduced student participation rates nearing two-thirds (Shuford (63.3%) and Claremont (65.5%)). This may be due to the proximity of two of the County's three largest private schools: Tri-City Christian School (2012-13 enrollment of 178) and Concordia Christian Day School (2012-13 enrollment of 180), both of which may attract students from families which can afford to pay tuition.[12]

Educational Attainment

From 2009 to 2012, Catawba County residents continued to achieve increased levels of educational attainment (Table 2-7). Though occurring at all academic levels, the largest gains were in college degree programs, with the largest jump in the proportion of County residents earning a graduate or professional degree (from 4.9% in 2009 to 7.5% in 2012). The percent of adults over age 25 with at least an associate's degree topped 30% for the first time, and more than one in five

Table 2-7.
Educational Attainment in Catawba County, 1990-2012

% of Population Age 25 and Over Attaining at Least	1990	2000	2009	2012
8th Grade or Less	100.0%	100.0%	100.0%	100.0%
9th to 12th Grade	87.0%	91.5%	92.2%	93.8%
High School Graduate	66.6%	74.8%	78.9%	83.3%
Some College, No Degree	36.6%	43.5%	51.8%	52.4%
Associate Degree	21.6%	24.0%	25.9%	30.4%
Bachelor's Degree	14.1%	17.0%	17.6%	20.7%
Graduate Degree	3.3%	4.7%	4.9%	7.5%

Source: US Census (1990 and 2000) and Census ACS (2009 and 2012).

[11] The exceptions were Clyde Campbell Elementary (38.0% to 35.2%) and Tuttle Elementary (48.8% to 45.3%).

[12] *2013 Directory of Non-Public Schools*, NC Division of Non-Public Education, Raleigh (2014), accessed at: http://www.ncdnpe.org/documents/12-13-CS-Directory.pdf The County's largest private school is Hickory Christian Academy in Viewmont, with a 2012-13 enrollment of 410 students.

adults has a bachelor's degree or higher (20.7%). Increased educational attainment occurred at the high school level as well. The proportion of adults over age 25 in Catawba County earning a high school degree or equivalent increased from about two in three (66.6%) in 1990 to about five in six (83.3%) in 2012. The increase in bachelor degrees comes concurrently with a decrease in the County's young adult population, and may be due in part to focused efforts by local institutions to allow residents to pursue goals of higher education without leaving their homes.

Despite these successes, however, Catawba County continues to trail both North Carolina and the United States in higher levels of education attainment (Table 2-8). Though still behind the State and US in college degrees, the County is closing the gap, especially in advanced degrees. The presence of multiple university satellite programs now in the Metro area in conjunction with community colleges is likely a positive factor in the region's increase in educational attainment.

Table 2-8.
Estimated Educational Attainment in Catawba County, North Carolina and the United States, 2009-2012

% of Population Age 25 and Over Attaining at Least:	2009	2012		
	Catawba County	Catawba County	North Carolina	United States
8th Grade or Less	100.0%	100.0%	100.0%	100.0%
9th to 12th Grade	92.2%	93.8%	94.2%	94.3%
High School Graduate	78.9%	83.3%	85.1%	86.4%
Some College, No Degree	51.8%	52.4%	58.0%	58.4%
Associate Degree	25.9%	30.4%	36.0%	37.1%
Bachelor's Degree	17.6%	20.7%	27.3%	29.1%
Graduate Degree	4.9%	7.5%	9.3%	10.9%

Source: Census ACS (2009 and 2012) (Table S1501).

Census estimates of educational attainment by adults age 25 and over according to ethnicity/race in 2005-2009 and 2010-2012 are shown in Table 2-9. Improvement in educational attainment can be seen across all races, both at the high school and bachelor's degree levels. Particularly noticeable is the significant growth of the proportion of African-Americans who earned at least a bachelor's degree, rising from 8.8% in 2009 to 13.4% in 2012. The only decline occurred in the proportion of Hispanic adults earning a bachelor's degree (7.9% to 5.8%). This decrease may be due to two factors: 1) higher unemployment and increased poverty in Hispanic-heavy areas, making it more difficult to afford college, and 2) more stringent residency requirements at state-run institutions of higher learning, which discourage some Hispanic participation. One unintended consequence of this policy may be an increased attraction of the County's Latino young adults to

Table 2-9.
Catawba County Educational Attainment (Age 25 and Over), by Race, 2005-09 and 2010-12

2005-09				
Level	**African-American**	**Hispanic**	**Asian**	**White, not Hispanic**
High School	72.6%	50.9%	61.4%	83.3%
Bachelor's	8.8%	7.9%	10.4%	10.4%
2010-12				
Level	**African-American**	**Hispanic**	**Asian**	**White, not Hispanic**
High School	78.6%	62.4%	67.4%	85.7%
Bachelor's	13.4%	5.8%	13.0%	23.8%

Source: Census ACS 2009 (5-Yr Estimates) ACS and 2012 (3-Year Estimates).

local/regional gangs composed of youth and young adults.[13]

The average percentage of Catawba County adults age 25 and older who did not complete high school or earn a high school equivalency as of 2006-10 and 2008-12 can be observed by Census Tract in Map 2-15, as can a comparison of the same statistics from the year 2006-10.[14] Areas of with a lower percentage of adults without a high school education correlate with those with greater household income. Particularly low rates of adults without a high school education were found in northwest Hickory (4.3%) and the Lake Norman area (4.9%). Other areas with lower rates of adults without a high school education included the Census Tracts in the vicinity of Mountain View (13.6%) and Conover and Claremont (14.8%), though it should be noted that the Conover/Claremont Census Tract experienced an estimated increase of 157 persons in this category since 2006-10.

Areas with higher rates of adults without a high school education or equivalent included areas of southern and southeastern Hickory, where concentrations of adults in this category neared or exceeded one of every three adults, reaching as much as 38.5% in Tract 110, in the vicinity of the Highland community. The percent of adults without a high school diploma in most of these areas has decreased in both percent and numbers since 2006-10 as the total population decreases. Other areas with higher rates of non-high-school-educated adults included Oxford west of NC Highway 16, where a large surge in Hmong population may contribute to a rise, since many middle-aged and older adults grew up in southeast Asia without the opportunity to attend college. Rates exceeding 20% were also found in and around Newton, southern Claremont, Maiden, and the Banoak and Vale communities.

Between 2006-10 and 2008-12, 17 of 32 Census Tracts in the County (53.1%) experienced a decline in the percentage of adults who had not earned a high school diploma or equivalency. The inset on the right of Map 2-15 shows the change in actual number of residents without a high school diploma or equivalent between 2006-10 and 2008-12.

Map 2-16 indicates the percent of each Catawba County Census Tract's adult population (age 25 and over) who have earned a bachelor's degree or higher. Of the County's 32 tracts, 22 (68.8%) experienced percentage increases in adults earning a bachelor's degree or higher between 2006-10 and 2008-12. Areas with higher proportions of persons earning at least a bachelor's degree are generally tracts containing higher incomes, including the Lake Norman area (33.7%), portions of Long View and west Hickory (34.9%) and northwest Hickory (51.6% and 50%) respectively. Census Tract 101.02 which includes parts of Conover and Claremont, retained a higher-than-average educational attainment for bachelor's degrees (26.8%), but that figure was a decrease from 2006-10.

Areas of southern Hickory and Long View contained the lowest portion of adults without a bachelor's degree, with the lowest proportion in Census Tract 107 (portions of Long View and

[13] Compare *25th NC Judicial District Youth Gang Activity Assessment*, WPCOG Data Services (2011), interview with Marie Connelly, Executive Director of Centro Latino in Hickory, NC.

[14] The slight discrepancies between the 2008-12 educational attainment rates reported in Map 2-15 versus the 2012 educational attainment rates reported in Table 2-7 (above) are due to the map's use of five-year estimates (necessary for sub-county geographic analysis) and the table's inclusion of one-year estimates for county-wide figures.

Hickory-5.3%), though it is noteworthy that all tracts in south Hickory and Long View have experienced increased rates of bachelor's degree educational attainment since 2006-10. Among more rural areas of Catawba County, ACS results for Tract 116.02, which is located between east Maiden and the Sherrills Ford community along the Lincoln County border, indicated lower attainment of bachelor's level education (7.9% of adults over age 25, a slight drop since 2006-10). The two tracts generally corresponding to the eastern and western Newton also experienced higher proportions of population with a bachelor's degree than did other areas in the County. Both of these tracts indicated growth in bachelor's-level educational attainment from 2006-10 to 2008-12.

Most rural areas in Catawba had lower educational attainment levels than in the municipalities with the exception of Census Tracts 107, 109 and 110. The minority-heavy urban sections of southern Hickory and Long View, though still possessing the lowest high school and college attainment rates in the County, experienced improvements throughout in both these attainment rates. Areas between Claremont and Conover appear to be experiencing lower adult educational attainment rates, which are reducing educational attainment gains which had been made in that community between 2000 and 2009. Education rates in the vicinity of eastern Maiden to Balls Creek are becoming particularly low, and the area might warrant investigation for Early Head Start needs, together with an educational outreach to its adult population.

Overview of Demographic, Economic and Social Characteristics of Families Eligible for Early Head Start

The population of Catawba County families with young children has experienced dramatic change during the past decade. The major factors impacting the population include:

- Continued severe loss of jobs, especially manufacturing jobs;
- Loss of young adults, and their families, leading to a lower population of children, affecting all major races and ethnicities in the County;
- A significant increase in the number of households in poverty, especially households with young children, and the fact that this is occurring in virtually all areas of the County;
- A dramatic increase, five-fold since 2000, in the percentage of persons receiving nutritional benefits (SNAP) and Supplemental Security Income;
- A stabilization of the Hispanic population in the County, after two decades of strong growth;
- A small but noticeable and steady dispersal of minority population away from traditional urban concentrations and into other areas of the County.

All of these trends definitely show an increase in the need for Early Head Start services. The economic conditions for Catawba County's very young population have deteriorated greatly since 2000 according to nearly every demographic and economic measure, highlighted by a 500% increase in the number of persons in poverty since 2000. Over two-thirds of children are now eligible for school meal assistance programs. These trends have only intensified since the last assessment in 2011.

The locations of highest need remain the Hickory areas of Ridgeview, Highland, near Hickory High School and west Hickory, as well as portions Long View. Newton also shows a high economic need, though the eastern and southern portions of the City generally show more financial hardship than do northern and western sections. In more rural sections of the County, the Oxford area (both east and west of NC Highway 16 North) continues to indicate economic need. Another rural area which appears to be indicating a growing need for Early Head Start services is located along and north of the Lincoln County border between Maiden and the Sherrills Ford community.

Section Three
Catawba County Schools Early Head Start Eligible Children and Families: Health and Nutrition Characteristics

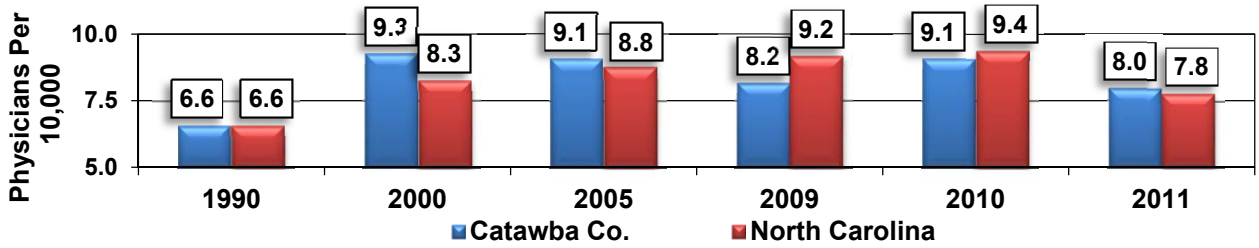
This section of the Catawba County Schools Early Head Start *Community Assessment* examines aspects of physical and mental health of program-eligible adults and children, as well as access to health care and proper nutrition. The data will allow Early Head Start personnel to determine better what health and nutrition needs exist among potential clientele, and to focus staff efforts in accordance with the degree of need in each health and nutrition category.

Medical and Dental Services

Medical Services

The number of primary care physicians per 10,000 residents in Catawba County from 1990-2011 is displayed in Figure 3-1.[1] After increasing from 1990 to 2000, the number of primary care physicians in Catawba County remained relatively stable throughout the decade of 2000-10, and was close to the statewide average ratio of physicians-to-population. From 2010 to 2011, however, the number of family doctors fell in both Catawba County (-12.1%, 141 to 124) and across North Carolina (-16.6%, 9,017 to 7,520). Reasons behind this reduction of general practitioners may include the economic recession; a consolidation of independent physician practices into hospital-owned clinics (which makes the continuation of single-doctor practices more difficult) and a nationwide lack of interest in general medicine in favor of better-paying specialized practices, beginning in 2005.[2] It remains to be seen if this one-year reduction marks the beginning of a trend in Catawba County.

Figure 3.1.
Primary Care Physicians per 10,000 Persons in Catawba County and North Carolina, 1990-2011



Source: NC Office of Budget and Management via NC LINC (1990, 2000, 2005, 2009, 2010, 2011).

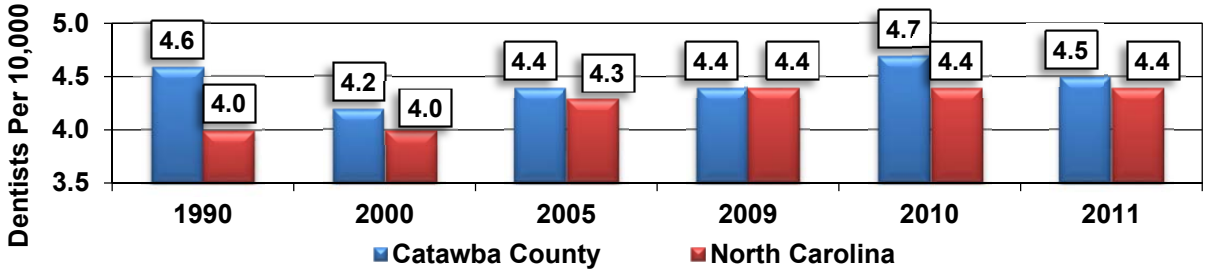
[1] "Active Primary Care Physicians" are defined as "active physicians in the specialties of general practice, family practice, internal medicine, pediatrics, and obstetrics/gynecology." Included are nonfederal, non-resident-in-training, practicing physicians and doctors of osteopathy as licensed by the NC Board of Medical Examiners effective October of the listed calendar year. (Source: NC State Office of Budget and Management via NC LINC).

[2] NC State Office of Budget and Management via NC LINC (2011), and Suzanne Sataline and Shirley S. Wang, "Medical Schools Can't Keep Up," *The Wall Street Journal*, April 12, 2010

Dental Services

After declining from 1990 to 2000, the number of dentists per 10,000 Catawba County residents rose steadily from 2000 to 2010, following a similar pattern statewide (Figure 3-2). In an experience similar to general practitioners, however, the County and State proportion of dentists fell between 2010 and 2011.

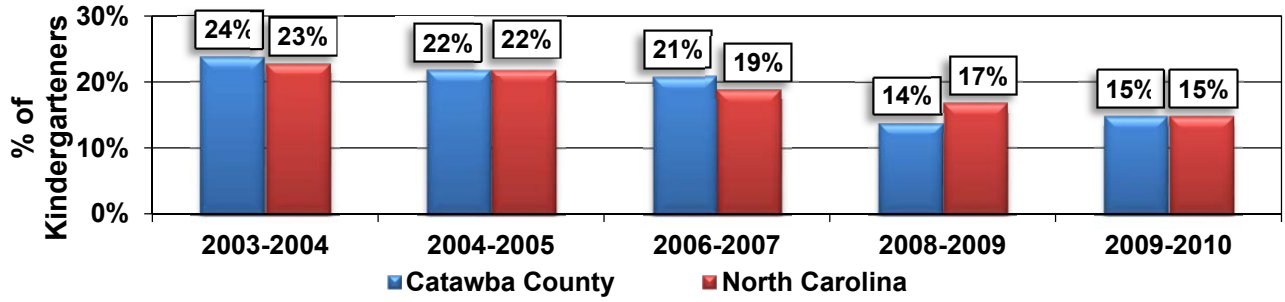
Figure 3-2.
Dentists per 10,000 Persons in Catawba County and North Carolina, 1990-2011



Source: NC Office of Budget and Management via NC LINC (1990, 2000, 2005, 2009, 2010, 2011).

As seen in Figure 3-3, the percent of kindergarteners with untreated tooth decay in Catawba County improved over the past decade. As of 2010 (the latest available data), the percentage of Kindergarteners with tooth decay was the same in Catawba County (15%) as statewide.[3] A closer look at kindergarten oral health according to race/ethnicity is interesting. Kindergarteners of all races/ethnicities suffered from untreated tooth decay at nearly the same rate, (14%-17%), with the exception of Asian students, whose rate of untreated tooth decay was nearly double (27%).

Figure 3-3.
Percent of Kindergarteners with Untreated Tooth Decay, 2003-2004 to 2009-2010



Source: NC Division of Public Health, "County Level Oral Health Services," 2010.

For lower-income families with children, securing the services of a private dentist who is willing to accept Medicaid for payment can be difficult. Private dentists can now refer lower-income children to the Catawba County Public Health Dental Clinic. Until recently the clinic only accepted patients age four and older, but now accepts children ages one through 21. The

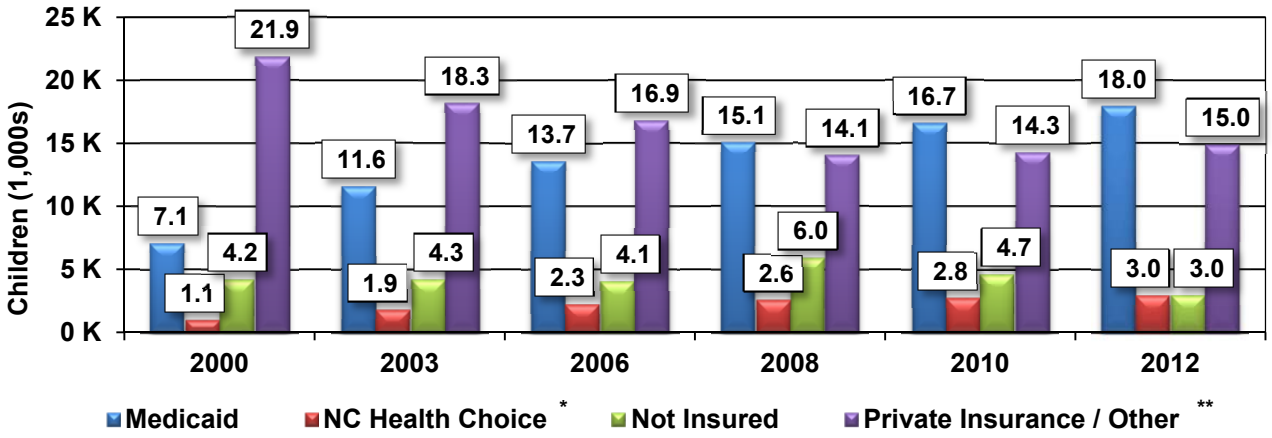
[3] NC Division of Public Health, Oral Health Section, "Kindergarten and Fifth Grade Oral Health Status, County Level Summary by Ethnicity, 2009-2010."

clinic accepts Medicaid and also NC Health Choice.[4] Additionally, the clinic works with private dentists and hospitals to obtain care for children who need specialized services.[5]

Insurance Coverage

With the continuing rise of Catawba County children in lower-income households from 2000 through 2012, providing health care to these children has been a priority for local agencies. Generally, children fall into one of four categories regarding health insurance: Medicaid, NC Health Choice, uninsured and private insurance. Figure 3-4 on page 40 displays a breakdown of Catawba County children age 0-17 by health insurance coverage from 2000 to 2012. The estimated number of children without any health coverage remained relatively steady from 2000 (4,247) to 2010 (4,677), and then falling by 2012 (3,000). Meanwhile, the number of children receiving Medicaid grew from 7,142 in 2000 (or 20.8% of all children) to 18,003 children (46.2%) in 2012, or nearly half the children in the County. Expecting mothers who received Medicaid as a percentage of all expectant mothers in the County rose modestly from 2000 to 2012, from 19.2% (388) in 2000 to 23.6% (492) in 2012.[6]

Figure 3-4.
Children Age 0-17 Estimated Health Insurance Coverage, by Source, Catawba County, 2000-2012



* NC Health Choice provides insurance to children through age 18.
**Note: Data for "Children without Health Insurance" for 2012 derived from calendar year 2011 (latest available).

Sources: Medicaid data – NCDMA: "Title XIX Authorized Medicaid Eligibles", online at http://www.ncdhhs.gov/dma/elig/index.htm. Categories included: Infants & Children, Foster Care, AFDC and MCHIP. NC Health Choice Data from NC Div. of Medical Assistance, Annual Utilization Reports. Uninsured children estimate from NC Institute of Medicine, accessed at: http://www.nciom.org/nc-health-data/uninsured-snapshots/. "Private Insurance / Other" figures are remainder of Catawba County child (0-17) population estimates provided by NC OSBM via NC LINC.

North Carolina Health Choice is a subsidized insurance plan for children who are in economic need, but who exceed the income limits for the Medicaid program. Eligibility is means-tested and categorized according to household size. For example, as of May 2014, a household of

[4] "Catawba Communities - Catawba County Public Health's Dental Practice" video on YouTube, uploaded by Catawba County Public Health (via user, Catawba County NC) on October 11, 2012.
[5] Telephone discussion with Angelia Kistler of Catawba County Public Health Dental Clinic (April 6, 2011).
[6] Medicaid data – NCDMA: "Title XIX Authorized Medicaid Eligibles", online at http://www.ncdhhs.gov/dma/elig/index.htm. Entire Population of Pregnant Females Figures: NC Office of State Management and Budget (via NC LINC).

three may earn up to $41,760. Families with income closer to (but above) Medicaid limits may have all health insurance premiums paid, while families with more income (but below the limits) will have their costs subsidized. From 2000 to 2012, the number of Catawba County children insured through NC Health Choice nearly tripled, from 1,058 (3.1% of all children) to 2,986 (7.7% of all children). The program has been retained as a component of the federal Patient Protection and Affordable Care Act (commonly known as "Obamacare").[7]

Catawba County's economic difficulties during the past decade have health insurance availability for children, and government-subsidized programs have largely filled the gap left by a widespread loss of household income. In Catawba County a majority of children (53.8%) in 2012 are covered by free or subsidized health insurance.

Prenatal and Birth Data

Teenage Pregnancy

Teenage pregnancies are often unplanned and present special challenges for the mother and baby. Teenage mothers and their children are at increased risk of the following difficulties:

- 14.3% increased likelihood of premature birth and 16.8% increased likelihood of low birth-weight babies, compared to all US births in 2012;[8]
- Increased likelihood of children ending up in foster care compared with non-teen mothers;[9]
- 51% of mothers age 19 and younger earn a high school diploma by age 22, compared with 89% of women who did not give birth as teenagers. This disadvantage in education often translates into lower paying jobs and unemployment;[10]
- 80% of fathers to children born of teen mothers do not marry the mother, and their child support payments average less than $800 annually, leading to increased risk of economic hardship for the mother and the child.[11]

For these reasons, it is important when planning the future of the Early Child Head Start program to examine the prevalence of teenage pregnancy and its effects on the County's very young children.

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[7] NC Institute of Medicine, "Implementation of the Patient Protection and Affordable Care Act in North Carolina (Interim Report)," March 2011.

[8] Martin, J.A., Hamilton, B.E. et al., *Births: Final Data for 2012,* "Table 25. Preterm and low birth-weight births, by age and race and Hispanic origin of mother: United States, 2012," *National Vital Statistics Reports*, 2013, p.83.

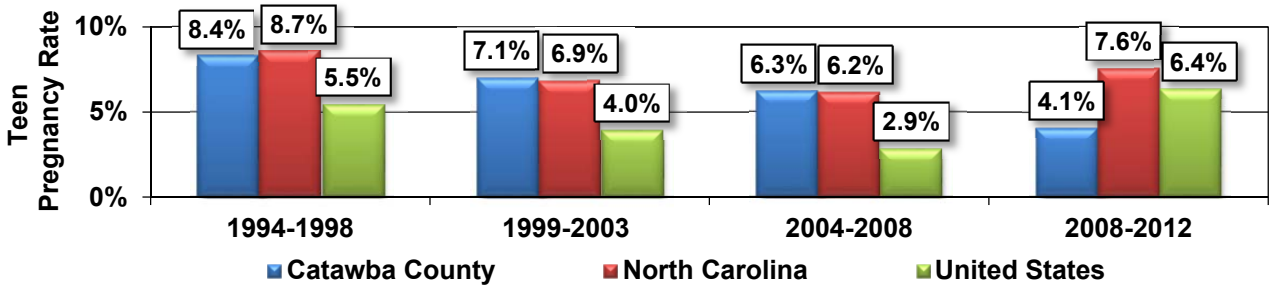
[9] Stier, D.M., Levelthal, J.M, Berg, A.T., Johnson, L. & Mezger, J. Are Children Born to Younger Mothers at Increased risk of Maltreatment? *Pediatrics*, 1993. 91(3): p. 642-648.

[10] Perper, K., Peterson, K., & Manlove, J., "Diploma Attainment Among Teen Mothers, 2010." Child Trends Research Center, DC. Retrieved April, 2011 from http://www.childtrends.org/Files//Child_Trends-2010_01_22_FS_DiplomaAttainment.pdf.

[11] Brein, M.J., & Willis, R.J., *Kids Having Kids: Economic and Social Consequences of Teen Pregnancy*, R. Maynard, Editor. 1997, The Urban Institute Press: Washington, DC. p. 95-143.

The annual average percentages of teenage pregnancies in Catawba County, North Carolina and the United States are displayed in Figure 3-5. Since 1994, Catawba County has seen a decline in the percent of females becoming pregnant annually, falling from 8.4% of all teenage girls in 1994-98 to 4.1% in 2004-08. This trend of fewer teen pregnancies was similar to that of the State and Nation through 2008. From 2004-08 to 2008-12 the teen pregnancy rate in the State increased (6.2% to 7.6%), but the rate grew dramatically in nationwide (2.9% to 6.4%). In 2008-12, however, Catawba County teens became pregnant at a much lower rate (4.1%) than the State (7.6%) or the Nation (6.4%).

Figure 3-5.
Teen Pregnancies-Percentage of Females Age 15-19 Becoming Pregnant Annually, 1994-98 to 2008-12



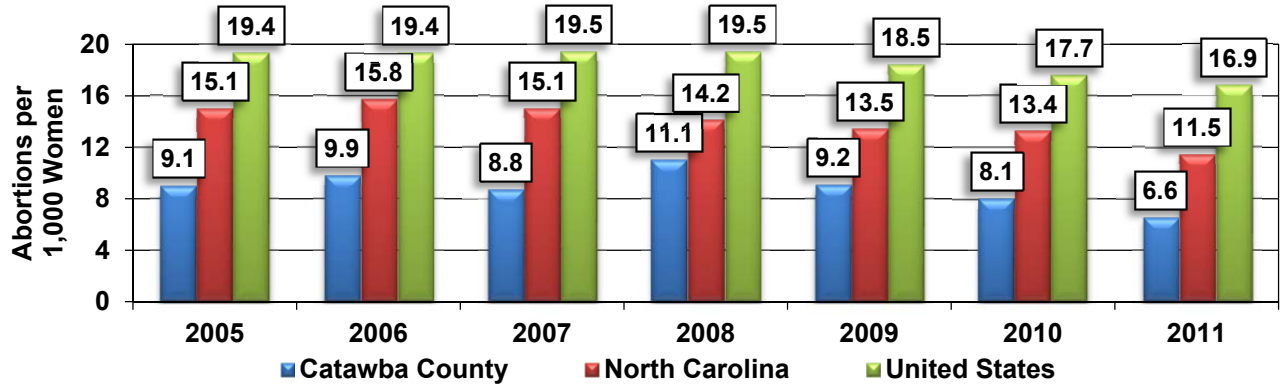
Source: For 2004-08 and 2008-2012, US Census American Community Survey, Table B13002. "Women 15 to 50 Years who had a Birth in the Past 12 Months by Marital Status Age." For 2001-2003, Table P033, "Number of Women 15 to 50 years who had a birth in the past 12 months by Marital Status by age" - US Census American Survey 2009 (1-year results), for 1999-2000, Figures from 1994-1998, "National Vital Statistics Reports" CDC, v. 49 No. 10, Table A, Populations figures from NC OSBM via NC LINC.

Abortion tends to correlate positively with women's poverty status.[12] Consequently, changes in the local abortion rate could impact participation in Early Head Start. Abortions per 1,000 females for Catawba County, North Carolina and the United States from 2005-2011 can be seen in Figure 3-6 on page 42. Abortions tend to occur more rarely among Catawba County females than in the State and the nation. From 2005 to 2008, abortion rates for the US, the State and Catawba County remained fairly stable, but began a steady decline thereafter through 2011. In 2011, the Catawba County abortion rate was 39.1% of that nationally. The annual number of abortions performed on Catawba County residents rose from 276 in 2005 to 344 in 2008, but fell to 195 in 2011 and 183 in 2012.[13] Given increase in poverty throughout the County from 2005 to 2012, the decline in the number of abortions is noteworthy.

[12] 42% of US abortions were performed on women whose annual income was below the federal poverty level in 2008. Source: Jones RK, Finer LB and Singh S, *Characteristics of U.S. Abortion Patients*, "Table 1: Percentage distribution of U.S. women obtaining abortions and of all U.S. women aged 15–44, and abortion index, by selected characteristics, 2008 and 2000," New York: Guttmacher Institute (2010). Also, according to a study of 954 US women seeking abortions, a lack of income was the most common motivation. Antonia M. Biggs, Heather Gould and Diana Greene Foster, "Understanding why women seek abortions in the US," *BMC Women's Heath*, v13, n 29, p6 (2013). Accessed online at: http://www.ansirh.org/wp-content/uploads/2013/06/biggs_gould_foster_whi7-2013.pdf

[13] Source: NC DHHS via NC OSBM and NC LINC.

Figure 3-6.
Annual Abortions per 1,000 Females Age 15-44, 2005-2011

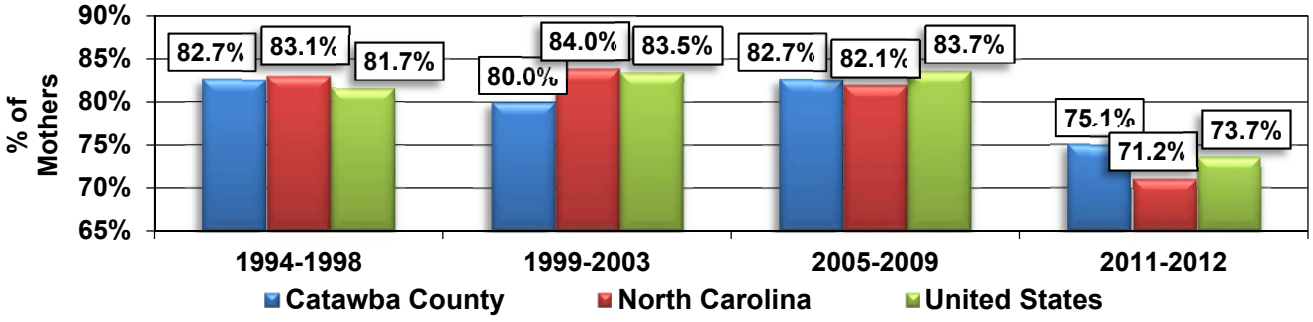


Source: Abortion figures for Catawba County and North Carolina from NC DHHS via NC OSBM and NC LINC. County and State population figures from NC OSBM via NC LINC. Statewide data for 2009 were unavailable from NC LINC and were instead calculated on a county-by-county basis and may differ slightly from an official statewide total. National abortion data from Guttacher Institute: *Facts on Induced Abortion in the United States* (March 2014). Population estimates for US from US Census Bureau American Community Survey Estimates Program, 2004-2011.

Prenatal Care

From 1994 through 2009, slightly more than four-fifths of Catawba County mothers received prenatal care during the first trimester of pregnancy, but unfortunately this figure fell to just over three-fourths (75.1%) in 2011-12 (Figure 3-7) . A similar pattern was experienced in the State and US, with decreases between 2005-09 and 2011-12. In the most recent statistics, Catawba County mothers received a higher rate of first-trimester prenatal care than the State or Nation. In 2012 out of 1,828 mothers who gave birth in Catawba County, 1,334 received prenatal care in the first trimester, and 427 in the second trimester, 52 in the third trimester, and 15 none/unknown.[14]

Figure 3-7.
Percentage of Mothers Receiving Prenatal Care in the First Trimester, 1994-2012



Sources: State and County first trimester care rates are from NCDHHS "NC County Trend Reports 2010" accessed at: http://www.epi.state.nc.us/SCHS/data/trends/pdf/Catawba.pdf. US figures from "Selected Risk Factors – 1994 to 2008." National Vital Statistics System, CDC, Data download from http://205.207.175.93/ vital stats/ReportFolders/ReportFolders.aspx ,2010.State and County source for 2011-12: http://www.schs.state.nc.us/schs/data/births/bd.cfm. Federal data for 2011-12 from USDHHS, Health Resources and Services Administration, Division of Maternal and Child Health, "Child Health USA 2013," accessed at: http://mchb.hrsa.gov/chusa13/health-services-utilization/p/prenatal-care-utilization.html.

[14] Birth figures from NC State Center for Health Statistics at: http://www.schs.state.nc.us/schs/data/births/bd.cfm.

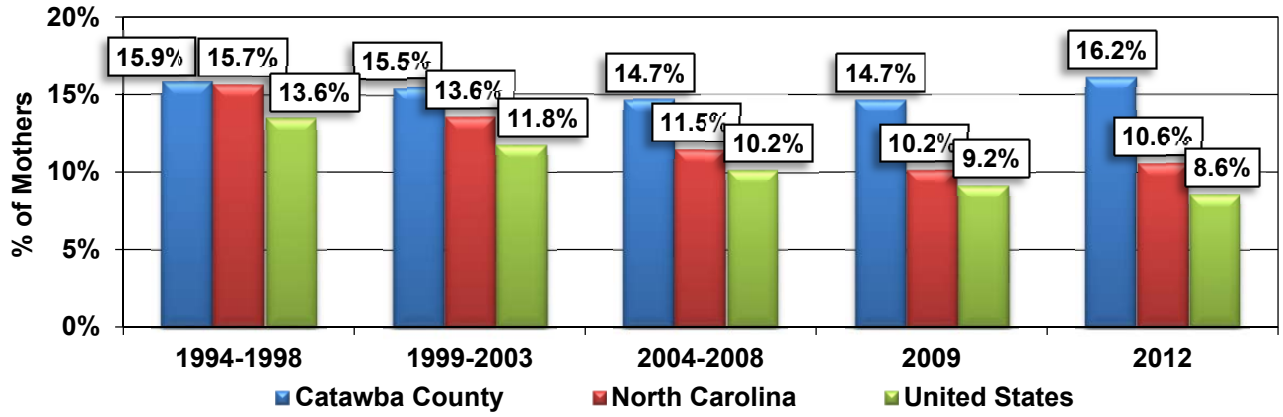
Smoking During Pregnancy

Smoking during pregnancy increases many health risks to newborns. Children born to smoking mothers:

- are more likely to be underweight, and average nearly a half-pound (7.1 oz.) less at birth than babies born to non-smoking mothers;
- are 30% more likely to be premature than children born to non-smoking mothers;
- and experience a 40% to 300% increase in probability of death by Sudden Infant Death Syndrome (SIDS) than babies born to non-smoking mothers. [15]

Figure 3-8 reveals the percentage of births in the County, State and US in which the mother smoked during pregnancy. Consistently since 1994, the percentage of mothers in Catawba County who smoked during pregnancy has been higher than in the State or the nation. Though the figure declined steadily in the United States (from 13.6% in 1994-98 to 8.6% in 2012), the percentage more recently has increased between 2009 and 2012 in both North Carolina (10.2% to 10.6%) and in Catawba County (14.7% to 16.2%). The increase in Catawba County mothers smoking during pregnancy may be related to with the area's sharp increase in poverty, which is correlated with lower rates of quitting tobacco use after becoming pregnant.[16] As of 2012, Catawba County experienced 297 births to mothers who smoked during pregnancy.

Figure 3-8
Percentage of Mothers Smoking During Pregnancy, 1994-2012



Sources: Data for Catawba County and North Carolina from NC State Center for Health Statistics, NC and County figures for 1994 to 2008 from "NC County Trend Reports 2010" accessed at: http://www.epi.state.nc.us/SCHS/data/trends/pdf/Catawba.pdf. State and County figures for 2009 accessed at: http://healthstats.publichealth.nc.gov/indicator/view_numbers/PregTobacco.County.html. State and County figures for 2012 accessed at: http://www.schs.state.nc.us/schs/data/databook/ National data for 1994 to 2008 from "Selected Risk Factors – 1994 to 2008." National Vital Statistics System, CDC, accessed at: http://205.207.175.93/vitalstats/ReportFolders/ReportFolders.aspx,2010. 2009 and 2012 National data from US Centers for Disease Control, "CDC Wonder" at: http://wonder.cdc.gov/natality-current.html.

[15] Figures from "Tobacco Use and Pregnancy" fact sheet, US Centers for Disease Control, accessed at: http://www.cdc.gov/reproductivehealth/TobaccoUsePregnancy/index.htm.

[16] Diana Rodriguez-Thompson, "Smoking and Pregnancy," in online journal *Up To Date*, 2002. Accessed at http://www.uptodate.com/contents/smoking-and-pregnancy.

In 2012 Catawba County mothers who were minorities were less likely to smoke (9.9%) than white, non-Hispanic mothers (19.9%). Within minorities, Hispanic pregnant women smoked at a rate of only 3.6%, while African-American mothers-to-be smoked at a rate of 19.5%.[17]

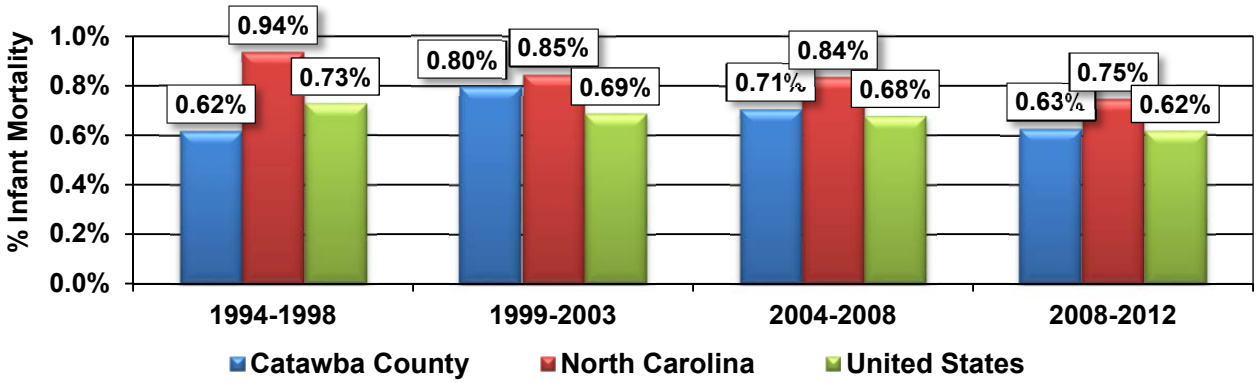
Children's Health

This portion of the Health and Nutrition section will examine various measures and trends in children's health in Catawba County and discuss some factors behind these trends and their implications for the Early Head Start program.

Infant Mortality

Data from 1994 to 2012 regarding infant mortality are shown in Figure 3-9 on page 45.[18] Throughout the County, State and Nation during this time, less than 1% of infants died during the first year of life. From 2008 to 2012, infant mortality in Catawba County remained lower than the State average, and ranked 78th of 100 counties statewide (meaning only 21 counties experienced a lower infant mortality rate). In light of the significant rise in poverty since 2000, the consistent decline in infant mortality may be in part be due to efforts to assist at-risk families by social agencies and health promotion agencies, as well as advances in local neonatal hospital care.

Figure 3-9.
Infant Deaths as Percentage of Live Births, 1994-2012



Sources: State / County data from State Center for Health Statistics, 1994-2012; National data from US CDC (1994-2011).

African-American infants in Catawba County experienced a much higher mortality rate from 2008-12 (1.73%) than did White non-Hispanic and Hispanic infants (both at 0.51%). The lowest mortality rate between 2008 and 2012 in Catawba County was experienced by "Non-Hispanic Other Minority" infants (0.48%), which was likely composed of mostly Asian infants, though the state database does not categorize this explicitly. Table 3-1 on page 45 lists the actual number of infant deaths in Catawba County by race/ethnicity from 2008 through 2012.

[17] Data for Catawba County and North Carolina from NC State Center for Health Statistics, "NC County Trend Reports 2012" accessed at: http://www.epi.state.nc.us/SCHS/data/trends/pdf/Catawba.pdf.

[18] "Infant mortality" is defined by NC Center for Health Statistics as deaths after live births of children age 0 to 12 months. This includes "Neonatal" (<1 month) and "Postneonatal" (1-12 months) deaths.

Of special concern to infant health for the Early Head Start program is Sudden Infant Death Syndrome (SIDS). Deaths attributed to SIDS sharply declined nationally from 4,073 in 1994[19] to 2,058 in 2010.[20] Some sources attribute this decline to increasing infant birth weight (through prenatal care and education) and by educating parents regarding proper infant sleep positions (the "Back to Sleep" program).[21] From 1999 to 2003, 12 Catawba County infant deaths were attributed to SIDS, while from 2004 to 2008 there were 11 cases. Between 2008 and 2012, six deaths were attributed to SIDS, comprising 10.2% of the 59 total infant deaths.[22]

Table 3-1.
Infant Deaths in Catawba County, by Race and Minority Status, 2008-2012

White Infant Deaths	Black Infant Deaths	Hispanic Infant Deaths	Other Minority Infant Deaths	Total Infant Deaths
32	16	8	3	59

Source: NC State Center for Health Statistics, 2008-12.

Childhood Disability

Early Head Start enrollees are expected to be composed of at least 10% disabled children. This can be difficult, as many mental and self-care disabilities aren't diagnosed until later in childhood. The US Census Bureau provides estimates of the number of non-institutionalized children age 5 to 17 who are disabled. Beginning in 2008, the Census Bureau began to use a new categorization of disabilities for children, so no direct comparison exists to periods prior to 2008. Of all Catawba County children age 5-17, an estimated 4.3% (1,169) had some type of disability in 2008-12 (Table 3-2). This is a lower percentage than experienced throughout North Carolina (5.7%) and the US (5.2%).

Table 3-2 on page 46 indicates the number of children ages 5 to 17 with each Census-defined category of disability. The most common category of disability experienced by Catawba County children ages 5 to 17 is "Cognitive Difficulty," which is experienced by nearly three-fourths (73.6%) of all disabled children. "Cognitive Difficulty" is defined as "a physical, mental or emotional problem, having difficulty remembering, concentrating or making decisions." Over one-in-five disabled children (21.7%) suffered from a "Self-Care Difficulty," while 16.1% of disabled children suffered from a "Vision Difficulty." It is important to note that these data refer only to children living at home and not to institutionalized children. It is also important to take into account that these disabilities are self-reported to the Census Bureau by parents or guardians, and are therefore not verified.

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[19] US Centers for Disease Control (CDC), "Sudden Infant Death Syndrome -- United States, 1983-1994," accessed at: http://www.cdc.gov/mmwr/preview/mmwrhtml/00043987.htm

[20] TJ Matthews, and Marian F MacDorman. *National Vital Statistics Reports, V62 N8: Infant Mortality Statistics from the 2010 Period Linked Birth/Infant Death Data Set*, "Table 5. Infant deaths and mortality rates for the five leading causes of infant death, by race and Hispanic origin of mother: United States, 2010 linked file," accessed at: www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62_08.pdf.

[21] Eunice Kennedy Shriver National Institute of Child Health and Human Development, NIH, DHHS, Figure 2. "US SIDS Rate and Sleep Position, 1988-2003", p.10 (2007).

[22] NC State Center for Health Statistics, 2008-12. SIDS Deaths for Catawba County accessed at: http://www.schs.state.nc.us/schs/data/databook/CD12C%20inf%20death%20rates.html. SIDS deaths accessed in document, "Ten Leading Causes of Death by County of Residence and Age Group." Downloaded from http://www.schs.state.nc.us/schs/data/databook/.

The percentage of all Catawba County children age 5-17 with a disability in 2005-07 and 2008-12 is depicted by race/ethnicity in Figure 3-10. Though the definitions of each individual type of disability changed between these two periods, it may still be helpful to compare the overall number of disabled children. On the whole, 4.3% of County children had a disability in 2008-12, up slightly from 4.1% in 2005-07. The number of children with a disability rose in every racial/ethnic category from 2005-07 to 2008-12, with an especially large increase in Hispanic children (48 to 160, or 233.3%). Disabilities were estimated to be experienced most commonly among African-American children, of whom 6.7% were disabled. Hispanic children had the next-highest incidence of disability at 4.6% of their population, followed closely by White non-Hispanic children (4.3%). Asian children experienced the lowest reported percentage (1.7%) of its population with a disability.

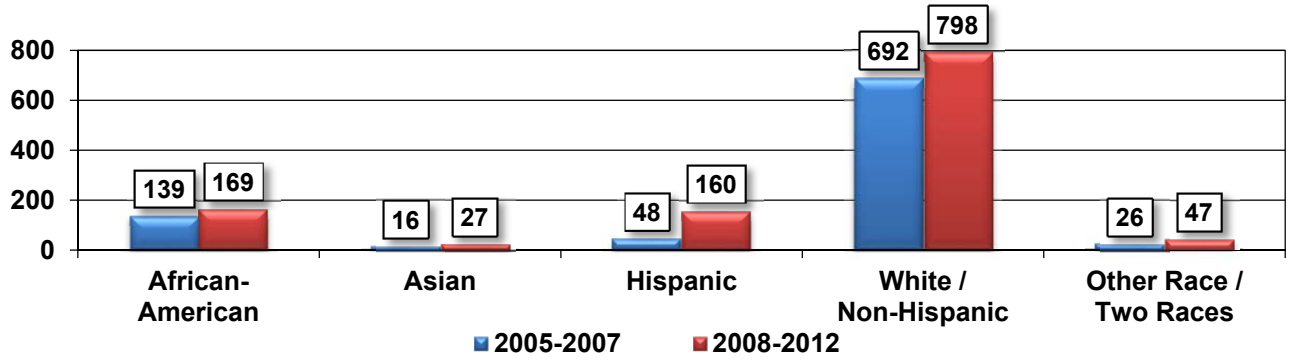
Table 3-2.
Number of Catawba County Non-Institutionalized Children Age 5-17 with Disabilities, by Type of Disability, 2008-12

Type of Disability	Est. # of Children with Type of Disability	Percentage of All Disabled Children
ALL TYPES	**1,169***	**100.0%***
Hearing Difficulty	99	8.5%
Vision Difficulty	189	16.2%
Cognitive Difficulty	860	73.6%
Ambulatory Difficulty	52	4.4%
Self-Care Difficulty	254	21.7%

* Number of children with each type of disability exceeds total number of children with disabilities because children can experience more than one type of disability.

Source: US Census American Community Survey Table S1810, (2008-12 Five-Year Average).

Figure 3-10.
Estimated Number of Non-Institutionalized Disabled Children Age 5-17 in Catawba County by Race and Ethnicity, 2005-07 to 2008-12



Source: US Census ACS (2007 3-Year and 2012 5-Year). 2008-12 figures derived from Table series B18101 and series B01001.

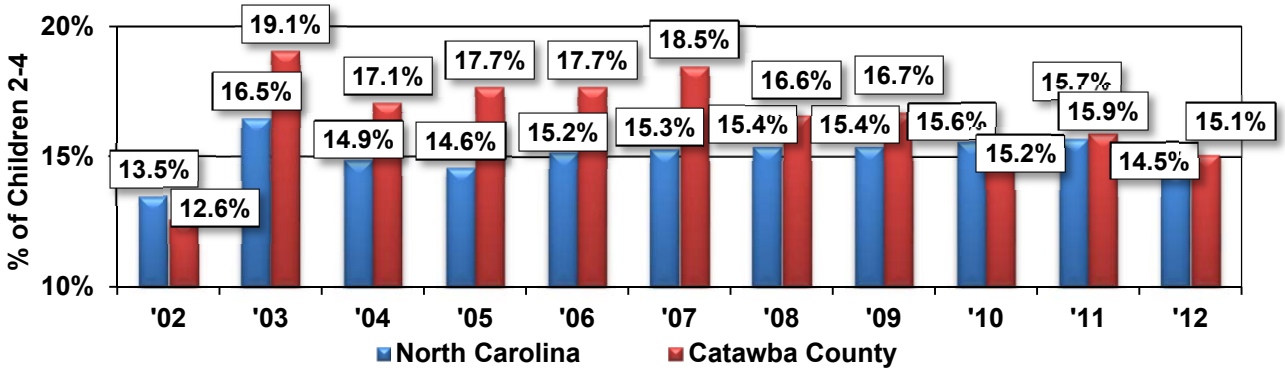
Childhood Obesity

About one of every six (15.1%) preschool-age children in Catawba County (age 2-4) is classified as "obese."[23] From 2002 to 2003, the prevalence of obesity in this group rose sharply, from 12.6% to 19.1% (Figure 3-11, page 48). Since 2003, however, the County has experienced a slow downward trend, with 2012 having the lowest reported rate of preschool

[23] North Carolina statistics for childhood obesity are maintained by "Eat Smart, Move More" (ESMM). ESMM used a definition of "childhood obesity" as >=95th percentile for children the same age and sex. The ESSM data is derived from the North Carolina-Nutrition and Physical Activity Surveillance System (NC-NPASS), which includes data on children seen in the Women, Infant and Children (WIC) program and Child Health Clinics.

obesity in a decade (15.1%). For most of the past decade, higher rates of preschool obesity have occurred in Catawba County than in the State as a whole, though the two areas have been within just a percentage point of each other since 2010. The 15.1% County average in 2012 (the latest data) nearly matches the 2011 national average of 14.9%.[24]

Figure 3-11.
Estimated Prevalence of Obese (>95% weight percentile) Children Age 2-4 in Catawba County and North Carolina, 2002-2012



Sources: State / County data from State Center for Health Statistics (1994-2008), National from US CDC, 1994-2008.

Throughout North Carolina, Hispanic preschool-aged children were the most likely to experience obesity in 2012, at a rate of 18.4%. African-American preschoolers were diagnosed at a rate of 13.3%, followed by White non-Hispanic 2-4 year-olds at 11.5% and Asian preschoolers at 4.4%. The North Carolina ESSM data do not include a breakdown of race/ethnicity at the County level. Figure 3-12, however, provides an estimate of the actual numbers of preschoolers experiencing obesity in Catawba County in 2012, by race/ethnicity. The estimate is generated by applying Statewide race/ethnic averages of preschool obesity to the County's respective age 2-4 Census populations for each race/ethnicity, and then adjusting that figure to account for Catawba County's overall higher incidence of preschool-age obesity.[25] Given the higher percentage of Hispanic preschool-aged children who are obese, it may be worthwhile for Early Head Start and other agencies who work with families of disadvantaged children to make a special effort with them to prevent obesity.

It is noteworthy that preschool rates of obesity in Catawba County have remained stable since 2003 even while poverty rates for children has increased dramatically, as there is typically a correlation between increased economic hardship and overweight children. Research has shown that families often cope with limited food dollars by purchasing less expensive but higher fat foods."[26] Factors such as nutrition education, healthier preschool/daycare lunches, and the growth of farmers' markets throughout Catawba County in the past decade may have helped to limit the growth of preschool obesity, and possibly begin its decline as of 2012.

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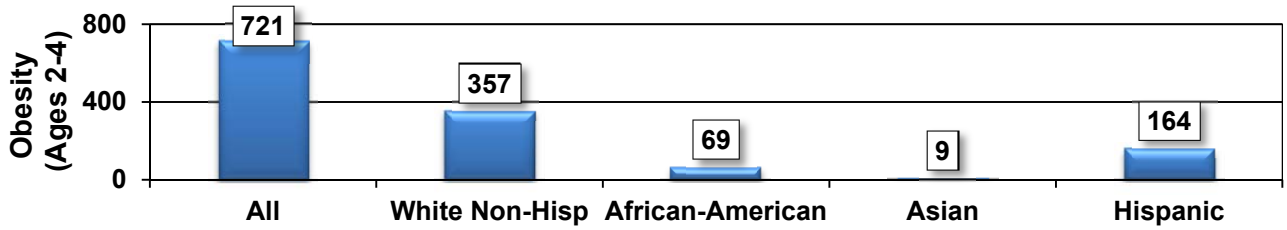
[24] This is the latest federal information. Centers for Disease Control and Prevention. "Trends in the Prevalence of Extreme Obesity Among US Preschool-Aged Children Living in Low-Income Families, 1998-2010." *JAMA*. 2012; 308 (24): 2563-2565.

[25] The adjustment is to multiply estimates by a factor of 1.0415 in order to account for the 4.15% higher incidence of preschool obesity in Catawba County as compared to North Carolina statewide.

[26] Kennedy E and Goldberg J. "What are American Children Eating? Implications for Public Policy." *Nutrition Reviews*; 53:111-26, (1995).

Figure 3-12.
Estimated Number of Obese Preschool-Aged Children in Catawba County by Race and Ethnicity, 2012



Sources: WPCOG Data Services, based on population data from US Census ACS (table B01001 series), and North Carolina-Nutrition and Physical Activity Surveillance System (NC-NPASS), accessed at: http://www.eatsmartmovemorenc.com/Data/ChildAndYouthData.html.

Another factor which may have inhibited childhood obesity may be better access to grocery stores. The 2011 *Assessment* indicated areas in the County with high minority concentrations and located more than one mile from a supermarket, which were termed "food deserts."[27] These "deserts" are found nationwide in urban areas with sizeable populations of ethnic/racial minorities. Persons in these areas often find transportation difficult, and may resort to fast-food restaurants with poor nutritional content or buying from small convenience stores which do not offer nutritional foods (such as vegetables, fruits, skim milk), or sell them at higher prices than do grocery stores. Food purchases for lower-income families in food deserts, then, may result in high-fat, low-nutrition diets for their children, potentially contributing to obesity.

Map 3-1 indicates areas in Catawba County which are not within one mile of a supermarket as of May 2014. It also shows the concentration of minority births per square mile by Census Block Group. For purposes of the map, "supermarket" was defined as a food store which had at least three check-out cashier stands and which contained all the major food departments found in a traditional supermarket, including fresh meat and poultry, produce, dairy, dry and packaged foods, and frozen foods. The area of highest minority birth density without access to a supermarket was in portions of the Ridgeview and Highland communities north of and parallel to Interstate 40. Across the remainder of the County, most minority populations appear to remain situated within one mile of a supermarket, with the exception of some areas of east Newton, as well as a region of high minority birth concentrations in sections of Maiden.

Since 2011 little has changed with respect to Catawba County food desserts. It may be that an increasing number of minority and lower-income families are availing themselves of Greenway Transit fixed-route bus service, which provides a regular and economical means of visiting grocery stores throughout Conover, Hickory and Newton. Greenway Transit is gathering information on ridership and groceries, but these data are not yet complete. One significant change in Catawba County grocery stores since the last *Assessment* was the opening of a "Save-A-Lot" grocery store in along US Highway 70 in southwest Hickory. Though this store is modest in size by grocery standards, it is within walking distance of the Ridgeview community. In addition to the Save-A-Lot grocery, Walmart has announced plans

[27] *Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and Their Consequences,* United States Department of Agriculture, p 1 (2008).

to build a "Neighborhood Market" near the old Catawba Furniture Mall by 2015, which will also serve economically disadvantaged communities in southern Hickory and Long View.

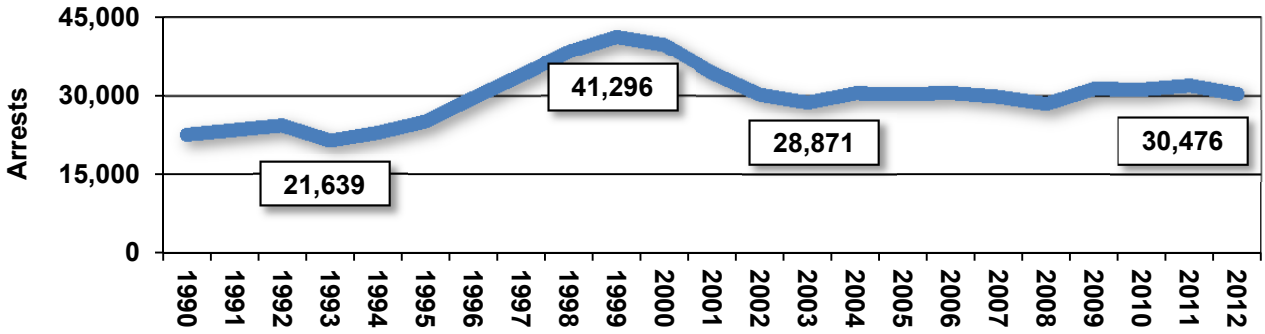
Family Environment

Family Environment: Exposure to Substance Abuse

Although very young children typically do not use drugs or alcohol themselves, they can be harmed by family members or others around them who abuse these substances. A brief look at national, state and local trends regarding illegal drugs and alcohol use may help to examine the extent to which these items may influence local families.

The number of drug-related arrests by the US Drug Enforcement Administration (DEA) is one measure over time of the influence of illegal drugs in American society. Figure 3-13 indicates the number of federal drug arrests throughout the US each year since 1990. After peaking at 41,296 in 1999, the number of federal drug arrests has remained about steady (30,000) during the past decade. Per capita the number of drug-related arrests nationwide from 1990 to 2012, however, has fallen from 1 in 9,166 to 1 in 10,300.

Figure 3-13.
Number of Drug-Related Arrests Nationally by DEA, 1999-2012



Source: US Dept. of Justice: Drug Enforcement Administration, 2012.

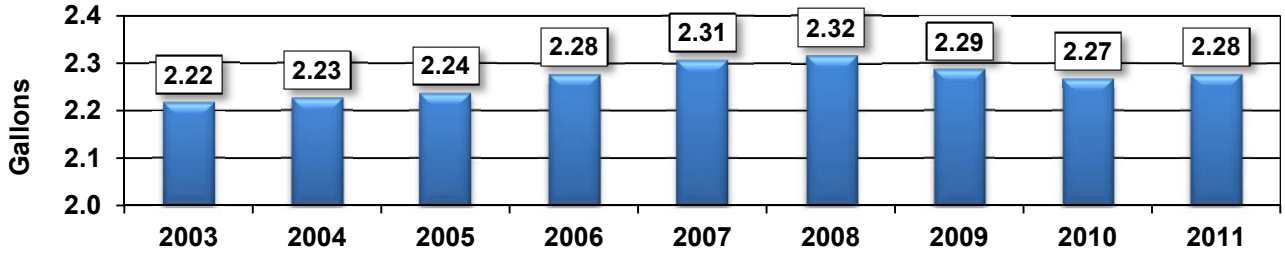
Regarding the prevalence of alcohol use per capita, alcohol consumption in the United States increased steadily (Figure 3-14, page 51). The annual per capita growth from 2003 to 2008 in drinking alcohol is 0.1 gallon (12.8 ounces), which represents an average increase of about 21 drinks annually.[28] Only 12.9% of adults in the US age 18 and over drank fewer than 11 alcoholic beverages per year.[29] The frequency of automobile accidents involving alcohol comprises one indicator of the severity of alcohol abuse in a given area. In Catawba County the number of crashes over the past decade involving alcohol fell from 323 in 2000 to 208 in

[28] "Standard" drinks of beer, wine or spirits contain 0.6 oz. of ethanol (drinking alcohol). National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health.

[29] *Vital and Health Statistics Series 10, Number 260 Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2012*, USCDC (2014), "Table 24. Frequency distribution of alcohol drinking status among adults aged 18 and over, by selected characteristics: United States, 2012," p. 134, accessed at: http://www.cdc.gov/nchs/data/series/sr_10/sr10_260.pdf.

2012 (-35.6%).[30] Another indicator of alcohol abuse is the number of DWI charges. In Catawba County, the number of DWIs fell between 2000 (1,556 cases) and 2012 (618) (-60.3%). This statistic is encouraging, especially in light of the growth in the number of persons in poverty during this time. The per capita rate of DWI's in Catawba County in 2012 (1 arrest per 747 residents) was slightly worse than the State average (1 arrest per 866 residents).

Figure 3-14.
Gallons of Drinking Alcohol Consumed Per Capita in the US, 2003-2011



Source: National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health, 2003-08.

Catawba County gross sales of liquor to the public at Alcoholic Beverage Control (ABC) stores can be seen in Figure 3-15 on page 51. Sales of liquor in Catawba County have risen most years between 2003 and 2013, from $8.8 million to $13.6 million, at a rate about twice that of inflation. Liquor revenues in the County totaled $13.61 million in 2011, or $110 for every adult.[31] This is approximately $2.5 million more in sales growth than would be accounted for by inflation alone compared with 2003.[32]

As part of the *25th NC Judicial District Youth Gang Activity Assessment* (2010), WPCOG staff surveyed 187 eighth-grade students throughout Catawba County regarding their experiences with youth gangs and gang-related factors at school and at home.[33] Students were asked specifically if any members of their family had experienced "severe" drug or alcohol abuse.[34] Nearly one-in-three students (33.2%) reported that they had observed "severe" substance abuse by a family member at home. Although this is only a one-time statistic, it seems likely that difficulties with alcohol and drugs affect the home life of thousands of students throughout the County.

It appears that the societal influence of drugs and alcohol is significant in Catawba County, though several metrics such as DWIs and alcohol-related crashes are trending downward. Increased poverty rates and associated potential of substance abuse pose serious threats to the well-being of all families in the County, including those with very small children.

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[30] NC and Catawba County DWI and alcohol related crash data from the Highway Research Center at the University of North Carolina at Chapel Hill, accessed at: http://www.hsrc.unc.edu/ncaf/index.cfm?p=home.

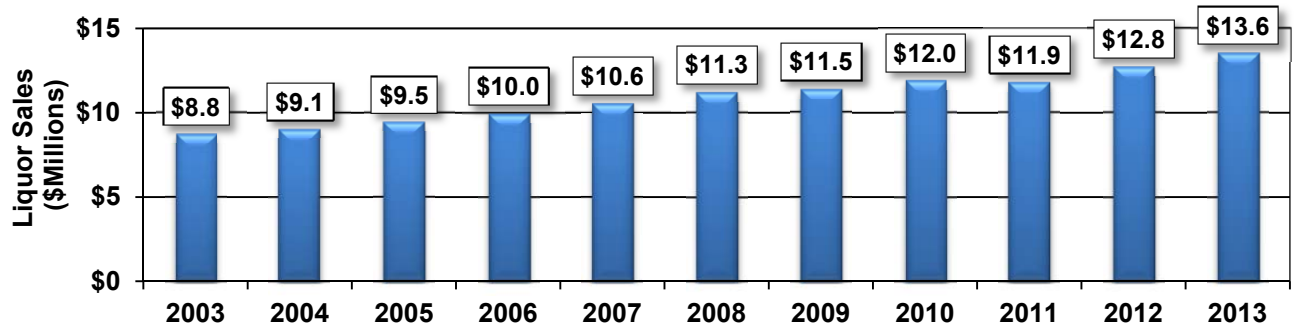
[31] NC Alcoholic Beverage Control Commission annual revenue reports, available at: http://www.ncabc.com/boards/revenue.aspx .

[32] Note: Catawba County ABC opened four new public stores between 2000 and 2010, bringing the current number of ABC stores in the County to nine.

[33] *Youth Gang Activity Assessment 2010 of the North Carolina 25th Judicial District, "*Figure 3-6. Percent of 8th Grade Students Reporting 'Severe' Drug or Alcohol Abuse by a Family Member", 169, (2010).

[34] Note: "Severe" was not defined in the study, and interpretation was left to the student.

Figure 3-15.
Catawba County ABC Stores Annual Sales of Liquor ($ Millions), 2003-2013

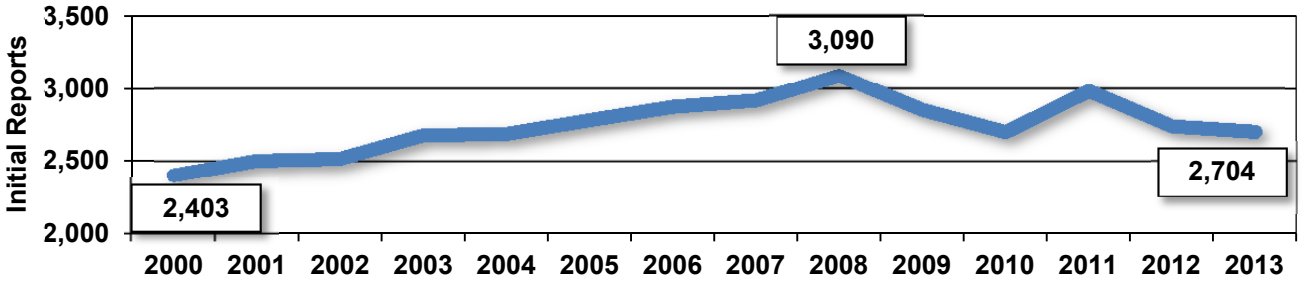


Source: NC Alcoholic Beverage Control Commission annual revenue reports, available at: http://www.ncabc.com/boards/revenue.aspx.

Family Environment: Child Abuse and Neglect

During the past decade, the number of initial reports of child abuse/neglect in Catawba County rose from 2,403 in 2000 to a high of 3,090 in 2008, before falling to 2,704 in 2013 (Figure 3-16). It is noteworthy that initial reports of child abuse/neglect have fallen off from 2008, even while poverty rates among children have been increasing steadily. Aside from the total number of initial reports, a change in categorization occurred in Fiscal Year (FY) 2004-05 nullifying any statistical comparison between categories of abuse reports prior to that year.

Figure 3-16
Initial Reports of Catawba County Child Abuse or Neglect, Fiscal Year 2000-2013



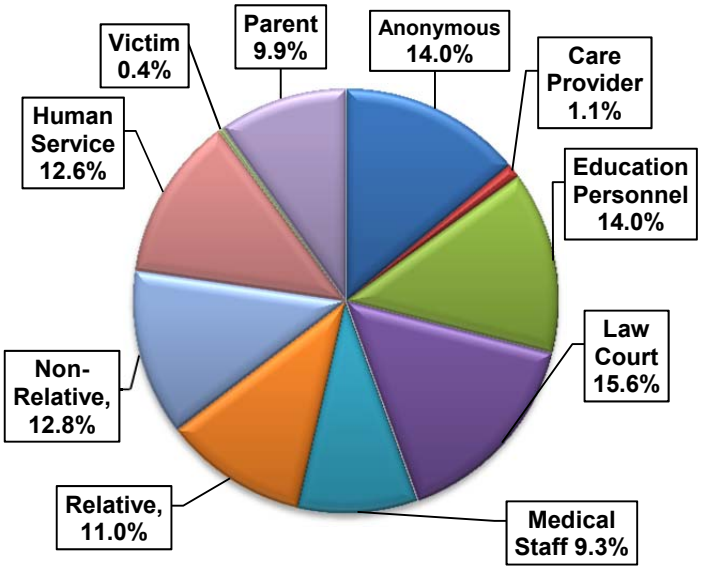
Source: Duncan, D.F., Kum, H.C., Flair, K.A., and Stewart, C.J. (2014). *Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina*. Retrieved from UNC- Chapel Hill Jordan Institute for Families website, URL: http://ssw.unc.edu/ma/.

The sources for the initial reports of child abuse/neglect during SFY 2013 are shown by category in Figure 3-17 on page 52. The most common source of initial child neglect and abuse reports came from the court system, which accounted for 15.6% of reports. The next largest sources of reports (14.0% each) were educators and anonymous persons. Almost 10% of reports came from a parent, and 9.3% were from medical personnel. Notably, the victim himself or herself comprised the smallest source of initial reports (0.4%).

In Fiscal Year 2013, the 2,704 initial reports of child abuse or neglect were investigated and findings or decisions were made regarding their validity and needs of each individual situation. Figure 3-18 breaks down the findings and decisions regarding the initial reports for Fiscal Year

2013 in Catawba County, compared with Fiscal Year 2010.[35] The majority of cases were categorized as "Services Recommended" (1,102, 40.8%) or "Services Not Recommended" (1,123, 41.5%). Services were described as "Needed" in 286 calls (10.6%). Of all the initial reports, 141 (5.2%) were categorized as "Abuse" or "Abuse and Neglect."

Figure 3-17. Sources by Type for Initial Reports of Child Abuse or Neglect in Catawba County, FY 2013



Note: percentages are a proportion of all reports, including duplications.
Source: D.F. Duncan, H.C. Kum, K.A. Flair, C.J. Stewart, J. Vaughn, R. Bauer, and Reese, J., 2013. *Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in NC* (v3.1).

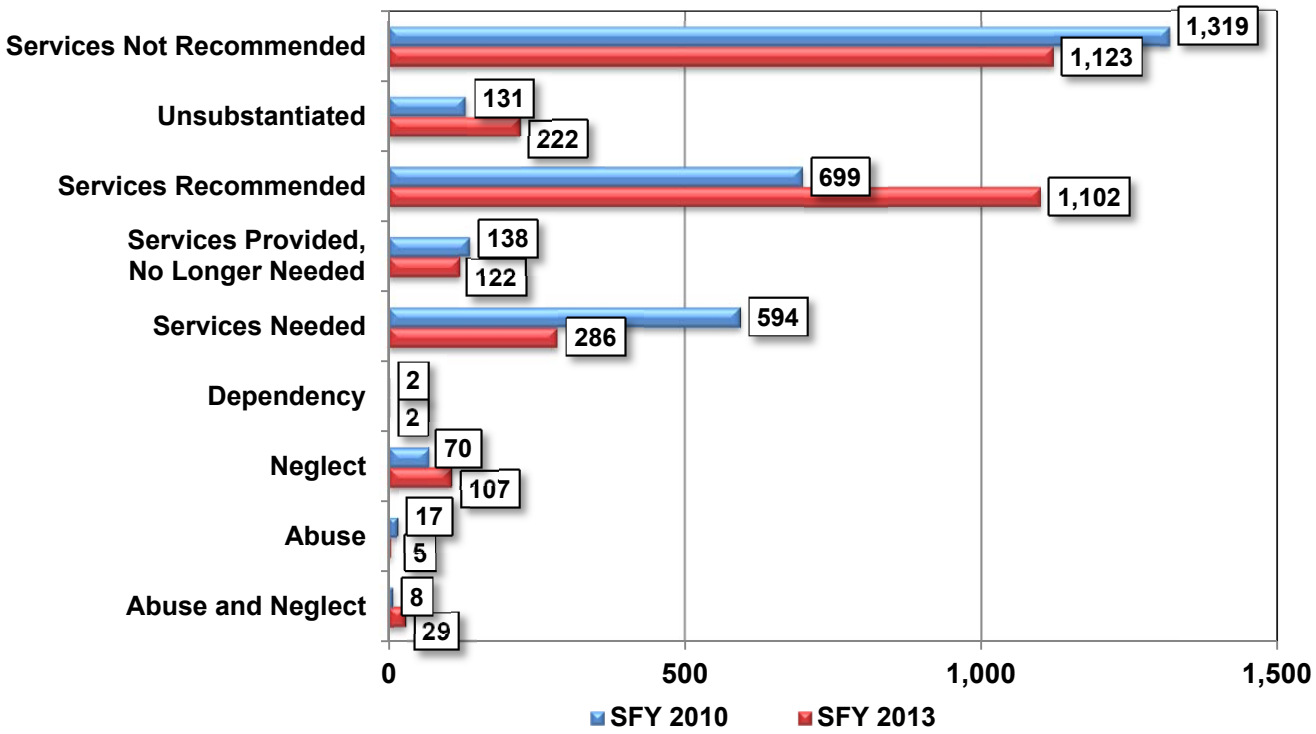
The number of African-American and Hispanic children as percentage of all initial reports of potential child abuse and/or neglect in Catawba County from SFY 2000 to 2013 is shown in Figure 3-19 on page 53.[36] From 2000 to 2012 the percentage of initial reports involving African-American children declined from 19.6% to 12.7%. This decline occurred despite the fact that during this period African-American children as a percent of all Catawba County children rose slightly, from 10.8% to 11.1%.[37] African-American children as a percentage of initial child abuse reports rose slightly between 2012 and 2013 (12.8%). This trend is very different from 2000, when African-American children were about twice as likely to be the subject of an initial report of child abuse as their proportion of the population.

The percentage of initial reports of child abuse and neglect involving Hispanic children rose rapidly during the past decade, from 4.2% in 2000 to 11.4% in 2011, before falling slightly to 10.4% in 2013. Despite this overall increase, as of 2013 the percentage of initial reports involving Hispanic children remained lower (11.4%) than the actual proportion of the Catawba child population in 2013 (14.7%). This relatively low reporting may be due in part to at least three factors:

- Difficulty in communicating with English-speaking authorities;
- Unfamiliarity with local law enforcement and social service roles and structures;
- Fear of revealing immigration status.

[35] More than one action can be taken regarding a particular case, so for the 2,689 initial calls, there were 2,978 resulting findings/decisions.
[36] The Jordan Institute for Families at the University of North Carolina at Chapel Hill does not offer statistics of initial reports of child abuse / neglect separately for Asian children.
[37] US Census 2000, (Tables P012 & P012B) and US Census ACS 2012 1-year estimates (Tables B01001 & B01001B).

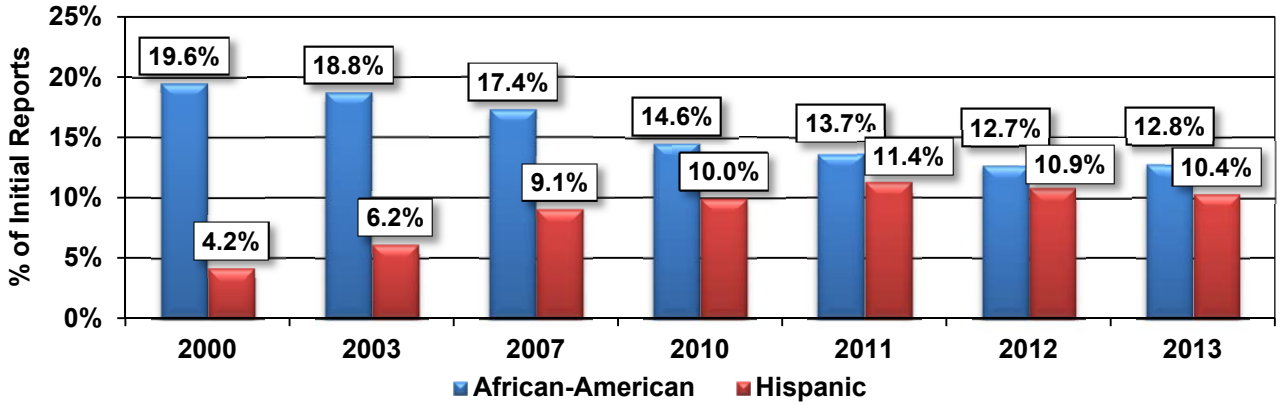
Figure 3-18.
Findings or Decisions on Initial Reports of Child Abuse or Neglect in Catawba County Fiscal Year 2010-2013



More than one finding or decision could be applied to an individual initial report. Source: D.F. Duncan, H.C. Kum, K.A. Flair, C.J. Stewart, J. Vaughn, R. Bauer, and Reese, J., 2013. *Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in NC* (v3.1).

In 2013, Catawba County received one initial report of potential child abuse or neglect for every 13.2 children age 0-17 residing in the County. This represents a slight increase over the year 2000 average of one report for every 14.3 children.

Figure 3-19.
Catawba County Initial Reports of Abuse or Neglect for African-American and Hispanic Children, as a Percentage of All Initial Reports, Fiscal Year 2000-2013



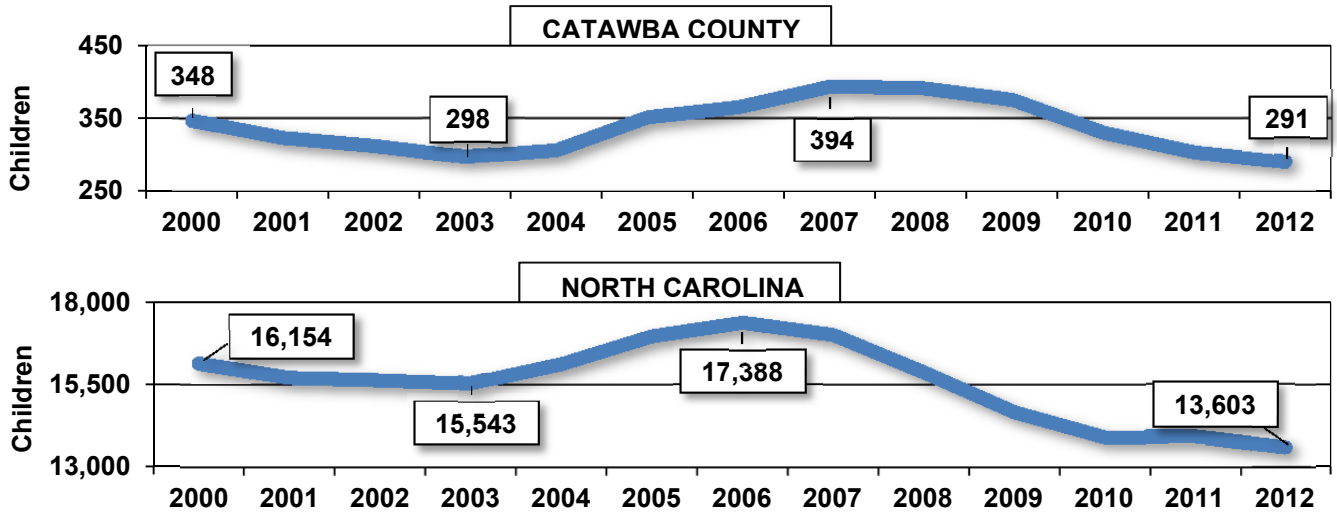
Source: D.F. Duncan, H.C. Kum, K.A. Flair, C.J. Stewart, J. Vaughn, R. Bauer, and Reese, J., 2013. *Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in NC* Retrieved January 24, 2011 from University of North Carolina at Chapel Hill Jordan Institute for Families website. URL: http://ssw.unc.edu/ma/

Although only a small proportion of the 2013 initial reports were verified as child neglect and/or abuse, a substantial increase occurred between 2010 and 2013 in the number of children recommended for community services (699 to 1,102, or +57.7%). In light of growing poverty, the increased number of reports to community services may be related to the growth of child poverty levels in the County from 2010 to 2013.

Family Environment: Foster Care

The number of children in Catawba County who were in foster care since 2000 peaked in 2007 at 394 (Figure 3-20). Since 2007 the number of children in foster care has decreased to 291. Children in foster care in North Carolina during the same period followed a similar pattern, peaking in 2006 at 17,388, and since falling to 13,603 in 2012.

Figure 3-20.
Number of Children in Foster Care, Catawba County and North Carolina, FY 2000 to 2012



Source: D.F. Duncan, H.C. Kum, K.A. Flair, C.J. Stewart, J. Vaughn, R. Bauer, and Reese, J., 2013. *Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in NC* Retrieved January 24, 2011 from University of North Carolina at Chapel Hill Jordan Institute for Families website. URL: http://ssw.unc.edu/ma/

The federal government provides monetary assistance to Catawba County's foster child program in the form of Title IV-E Social Security funds. The amount received each year from 2006 to 2013 for foster care in Catawba County is indicated in Table 3-3 (adjusted for inflation to 2013 dollars). From this IV-E foster care program, the County received $3,448 per child in foster care in 2013.

Table 3-3. Annual Federal Funding for Title IV-E Foster Care in Catawba County, 2006-2013
(Adjusted for Inflation to 2013 Dollars)

2006	2007	2008	2009	2010	2011	2012	2013
$968,823	$858,405	$789,363	$1,070,298	$1,014,005	$875,114	$1,094,625	$1,003,336

Note: Also includes supplemental ARRA funds for Foster Care during SFYs 2009, 2010 & 2011. Does not include IV-E funds designated for Administration, Child Protective Services or Vendor Payments.
Source: Annual "Compliance Letters" of the Catawba County, NC Finance Department, available at: www.catawbacountync.gov/Finance/report13/ComplianceLetters.pdf, as well as previous years back to 2006 by substituting the last two digits of the year for the numerals after "report…"

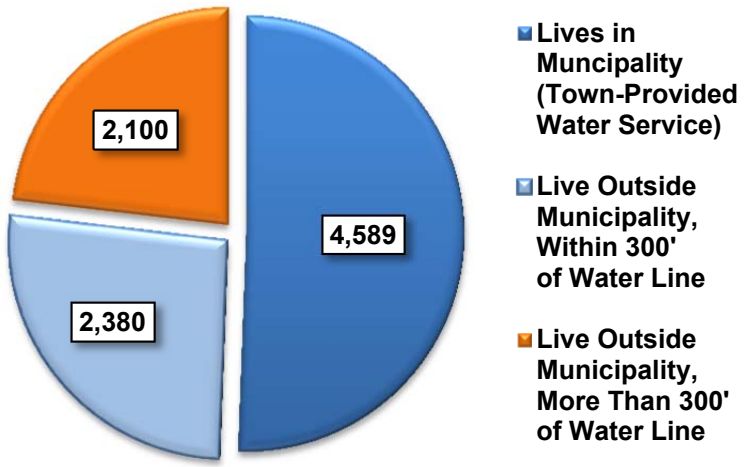
Natural Environment

This portion of the assessment will examine factors in the natural environment of Catawba County which may have the potential to affect the health of very young children.

Water Access and Pollution

Of the 9,069 children born from 2008 to 2012, over half in 2010 (4,589 or 50.6%) live in municipalities and therefore are assumed to have access to water lines. In addition, another 2,380 children (26.2%) lived in residential parcels which, though not in a municipality, are within reasonable range (300 feet) of a 2 inch or larger public water line (Figure 3-21). Thus combined, 76.8% of very young children have access to fluoridated water, a little better than the total US population (74.6%), but lagging behind the NC population (87.5%).[38] The remaining 2,100 children (23.2%), however, live outside municipalities and not within a reasonable range (more than 300 feet) of a water line. This is an improvement of 515 children since the 2011 *Assessment*, when an estimated 2,615 babies born in 2005-09 lived at addresses without easy access to municipal or county water. Studies have indicated that children without fluoridated water cost an average of $19 per year more in dental expenditures than do children who have fluoridated water.[39] This represents an estimated $378,300 in extra dental costs over the course of childhood (0-17 years) for the families of these Catawba County children without fluoridated water ($323 per child).

Figure 3-21.
Catawba County Births, 2008-12, and Estimated Access to Municipal or County Water Systems, 2014



Sources: NC State Center for Health Statistics, 2008-12; Catawba County GIS (water lines), 2014.

Of the estimated 2,100 very young children in Catawba County who used well water in 2013, 131 (6.2%) lived within one-half mile of waterways classified in 2012 as "impaired" by the NC Department of Natural Resources (NCDNR).[40] Causes of impairment include low PH levels, and low microbial activity.

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[38] US CDC, "Community Water Fluoridation 2012," accessed at http://www.cdc.gov/fluoridation/statistics/2012stats.htm on May 12, 2014.

[39] US CDC, "Cost Savings of Community Water Fluoridation," accessed at www.cdc.gov/fluoridation/factsheets/cost.htm on May 12, 2014.

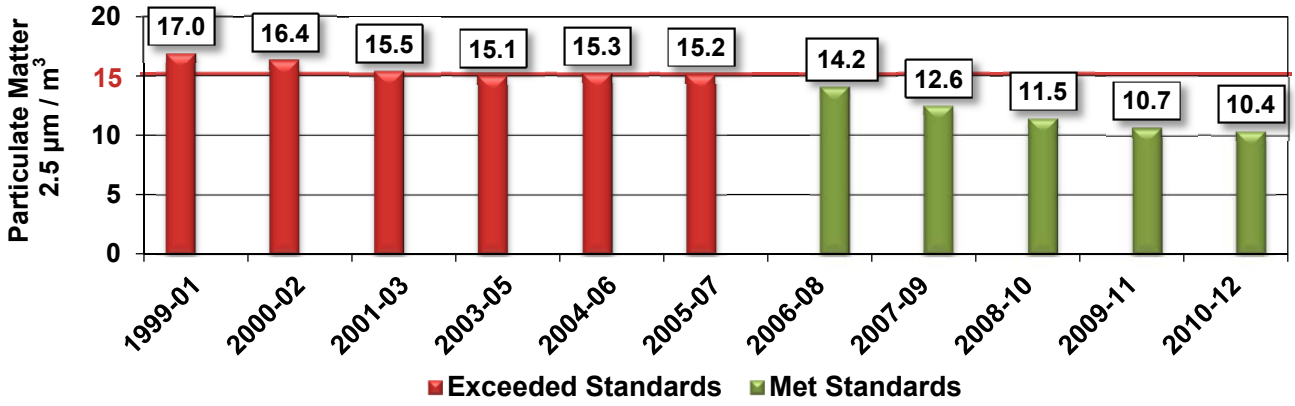
[40] GIS data on impaired waterways from: *Catawba River Basinwide Water Quality Plan -- September 2012*, cited by the NC Department of Environment and Natural Resources (DENR), Division of Water Resources, on its online GIS of impaired waterways, accessed at: http://portal.ncdenr.org/web/wq/ps/bpu/watershed-plan-map (accessed May 12, 2014).

Air Pollution: Fine Particulate Matter and Ground Ozone

Fine particulate matter measuring 2.5 micro-meters (µm) or less, poses a risk to the pulmonary health of very young children. Particles this small (about 1/30 the width of a human hair) can pass directly from human lungs to the bloodstream without being filtered by the body's defenses.[41] Very young children are particularly at risk since they breathe through their mouth more than adults (fewer nose hairs and other barriers to pollutants) and because they breathe more air compared to their body weight than do adults. High amounts of particulate matter have been linked in small children to higher and more intense cases of asthma, problems of lung development and increasing occurrences of lung cancer as the children become adults.

Major sources of fine particulate matter (PM 2.5 µm) are diesel engines, gasoline engines and wood burning. Since 1997, the Environmental Protection Agency has set the annual standard level of PM 2.5 µm at 15 micrograms per cubic meter. These levels are measured in Catawba County and are reported in three-year averages. From 1999 through 2007, Catawba County was in violation of the annual standard of PM 2.5 µm (Figure 3-22, page 58). The County reached compliance beginning in 2008 and has continued to decline through 2010-12, by which time PM pollution had dropped by 38.8% since 1999-2001. This drop is likely due in part to economic and traffic downturns, improved pollution controls, and to intergovernmental efforts through the Unifour Air Quality Committee.[42]

Figure 3-22.
Fine Particulate Matter (2.5µg) in Catawba County, Three-Year Averages, 1999 to 2012



Source: NC Division of Air Quality, 2014.

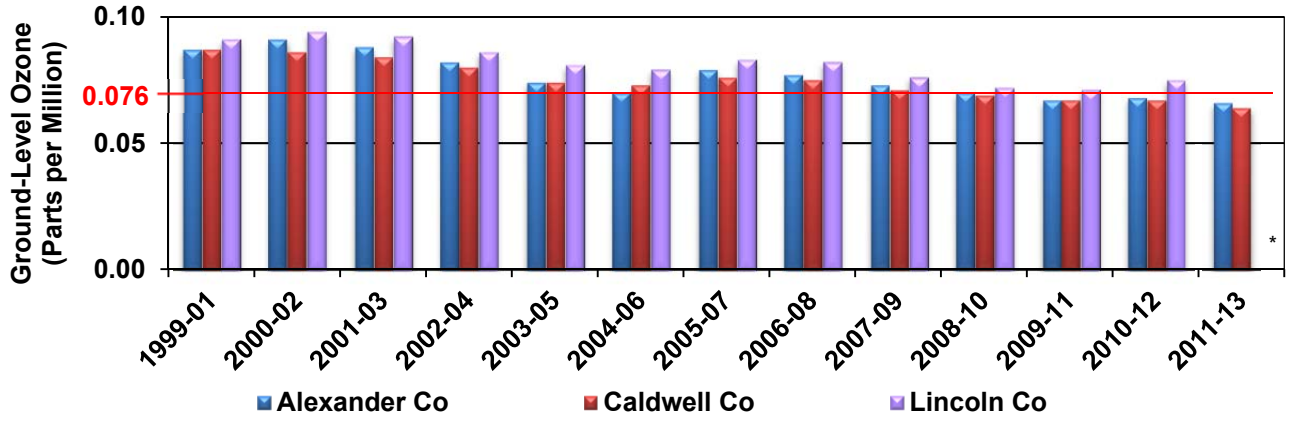
Ground-level ozone (as opposed to high-atmospheric ozone) is considered detrimental to human health and is formed when sunlight and water vapor react with motor vehicle and industrial emissions. The high levels of sunlight and heat necessary to create ground-level ozone generally only occur during the summer, leading to "high-ozone" days during periods of

[41] Koening, Jane Q. et al., "Pulmonary Function Changes in Children Associated with Fine Particulate Matter" *Environmental Research* v.63 p.26-38 (1993).
[42] NC Division of Air Quality, "PM 2.5 Data Analysis" (1999-2009), accessed at: http://daq.state.nc.us/monitor/data/pm2pt5/ on January 14, 2011.

high temperatures and stagnant air masses.[43] High levels of ground-level ozone have been associated with many lung problems in children including: coughing, wheezing, decreased pulmonary function, higher rates of pneumonia, increased asthma and permanent lung damage. The current EPA standard of ground ozone (three year average) was 0.076 parts per million.[44]

Catawba County does not host a monitoring station to measure ground-level ozone, but there are three monitoring stations in neighboring counties: Caldwell (to the northwest), Alexander (to the north) and Lincoln (to the south). Generally, ground ozone levels in these counties have been declining throughout the past decade (Figure 3-23). In a similar fashion to particulate matter, monitor readings for ground ozone pollution in the region fell from above the standard (0.76 parts per million) in 2002-2004 down to below the standard by 2007-09. One note concerning the data in Figure 3-23 is that the Lincoln County monitor recorded an increase between 2009-11 and 2010-12, while Alexander and Caldwell levels continued to decline. This may be due to the Lincoln monitor's proximity to the larger Charlotte Metro, which routinely has higher levels of ground-level ozone pollution than the Hickory Metro area.

Figure 3-23.
Ground-Level Ozone (parts per million), Three-Year Averages, 1999 to 2012



*Lincoln County ground ozone data for 2013 not included. Source: NC Division of Air Quality, 2014.

In summary, levels in Catawba County's atmosphere of both fine particulate matter and ground ozone continue to decline and are currently well below federal standards. This trend is a positive development for the lung health of the County's very young children.

Health and Nutrition Overview

In review, several positive and unfortunately several negative trends are occurring in the overall condition of health and nutrition of children in Catawba County. Some of the negative trends include:

[43] US Environmental Protection Agency "Ground-Level Ozone" fact sheet, accessed at: http://www.epa.gov/glo/health.html on April 16, 2011.
[44] NC Division of Air Quality, "Ozone Design Value Maps" (1999-2009), accessed at: http://daq.state.nc.us/monitor/data/o3design/ on January 14, 2011.

- A continuing decline in primary care physicians per capita (8.0 per 10,000 residents, lowest since the 1990s);
- Increasing reliance upon public funding sources to pay for children's health care (18,003 children, 46.3% of all County children age 0-17 are covered by Medicaid);
- An increase in the number and percent of County mothers who smoke while pregnant (297 or 16.2%, the highest percentage since 1994);
- An increase in number and percentage of children with a disability across all races and ethnicities;
- A reduction in the percentage of mothers receiving medical care in the first trimester, from 82.7% in 2005-09 to 75.1% in 2011-12.

The growth of these negative health measures is likely due in large part to the County's continuing economic downturn. These indicators continue to pose challenges for Early Head Start personnel in their goal of ensuring healthy and stable homes for the County's economically challenged very young children.

Another noteworthy trend is a substantial decrease in the rate and number of abortions performed on Catawba County women, from 11.1 per 1,000 females in 2008 (344 abortions) to 6.6 per 1,000 females in 2011 (195 abortions). Concurrent with the decline in abortions, the number of births also decreased during the period, from 1,948 in 2008 to 1,778 in 2012 (-170, or -8.7%).

Despite the economic difficulties experienced in Catawba County, several measures of health have been maintained or have improved, including:

- The percentage of children who are totally without health insurance. This number continues to fall, from 12.3% of children in 2000 to 7.7% in 2012;
- The rate of teen pregnancy, which continues to decline from 8.4% of teens annually in 1994-98 to 4.1% in 2008-12;
- A decrease in the prevalence of childhood obesity, from 19% of 2-to-4-year-olds in 2007 to 15% in 2012;
- A general decrease in the number of initial reports of abuse or neglect in Catawba County, from 3,090 in 2008 to 2,704 in 2013 (-386, or -12.5%)
- A decrease in the estimated number of very young County children who lack access to fluoridated water (2,615 in 2011 to 2,100 in 2014, or -19.7%);
- A continuing decrease in both PM 2.5 (particulate matter) and ground ozone.

These positive factors during this extended period of economic difficulty are noteworthy, and are likely due in large part to continued coordination and focused planning of local health and social organizations.

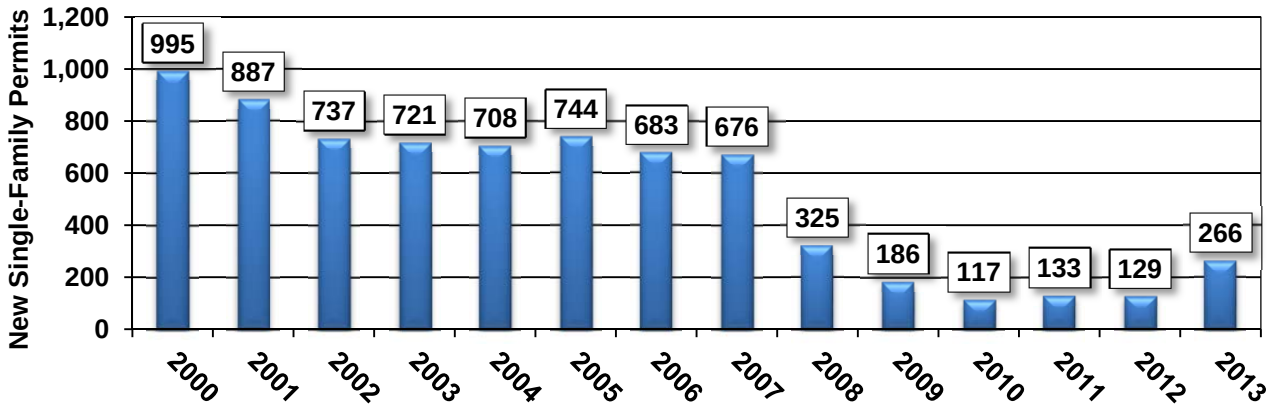
Section Four
Catawba County Housing Characteristics

This section of the Catawba County Schools Early Head Start *Community Assessment* provides an overview of housing characteristics in the County, data regarding home ownership versus renting and the use of Section 8 rental assistance for low-income families. Information regarding housing and race are also included in this section of the report.

Housing Costs and Construction

The annual number of single-family (site-built) building permits in Catawba fell 88.2% from 995 in 2000 to 117 in 2010 (Figure 4-1). This decline was due to many factors, including a large drop in County employment during the past decade and bank-lending difficulties tied to the national subprime mortgage crisis that occurred between 2007 and 2010. The number of new single-family permits remained below 135 through 2012. In 2013 the number of single-family permits more than doubled to 266. It remains to be seen whether the growth in home construction represents the beginning of a trend; however, by historical standards residential construction in Catawba County remains extremely weak.

Figure 4-1.
Annual Building Permits for Single-Family (Site-Built) Home Construction, Catawba County, 2000-2013



Sources: US Census, Building Permits Survey, 2014. Accessed on May 12, 2014 at: http://censtats.census.gov/bldg/bldgprmt.shtml

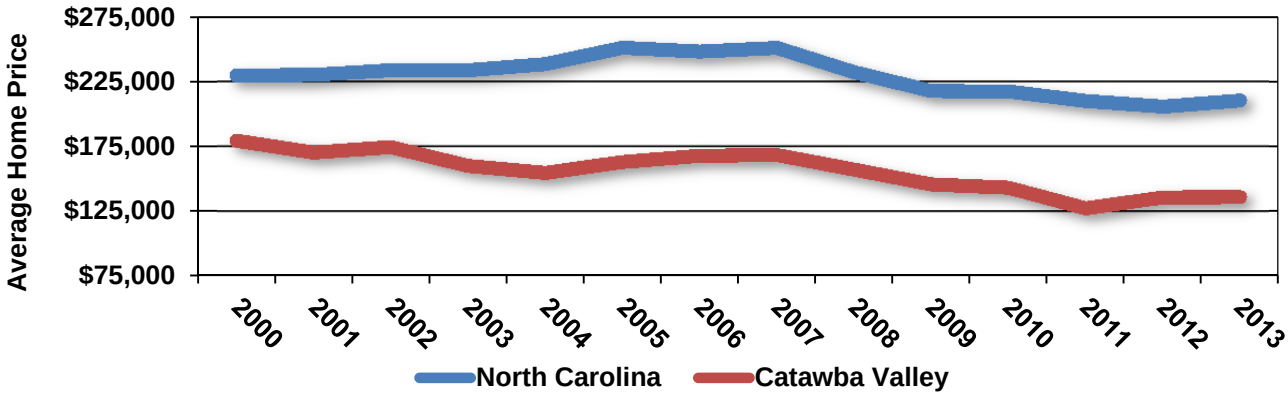
Catawba County's existing home sales were also hard-hit by a lack of available credit, job losses, a departure of many young adults from the County and a glut of foreclosed homes. The number of homes sold through Multiple Listing Service (MLS) in both the Catawba Valley region (defined as portions of Alexander, Caldwell and Catawba Counties) and the State peaked in the middle of the decade, and then fell sharply thereafter. After rising to a high of 3,055 homes sold in 2006, Catawba Valley home sales fell to 1,944 units by 2011 (Table 4-1, page 60). From 2006 to 2011, existing home sales statewide fell by 40.0%. The average (mean) value of homes sold during the same period is shown in Figure 4-2 on page 60 for both the Catawba Valley and the State (adjusted for inflation to 2013 dollars).

Table 4-1. Existing Homes Sold through Multiple Listing Service (MLS) in the Catawba Valley Region and North Carolina, 2000-2013 (in thousands)														
Area	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Catawba Valley	1.9	1.8	1.8	1.9	2.4	2.8	3.1	3.0	2.5	2.2	2.0	1.9	2.0	2.4
North Carolina	69.2	74.5	81.2	92.3	112.7	135.8	133.6	125.4	92.3	81.1	80.6	80.1	93.5	122.6

Source: North Carolina Association of Realtors (2014). Accessed at: http://www.ncrealtors.org/market_statistics.cfm

Changes in the average existing home sale price shows a similar pattern as the number of homes sold, with the peak average home prices in the middle of the decade, but falling off sharply beginning in 2008 (Figure 4-2). On average, homes in the Catawba Valley region sell for about $70,000 to $75,000 less than do homes Statewide, with the most recent (2013) average prices being $210,634 across North Carolina and $136,201 in the Catawba Valley.

Figure 4-2.
Average (Mean) Existing Home Sales Price, Catawba Valley and North Carolina, 2000-2013



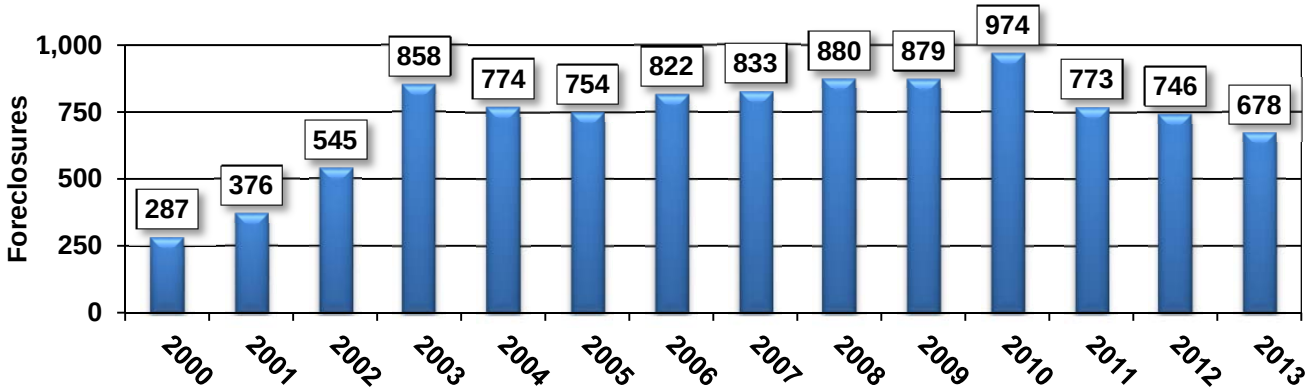
Source: North Carolina Association of Realtors, 2014. Accessed at: http://www.ncrealtors.org/market_statistics.cfm; Adjusted for inflation using US BLS data.

Though home prices have fallen, home ownership still remains difficult for many low income families. Since 1996, the HUD-funded Unifour Consortium HOME Program provides interest-free down-payment assistance up to $7,500, and education opportunities to help lower-income families buy a home. Up to half of the loan is forgiven if the family lives in the home for at least ten years. Over 2,300 families have benefitted from the program, an average of 136 families per year.

Foreclosures and Vacant Homes

Equally dramatic as the decline in new home construction was the strong rise in Catawba County foreclosures (Figure 4-3, page 61). From 2000 to 2010, the number of homes entering the foreclosure process rose from 287 to 974 (239.4%). Since 2010, however, foreclosures have been declining steadily. The 678 foreclosures filed in 2013 was the lowest number recorded since 2002 (545 foreclosures). The increase in home sales and decrease in foreclosures since 2010 may indicate a significant change in direction for Catawba County's home construction and home sales industries, as well as increase in equity for homeowners.

Figure 4-3.
Catawba County Foreclosure Cases, 2000-2013



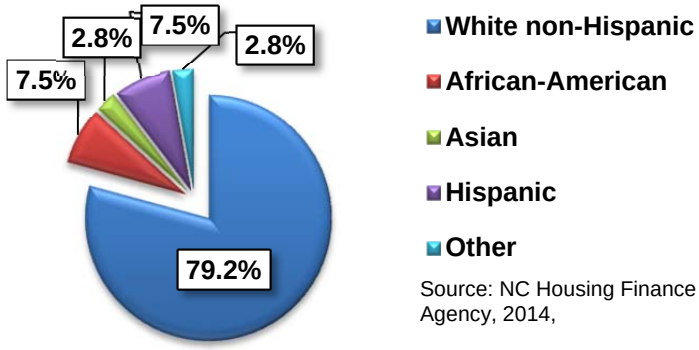
Source: North Carolina Administrative Office of the Courts, 2014.

Another indicator of economic distress in the housing market is the number of vacant homes. From 2000 to 2010, the number of vacant homes increased in Catawba County, from 4,386 empty homes in 2000 to 6,999 in 2010. As of 2012, the estimated number of vacancies had continued to climb, reaching 8,511, an increase of 4,125, or a 94.0% increase since 2000.[1]

Mortgage Payment Program

In 2010, Catawba County was chosen by the NC Housing Finance Agency to participate in its Mortgage Payment Program (MPP). If a homeowner in the County has lost his or her job due to layoffs and either was unable to find a new job or go back to school, the MPP will loan the client the money to make the house payment. Loans are up to $1,000 per month for 36 months, interest-free. Moreover, if the client stays in the home for ten years afterwards, the loan can be forgiven. From its inception in October 2010 through December 2013, MPP has assisted 106 households in Catawba County. A breakdown of Catawba County participant households by race and ethnicity is displayed in Figure 4-4. The majority of program participant households (79.2%) are White non-Hispanic. This is generally consistent with the percent of Catawba County homeowners by race/ethnicity (as seen below Figure 4-6 on page 63).

Figure 4-4.
Catawba County Households Participating in NC Housing Finance Agency's Mortgage Payment Program, % by Race and Ethnicity, 2010-2012



Source: NC Housing Finance Agency, 2014,

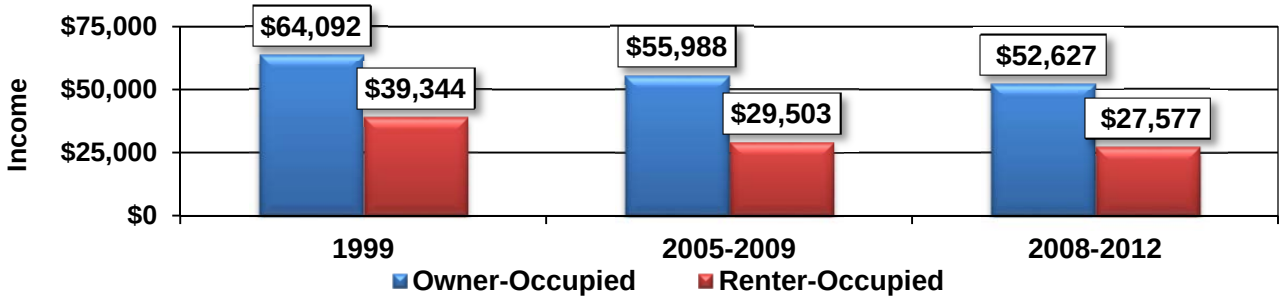
Renting

Whether a household is occupied by owners or renters is a strong predictor of economic need in families. In 2008-12, the median income in

[1] Source: US Census 2000, "Table QT-H1. General Housing Characteristics;" Census 2010, Table H-1. "Occupancy Status – Housing;" American Community Survey, 2012 – 1-year estimate, Table DP04 – Selected Housing Characteristics."

Catawba County for rental households was only about half (52.4%) of the median income for owner-occupied households (Figure 4-5). Adjusted for inflation (to 2012 dollars) median household income has fallen steadily for owner-occupied houses for more than a decade, from $64,092 in 1999 to $52,627 in 2008-12 (-17.9%). During the same period income declined at a faster pace for renter-occupied households, falling 29.9% from $39,344 in 1999 to $27,577 in 2008-12.

Figure 4-5.
Median Household Income by Ownership Status, Catawba County, 1999, 2005-09 and 2008-12
(adjusted for inflation)



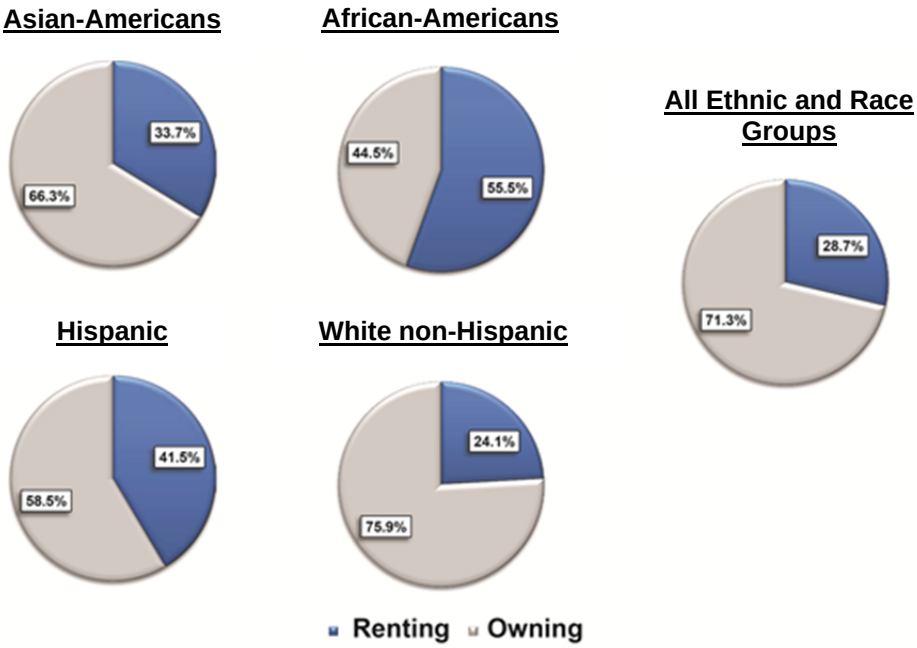
Source: US Census, Table HCT012 (2000), American Community Survey, Table B25119 (2005-09 & 2008-12). Inflation-adjusted by BLS Inflation Calculator.

Figure 4-6 on page 63 presents a breakdown of Catawba County home owners and home renters according to race and ethnicity in 2008-12. In 2008-12 a total of 71.3% of Catawba County households owned their homes, down from 72.8% in 2005-09, but still a higher proportion than both the State (67.1%) and the US (65.5%). There were substantial differences in home ownership between ethnic and racial groups: Over three-fourths (75.9%) of non-Hispanic White families lived in homes which they owned, down 2.0% since 2005-09. The percentage of Asian owner-occupied households fell from over three-quarters (77.0%) in 2005-09 to under two-thirds (66.3%) in 2008-12.

Hispanic households underwent a very large change from 2005-09, when only 38.1% of Hispanics owned their own home. By 2008-12, 58.5% of Hispanic households were owner-occupied. The percentage of African-American households which were owner-occupied also increased, from 53.7% of homes in 2005-09 to 55.5% in 2008-12. This may also reflect the departure of lower-income workers for jobs elsewhere. Nonetheless, a large homeownership disparity continues to exist in Catawba County between racial/ethnic groups. Catawba County minority families are more likely to be renters which, as noted above in Figure 4-5, earn less income on average than homeowners.

An important source of economic assistance for rental households in Catawba County continues to be the Section 8 rental assistance program, funded by the US Department of Housing and Urban Development (HUD), and administered locally by the Western Piedmont Council of Governments (WPCOG). This program supplements a resident's rental payment, and requires landlords who participate in the program to meet basic construction and maintenance standards. Beginning in fiscal year 2014, the Section 8 program underwent a reduction in federal funding which resulted in a decrease in the rental payment assistance available to landlords by 10%, as well as an increase in the number of persons per rental unit.

Figure 4-6.
Percentage of Catawba County Households, by Tenure and Race or Ethnicity, 2008-12



Source: American Community Survey, 2008-12 (5 year Estimates, Table S2502), 2014.

As of April 2014, the Section 8 program was assisting 810 individuals in 363 families in Catawba County. Of these, the majority of families were African-American (55.4%), and nearly all of the rest were White (42.4%) (Figure 4-7, page 72). Hispanics constituted only 1.9% of client families receiving rental assistance, despite the fact that over two of every five Hispanic households rent. This low rate of participation may be due to several reasons, including:

- Many Hispanic residents have arrived in Catawba County seeking temporary employment and do not intend to settle long enough to apply for rental assistance;
- Hispanic residents may be confused by language and cultural differences with English-speaking authorities, and be ignorant of the benefits offered by Section 8 housing; and
- Hispanic residents who are not legal workers may be unable to seek benefits and fear being deported.

Public Housing

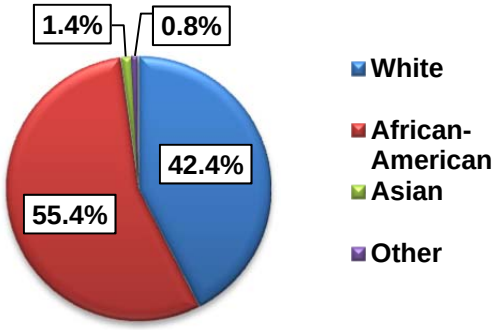
In 2012 a total of 311 families lived in public housing apartments in Catawba County. Since 2000, the number of families living in public housing has grown modestly (by 11.1%), but the racial/ethnic makeup of public housing residents has remained generally the same since 2006. Table 4-2 shows demographics of Catawba County public housing clients since 2000

African-American families continue to constitute the majority (77%) of public housing residents. The proportion of White families has remained near 23% since 2006. Though increasing

between 2000 (1%) and 2006 (6%) the proportion of Hispanics has remained at about 5%, or about one-in-twenty families. Thus, Hispanic families appear to be under-represented in Catawba County public housing, possibly for similar reasons as discussed for Section 8 participation rates. Asian families are not represented at all (0%).

Women headed the vast majority of households in Catawba County public housing throughout the period, though the percentage of female head-of-households has fallen from 87% in 2000 to 79% in 2012. The large disparity between single mother-led homes (46%) and female-led homes (79%) may be due to multi-generational homes, where the grandmother, or even great-grandmother, is listed as head of household.

Figure 4-7.
Breakdown of Catawba County Section 8 Families, by Race, 2014*



* Section 8 statistics classify "Hispanic" as an ethnicity, not a race. Hispanic clients are tallied in addition to the above percentages. In May 2014, Hispanic families constituted 1.9% of Catawba County Section 8 clients.
Source: WPCOG Section 8 Housing.

Table 4-2.
Families in Public Housing by Race or Ethnicity in Catawba County, 2000, 2006, 2008, 2010, 2012

Year	Families Served	% Female Head of Household	% Single Mother	% Any Racial Minority	% of African-American Families	% of Asian-American Families	% of White Families	% of Other Race Families	% of Hispanic* Families
2000	280	87%	60%	83%	80%	2%	18%	0%	1%
2006	306	82%	47%	84%	77%	0%	23%	0%	6%
2008	303	79%	46%	82%	75%	1%	23%	1%	5%
2010	307	77%	45%	83%	78%	0%	22%	0%	5%
2012	311	79%	46%	82%	77%	0%	23%	0%	5%

Source: WPCOG Section 8 Housing.

Housing Characteristics Overview

Overall, the housing industry fell strongly from 2000 to 2011, but appears to be undergoing a modest recovery. Median household income has continued to decline, particularly for households that rent. The median rental household income of $27,577 is very low and thus indicates the severity of economic pressures on renters. The percentage of African-American and Hispanic households that rent is decreasing. Of the major housing assistance programs, Section 8 rental assistance and Public Housing, African-Americans continue to utilize these opportunities much more than Hispanics in Catawba County. Asian households enjoy a much higher percentage of home ownership than other minorities and continue to rely on almost completely absent from local housing programs.

Section Five
Catawba County Child Care Characteristics

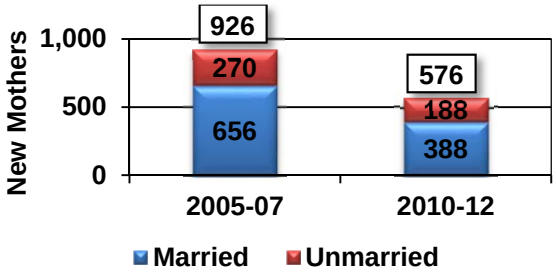
This section of the Catawba County Schools Early Head Start County Assessment provides an overview of the employment of mothers of very young children and the resources available to provide child care for them.

New Mothers and Employment

The Census Bureau provides estimates regarding the employment of women who have given birth during the previous 12 months. In Catawba County the estimated number of new mothers fell from 1,871 per year in 2005-07 to 1,404 per year in 2010-12 (-467 or -25.0%), a drop which coincides with the decline in number of births countywide over the past decade. Of these new mothers the estimated number which were not in the labor force fell dramatically, from 926 in 2005-07 to 576 in 2010-12 (-350 or -37.8%).[1]

Figure 5-1 displays the estimated number of new mothers not in the labor force by marital status. With the significant growth in poverty rates since 2000, it might be expected that the number of single and unemployed new mothers might grow. ACS results indicate, in fact, that they actually declined at almost as high a rate (-30.4%) as the number of married and unemployed new mothers (-40.9%). Some possible reasons behind the decrease in unemployed single mothers may include a lower County birth rate across all races/ethnicities, as well as an increase in grandparents raising grandchildren, which can allow a single mother to be employed.

Figure 5-1.
Estimated Catawba County New Mothers Not In the Labor Force*, by Marital Status, 2005-07 and 2010-12



*Defined as women giving birth in past 12 months.
Source: ACS, Table B13012 (2005-07, 2010-12).

Day Care Access

As of March 2014 there were 38 licensed day care facilities in Catawba County which cared for children age 0-2 and were not based in a home.[2] This represents a decline of seven licensed day care facilities (-15.6%) in the County since January 2011. The North Carolina Division of Child Development (NCDCD) uses a five-star rating system to inform parents of the extent of a day care's staff education levels and program standards. A rating of one star indicates that a facility meets the minimum standards for licensure. A facility may voluntarily attempt to surpass a one-star rating. A rating of fewer stars is not intended to indicate poor care at a facility, but rather that higher-rated facilities offer more programs and employ better-educated child care workers. Church-based day care facilities are not required to participate in the star rating

[1] Source: US Census ACS 3-Year Averages, "Women 16 to 50 years who had a birth in the past 12 months by marital status and labor force status," Table B13012 (2005-07, 2010-12).
[2] Source: NC DHHS, Division of Child Development, "Child Care Facility Search Site," accessed on April, 2014 at: http://ncchildcaresearch.dhhs.state.nc.us/search.asp.

system, but may if they wish. Table 5-1 lists all licensed day care centers in Catawba County for children age 0-2, in order of star rating.

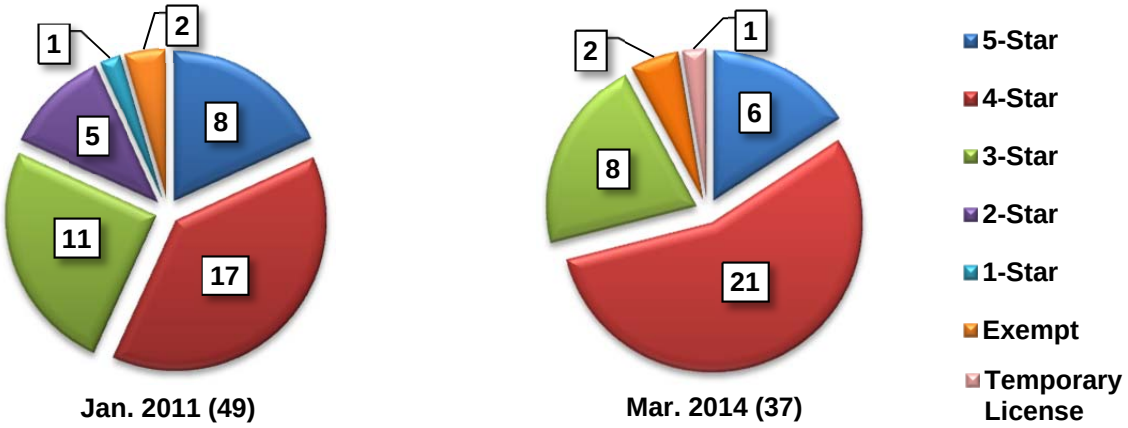
Table 5-1.
Day Care Centers for Ages 0-2 in Catawba County and Star Rating, March 2014

Facility Name	Address	Location	Star Rating
Abernethy Memorial Child Development Center	1300 North Main St	Newton	5
Catawba Child Development Academy	2481 J&B Rd	Claremont	5
Community Ridge Day Care Center, Inc.	243 7th Avenue SW	Hickory	5
Jenkins Head Start	2750 North Center St	Hickory	5
Tyndall Center For Early Childhood	4431 County Home Rd	Conover	5
Woodlawn Baptist Child Development Center	440 7th St Place SW	Conover	5
A New Beginning Children's Learning Center	15 East 22nd St	Newton	4
Bethlehem United Methodist Child Development Ctr	3214 Catawba St	Claremont	4
Catawba Ridge Child Development Center	1635 20th Avenue Dr NE	Hickory	4
Children's Academy #2	3451 Highland Avenue	Hickory	4
Children's Academy #1	411 10th Ave Dr NE	Hickory	4
Conover Academy Day Care	218 3rd Ave SE	Conover	4
Hickory Foundation YMCA Child Dev. Ctr.	701 1st St NW	Hickory	4
Hickory Montessori School	925 5th St NE	Hickory	4
Jump Start Academy	2615 NC Highway 10 West	Newton	4
Legrande Learning Center	3720 North Center St	Hickory	4
Little Folks School East	410 21st St SE	Hickory	4
Little Stars Child Development Center	2210 18th Ave NE	Hickory	4
Love-N-Care Child Day Care at Shuford YMCA	1104 Conover Blvd East	Conover	4
Miss Millie's Child Care Center	2853 Water Plant Rd	Maiden	4
Nanny's Learning Center	513 N Carolina Avenue	Maiden	4
Quality Care Child Development Center, LLC	2830 23rd Ave NE	Hickory	4
Quality Care Child Learning Center	2952 North Oxford St	Claremont	4
Rainbow Child Care Center-Conover 2	401 Rock Barn Rd	Conover	4
Rosenwald Preschool Academy	510 Potts St	Maiden	4
Tender Care Child Development Center	3375 NC Hwy 127 S	Hickory	4
The Sandbox	2555 Tate Blvd SE	Hickory	4
Chesterbrook Academy	2751 NC Hwy 127 S	Hickory	3
Christ Church Child Development Center	2416 Zion Church Rd	Hickory	3
D'S Lovin Day Care	423 3rd Avenue SE	Hickory	3
Footsteps Child Care Center, LLC	5122 Fleetwood Dr	Hickory	3
Kids In Motion Day Care	4737 Commons Dr	Denver	3
Rainbow Child Care Center- Conover 1	1031 Fairgrove Church Rd	Conover	3
Sherrills Ford Learning Academy	7733 Sherrills Ford Rd	Sherrills Ford	3
The Pa-Paw Patch, Llc	3819 Cat Square Rd	Vale	3
Eastern Sky Child Development Center	1432 Old Conover-Startown Rd	Newton	Temp License*
First Baptist Church Child Development Center	339 2nd Ave NW	Hickory	(Religious)
Word Of Life Academy	1651 East P St Ext	Newton	(Religious)

*A temporary license is given to a new or previously licensed center upon change in ownership or location, for a period of no more than 90 days. This allows the center to achieve a satisfactory rating for a regular license. A temporary license must be posted in the center where it can be easily seen .Source: NCDHHS, Division of Child Development, 2014.

A breakdown of Catawba County day care centers caring for 0-2 year-old children in January 2011 and March 2014 by star rating is displayed in Figure 5-2. The decline in the total number of day care centers for very young children may be partly due to the trend of declining births in the County. Overall the star ratings of Catawba County day care facilities have increased since 2011. As of March 2014 there were no one- or two-star day care facilities, likely due to the fact that NC Child Care day care subsidies are now only approved for three-star day cares and above.[3] The number of four-star day care centers increased from 17 in 2011 to 21 in 2014. Together, four- and five-star day care centers now account for 71.1% of facilities in the County, an increase from 55.6% in 2011. Two religious day care institutions claimed exemption from the ratings system in 2011 and 2014, although most religiously-sponsored centers continue to participate voluntarily.[4] This increase in ratings means that day care centers in Catawba County are offering more programs to children, and the day care staffs are better trained than three years ago.

Figure 5-2.
Catawba County Day Care Centers, Caring for 0-2 Year-Olds, by Rating, 2011 and 2014



Source: NCHHS, Division of Child Development, 2011 and 2014.

Map 5-1 displays the locations of licensed Catawba County day care facilities for very young children in March 2014 and includes the star rating of each Center. Areas within a one-mile radius of centers with four or five stars are highlighted. The map also displays the density per mile of minority births from 2008-12 by Census Block Group, which are associated with increased poverty rates. The purpose of the map is to help identify areas with elevated concentrations of very young minority children which may lack reasonable geographic access to a day care center with higher program standards and staff education levels.

The map reveals that most areas with higher concentrations of minority births are within an accessible distance of a four- or five-star day care, especially in portions of Hickory. Areas of

[3] Source: NC DHHS Division of Child Development, "Child Care and Development Fund Plan for North Carolina, FFY 2014-15" p. 35, accessed in May, 2014 at: http://ncchildcare.nc.gov/pdf_forms/ccdf_plan_2014_2015.pdf.

[4] Note: Participation by religious-sponsored day cares in the star-rating system may be due to the fact that those which claim a religious exemption are reimbursed at only a one-star rate. Source: NC DHHS Division of Child Development, " Child Care and Development Fund Plan for North Carolina, FFY 2014-15" p. 67, accessed in May, 2014 at: http://ncchildcare.nc.gov/pdf_forms/ccdf_plan_2014_2015.pdf.

Newton experiencing higher concentrations of minority births also appear to have reasonable access to four- and five-star day care services.

An improvement since the 2011 Assessment occurred in an area of higher minority births in the Oxford community, which now enjoys access to a five-star facility. One particular area which experiences higher minority births, but which contains no day care facilities, is located in Long View. In the 2011 *Assessment* a two-star facility existed in Long View, but as of 2014 no licensed day care facilities for very young children operate there. Several outlying and rural communities throughout the County have access to four- or five-star facility near their centers, including Claremont, Maiden and Mountain View. A surprising result seen in the map is in the Viewmont area, which includes relatively high household income, but as of 2014 has no four- or five-star day care facilities. Viewmont had two such facilities in 2011. Also since 2011, the southeastern portion of Catawba County lost access to five-star daycare. These instances of decline in four- and five-star day care access for very young children may be an indication of the decrease of young professional adults and families living in the County. Parents may also be opting for lower cost home-based day care services.

Generally, young children require more care, attention and supplies than do older children, and day-care is accordingly more expensive the younger a child is. In North Carolina the average annual cost in 2013 for day care for a four-year-old child was $7,501, while for an infant the average cost was $8,868.[5] Section Four of this report notes that the median household income in Catawba County for families who rent is $27,577 per year. Thus for rental households (which are likely to be minorities), full-time day care would represent 27.2% of household income for a four-year-old, and 32.2% for an infant.

Federal and State governments provide subsidizes for lower-income families child day care. This subsidy frees many parents from making difficult decisions between paying for rent, food or child care, and allows parents who financially need employment to keep their jobs rather than quit and stay home with children. North Carolina families active in the program are required to contribute a portion of their family income to participate, based on a sliding scale. As of April 2013 a total of 76,754 North Carolina children were receiving subsidized day care, while 41,465 were on the waiting list.[6]

In Catawba County, the number of children receiving subsidized day care has greatly increased from 209 children per month in 2009 to 1,442 children per month in 2012 (+590.0%) (Figure 5-3, page 69). Subsidy rates paid to day care centers are based on each center's star rating. In 2013, for example, a Catawba County one-star center would receive $379 per month to care for an infant, while a five-star center would receive $654 (an increase of 72.6%).[7] It is important to mention that these rates have remained the same since 2007, and changes are

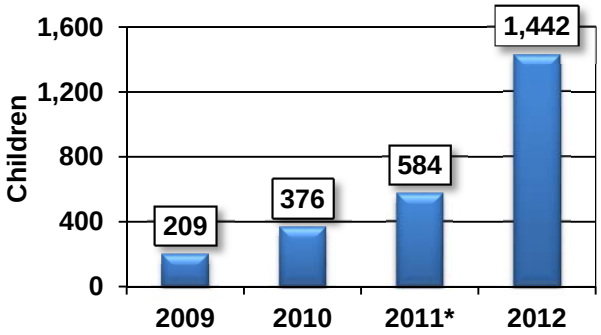
[5] Source: National Association for Child Care Resource and Referral Agencies, "2013 Child Care in the State of North Carolina," fact sheet. Accessed on May 17, 2014 at: http://www.naccrra.org/sites/default/files/default_site_pages/2013/north_carolina_2013_state_fact_sheet.pdf

[6] Source: NC DHHS, Division of Child Development and Early Education, "Monthly Statistical Summary: April 2013." Accessed on May 17, 2014 at: http://ncchildcare.nc.gov/pdf_forms/April_2013_Statistical_Report.pdf

[7] NC Division of Child Development, "Subsidized Child Care Rates for Child Care Center, by County, Effective October 1, 2007," spreadsheet. Accessed on April 20, 2011 at: http://ncchildcare.dhhs.state.nc.us/pdf_forms/center_market_rate_table_effective_100107.pdf

pending implementation of a 2013 market rate study by NC State University.[8] This payment system continues to provide a compelling incentive for day care centers to increase the range of their program offerings and the education level of staff members. The payment system is also a major factor in the increase of staff education and new programs at day cares throughout Catawba County since 2009.

Figure 5-3.
Catawba County Children in Subsidized Day Care, Monthly Average, 2009-2012



*Monthly average through the first three months of calendar year 2011.

Source: Catawba County Department of Social Services, Subsidy Child Care Unit, 2013.

Catawba County Child Care Overview

Catawba County's economic struggles since 2000 continue to severely impact the well-being of very young children, especially regarding the loss of income in rental households. The availability of subsidized day care has greatly increased since 2009 to meet the need of lower-income families to keep young children in day care. The subsidy program appears to be a major factor in keeping many of the County's day cares operating in an otherwise unfavorable economic environment, even in lower-income areas. Moreover, the program's tiered payments, with significantly higher funding going towards day care centers which offer more programs and have better staff education, has likely been the most important factor driving the significant improvement in the star rating system of many programs.

[8] The results of the study are available at http://ncchildcare.dhhs.state.nc.us/PDF_forms/2013CHILD-CARE-MARKET-RATE-STUDY.pdf

Section Six
Catawba County Early Head Start Eligible Families Transportation and Communication

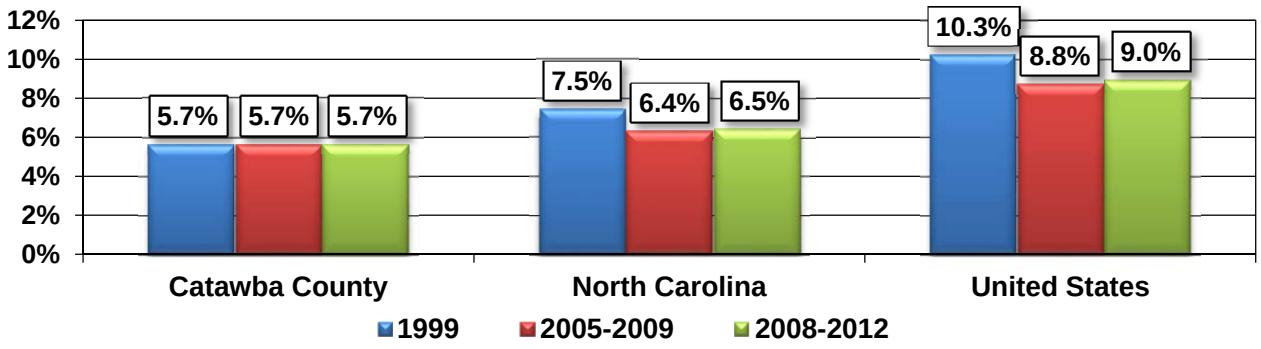
This section of the Catawba County Schools Early Head Start *Community Assessment* examines the extent to which families are able to access local transportation and communication infrastructures.

Transportation Access

Vehicle Ownership

Since 1999, the percent of persons without access to a personal motor vehicle has trended downward nationwide and in North Carolina (Figure 6-1). From 2008 to 2012, the trend reversed slightly with a slight uptick in percentage of people lacking a vehicle. This may be related to the economic recession and the expansion of public transportation in urban environments. During 2008-12 the percentage of population without access to a personal vehicle has remained steady in Catawba County, with 5.7% of the population not having a vehicle. Throughout the last 13 years, Catawba County had a lower proportion of its population without access to an automobile than the State or the nation; however, unlike the State and nation, the percentage of County residents without access to automobiles has not decreased.

Figure 6-1.
Percentage of Population without Access to Personal Motor Vehicle, Catawba County, North Carolina and the United States, 1999, 2005-09 and 2008-12



Source: US Census Bureau, 2014.

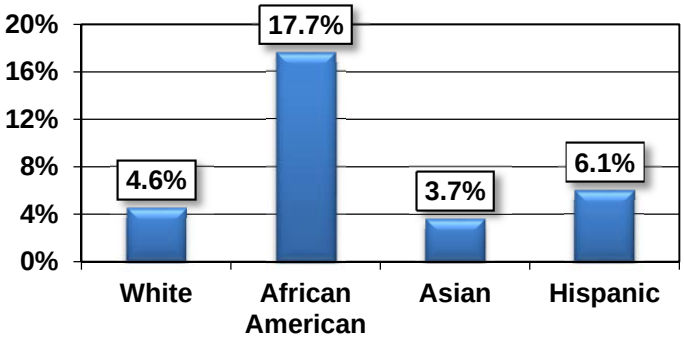
Reasons for this persistence in lack of access to motor vehicles in Catawba County may include:

- The severity and persistence of two economic recessions during the 2000s in Catawba County may have stifled economic upward mobility of lower income persons, delaying or preventing initial purchase of a car;
- Catawba County population growth has been being largely composed of Latino residents, who often walk to work and can lack the money and/or proper paperwork to purchase a vehicle;

- Increasing access to and use of public transit;
- Fewer young adults and young families with access to cars electing to stay in Catawba County; and
- High gasoline prices.

African-Americans had the highest percentage of population without access to a personal car (17.7%) of all the ethnic/racial groups in Catawba County in 1999 (the latest data available), though this was a lower percentage than experienced by African-Americans nationwide (28.8%) (Figure 6-2). Steven Raphael and Alan Berube of UC-Berkley write that African-Americans tend to have less access to personal vehicles than do members of other racial and ethnic groups, even when household income is accounted for.[1] This appears to occur, at least in part, because African-Americans tend to live together in concentrated urban environments where public transportation can meet many needs, and where centers of family, social and religious life are often located within walking distance. They observed that African-Americans often relied for occasional transportation upon the car of an extended family member or friend.

Figure 6-2.
Percentage of Catawba County Residents without Access to Personal Motor Vehicle, by Race and Ethnicity, 1999



Source: US Census Bureau.

This trend, however, could exacerbate the effects of "food deserts" on African-Americans in Catawba County (see Section 3) when access to affordable, nutritious food is not within walking distance of urban Black population centers. Lack of an automobile could also compel families with young children to use the closest day care facility, regardless of the services it may offer or how well their children function at that day care. It also limits job opportunities to locations and hours served by public transportation.

Public Transportation

In 2008 the Western Piedmont Regional Transit Authority created Greenway Public Transportation, which provides scheduled public transit services for Catawba County using full sized city buses. Since its inception, ridership declined until 2011 (Figure 6-3, page 77), likely due to increasing unemployment during that time. Recently, ridership has increased between 2011 and 2013, possibly due to a slow economic recovery and an incrementally improving job market. The amount of discounted fares for elderly or disabled patrons has increased by $2,000 from 2010-2011 to 2011-2012. This may be due to more public awareness of this public transportation option. The routes served by Greenway Transit in Catawba County

[1] Steven Raphael and Alan Berube, "Socioeconomic differences in household automobile ownership rates: implications for evacuation policy," *Program on Housing and Urban Policy,* Berkeley Symposium on Real Estate, Catastrophic Risk, and Public Policy, 2006.

attempt to serve lower-income and minority residents. Map 6-1 displays all areas within one-half mile of bus routes in the County, along with the number of minority births per square mile from 2008-12. It is apparent on the map that the buses run through the midst of urban lower-income and minority housing concentrations in Hickory, Newton and Conover, and are close to portions of Long View.

Figure 6-3.
Fixed-Route Ridership, Fare Amount Paid, 2008-13 (in $Thousands)

Source: Greenway Public Transit, 2014.

The data in Table 6-1 show that the majority of recently-born Hispanic (52.80%) and Black (58.10%) children live in homes which are located within one-half mile of a public transit bus stop. The affordable option of public transit can be a valuable asset for families with very young children, providing safe and regular travel to places of employment, as well as to grocery stores and medical facilities. The majority of Asian very young children do not live within one-half mile of a public bus route, in part because so many Asian families have moved from Long View to the more rural Oxford area during the past decade. Just under one quarter (23.20%) of White children born from 2008 through 2012 live in households within one-half mile of public bus, but this is generally less concerning than it is for minorities, since White households tend to be more affluent and have access to personal vehicles to provide individual transportation.

Table 6-1
Percentage of Children Born from 2005 through 2012 Living within 1/2 Mile of Catawba Public Transit Routes, by Race, April 2014

Race or Ethnicity	Within 1/2 Mile	
	2005-09	2008-12
Hispanic	53.4%	52.8%
Black	56.4%	58.1%
Asian	34.6%	32.7%
White (non-Hispanic)	23.1%	23.2%
All Races	35.1%	35.6%

Source: Greenways Public Transit and WPCOG Data Center, 2014.

Communication Access

Access to Telephone Service

Since 2005, the percentage of the population without telephone service, including cell phones, has decreased nationally as well as at the State and local level. In Catawba County, only 2.3% of the population does not have access to some type of phone service. This is slightly lower than both state (2.5%) and the national (2.4%) percentages (Table 6-2). As competition

increases with more mobile providers, more usage plans and a wider array of home phone options (traditional phone line, bundled with cable or internet provider or a stand-alone device), prices have become more affordable for consumers. In 2013, 56% of US adults owned a smart phone[2]. Even smart phones with a data plan have decreased in price, with some plans as low as $40 per month[3].

Table 6-2.
Percent of Households Without Telephone Access, Including Cell Phones, 1999, 2005-09 and 2008-12

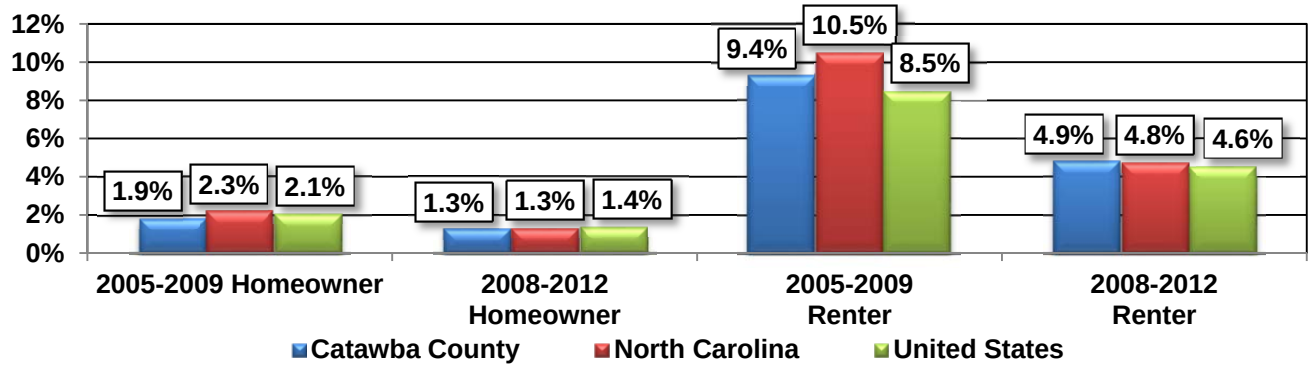
Area	1999	2005-09	2008-12
Catawba County	3.2%	3.2%	2.3%
North Carolina	3.0%	4.9%	2.5%
United States	2.4%	4.2%	2.4%

Source: 2000 Census, 2005-09 and 2008-12 (5-Year Estimates) Census American Community Survey (ACS), US Census Bureau.

The "Universal Service Program for Low-Income Consumers," a program of the Federal Communications Commission, has two options to help low income people gain access to phone service, Lifeline and Link Up. Lifeline provides discounts on basic monthly phone service (wireline or wireless) for qualified subscribers. These discounts can be up to $10 per month. Link Up provides qualified subscribers with a one-time discount, up to a maximum of $30 off of the initial installation fee for one traditional, wireline phone service at the primary residence or the activation fee for one wireless phone service[4]. Even with lower prices, these services can still a luxury for families in extreme poverty.

As noted in Section 4, household income for renters in Catawba County tended to receive only about half of the income of County households that own their home, and the income for renters has declined over the last decade.[5] These financial challenges are evident when examining household telephone access according to whether a home is owned or rented (Figure 6-4).

Figure 6-4.
Percentage of Households without Telephone Access, by Household Type, 2005-2012



Source: 2005-09 and 2008-12 (5-year estimates) American Community Survey, 2014.

[2] Source: Pew Research Center, "Home Broadband," accessed on May 8, 2014 at: www.pewinternet.org/2013/08/26/home-broadband-2013/ .
[3] Source: Company price comparison per user as presented in *Time*, accessed on May 7, 2014, at: http://time.com/7982/which-wireless-plan-is-cheapest/;
[4] Source: Federal Communication Commission website, accessed on May 8, 2014 at: http://transition.fcc.gov/wcb/tapd/universal_service/lowincome.html
[5] Cf. Figure 4-4.

In Catawba County from 2008 to 2012, fewer than one in fifty (1.3%) houses owned by the residents was without landline or cell phone service, but the proportion of rental houses without phone access was nearly one in every twenty (4.9%). The overall trend in the last 10 years was been a significant increase in the availability of phone access by renters. The percentage of renters without phone access has declined from 9.4% from 2005-2009 to 4.9% during 2008-2012 period.

Internet Access

Internet access in the United States has been growing strongly over the past decade. As of May 2013, 73% of adults in the United States had access to the internet at their home, 70% via broadband and 3% via dialup service.[6] Educational attainment and household income are the major factors in broadband access from a residence. Map 6-2 uses geographic data from the National Telecommunications and Information Administration together with Catawba County birth certificate data for 2008-12. The result indicates that only 3.73% of Catawba County children born in 2005 to 2009 lived in households which did not have geographic access to broadband internet. Lack of access in the County was mostly located in the southern portion of the Bandys High School district or between municipalities.

As with phone service, however, internet access can be expensive. According to a study by the Ookla Speedtest.net website, the average monthly broadband bill in the United States in 2010 was $47.32 per month.[7] Dial-up internet access, though very limiting to the user, was much cheaper ($7 to $10 per month) and its usage has remained steady as its very low cost keeps it attractive to lower income users during the nationwide economic downturn.[8]

Though broadband access is physically available to most lower-income households with very young children in Catawba County, these households tend to have several characteristics which correlate with lower-than-average internet use nationwide. Some of these factors include:

- Hispanic (53%) and African-American (64%) households are less likely to use broadband than are White households (74%);
- Households earning less than $30,000 per year are less likely have broadband (54%) than households earning $30,000 or more (74% and up, correlated with higher income);
- Only 37% of adults without a high school diploma or equivalency have home broadband access, compared to 57% of persons with a high school diploma, and 89% of persons with a four-year degree[9].

[6] Source: Pew Research Center, "Home Broadband," accessed on May 8, 2014 at: http://www.pewinternet.org/2013/08/26/home-broadband-2013/ .

[7] Source: Burger, Andrew, "Average US Monthly Broadband Cost," accessed on May 8, 2014 at: www.telecompetitor.com/ookla-average-u-s-monthly-broadband-cost-47-32 .

[8] Source: Pew Research Center, "Home Broadband Adoption 2000-2010" accessed on April 23, 2011 at: http://www.pewinternet.org/Trend-Data/Home-Broadband-Adoption.aspx

[9] Source: Pew Research Center, "Home Broadband," accessed on May 8, 2014 at: http://www.pewinternet.org/2013/08/26/home-broadband-2013/ .

The areas identified earlier in this *Assessment* with higher minority populations, lower household incomes and lower education levels, are all less likely to have home broadband internet access. As the internet becomes the primary access point for information, shopping, news, job openings, government services, and other beneficial areas, persons without internet access or with limited downloading speed may be at a disadvantage in attempting to solve problems or obtain services that they need.

Transportation and Communication Overview

The families of minority and lower-income children in Catawba County have more difficulty accessing transportation and communication services than does the overall County population.

The proportion of adults in Catawba County who do not have access to a personal automobile has remained steady in the County during the past decade, while it has decreased on the State and national levels. In particular, African-Americans in the County are three times more likely than people of any other racial or ethnic group not to have access to a car. As of 2008, however, Catawba County has attained a full-service public transit system, whose routes have good access to several population centers of lower-income and minority families with very young children. From 2008 to 2011, ridership has decreased annually as the number of persons employed has declined. Since 2011, ridership has slowly increased along with the revenue received from discounted fares for disabled or elderly riders.

Households of Early Head Start-eligible families are more likely than the public at large to experience difficulty accessing the County's communication infrastructure. Phone access for this part of the population is improving over time. The proportion of Catawba County residents without telephone service (including cell phone) has decreased since 2005, especially among households that rent (whose members are disproportionately minority). Currently, only 4.9% of rental households do not have phone access, down from 9.4% in 2005-2009. Internet access has been growing during the past decade, but factors which tend to affect Early Head Start-eligible families also tend to be those which correlate with lower rates of broadband internet access, including lower household income and lower educational achievement.

Section Seven
Catawba County Schools Early Head Start Enrolled Children and Families

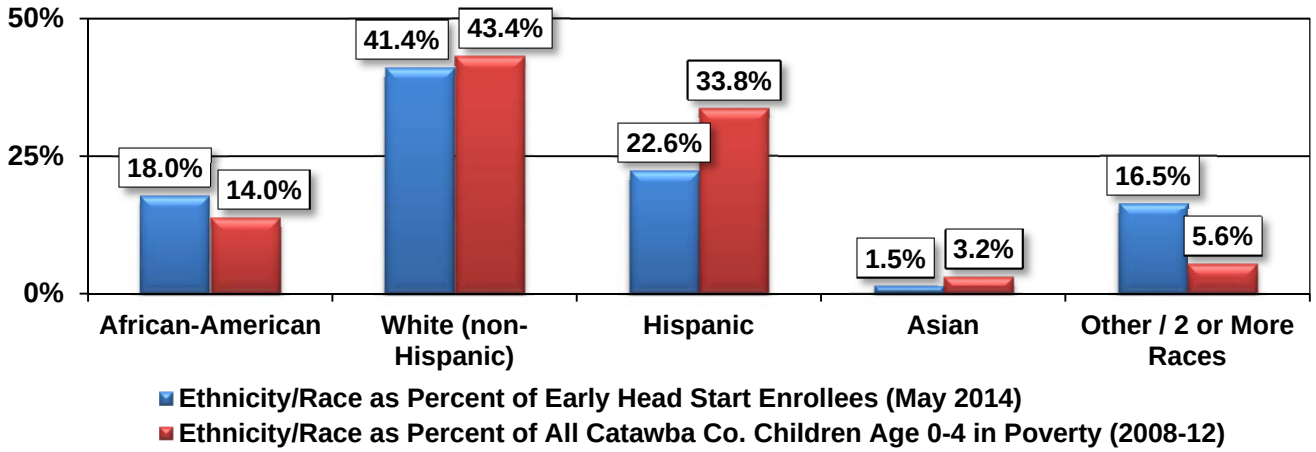
This section of the Catawba County Schools Early Head Start *Community Assessment* provides a brief overview of the demographic makeup of enrolled children and their families.

Race and Ethnicity of Early Head Start Enrollees

As of May 2014 there were 133 children enrolled in the Catawba County Schools Early Head Start program (CCS-EHS), an increase of 59 children (79.7%) since 2011. Of these students 48.1% lived in one-parent households, a slightly larger percentage than in 2011 (43.1%).[1] The proportion of single-parent households for CCS-EHS children is lower than the estimated percent of Catawba County 0-4 year olds in poverty who live in a single-parent household (65.4%) in 2008-12.[2]

The ethnic and racial makeup of children in the Catawba County Schools Early Head Start program largely reflects the ethnic and racial makeup of the County's very young children in poverty (Figure 7-1). Hispanic students appear to be enrolled slightly below the proportion in the general population, though this may reflect the reduction of Hispanic students which has occurred in the County since 2010.

Figure 7-1.
Racial and Ethnic Composition of Catawba County Early Head Start Enrollees Compared with Racial and Ethnic Composition of Catawba County Very Young Children in Poverty (Age 0-4)



Source: US Census American Community Survey Estimates Program (2008-12) and Catawba County Schools Early Head Start Enrollment Data, May 2014.

[1] The number of parents in the household of two enrollees was not indicated. Source: CCS-EHS: "Management Report – Demographics", January 2011 and May 2014.
[2] US Census American Community Survey (2008-12), Tables B17001 and B17006.

Students who represent "Other / 2 or more Races" are listed significantly higher (16.5%) than in the general population of very young children (5.6%). This may reflect the fact that Census race and ethnicity figures are self-identified. This means that parents may identify themselves and/or their children on the Census form as being one particular race. Meanwhile, school staff may tend to classify children as biracial, based on their biological parentage. As a result, school staff may tend to identify more children as "biracial" than the estimates of "biracial" in the Census figures.

All 133 children in CCS-EHS were certified as economically entitled to participate in the Child and Adult Care Food Program (CACFP), whose income limits are used as a criterion for the CCS-EHS program.[3] CACFP eligibility is met if household income does not exceed 185% of the federal poverty level.[4]

As noted above in Section 3 very young children with disabilities must constitue at least 10% of CCS-EHS clients. Disabled infants and toddlers ages 0-3 in the United States are guaranteed to receive early intervention services through the federal Individuals with Disabilities Education Act (IDEA) of 2004, and the EHS program is a means used by the federal government to comply with this mandate.[5]

[3] CCS-EHS does not participate in CACFP, but uses that program's income limits as a criterion for prospective clients.

[4] USDA Food and Nutrition Service, "Child & Adult Care Food Program" fact sheet, accessed at: http://www.fns.usda.gov/cnd/care/cacfp/aboutcacfp.htm.

[5] § 303.118 IDEA—The Individuals with Disabilities Education Act, Part C of IDEA: Early Intervention for Babies and Toddlers, Subpart B of the Part C Regulations: "State Eligibility and Requirements for a Statewide System," National Dissemination Center for Children with Disabilities, accessed at: http://nichcy.org/laws/idea/partc/subpartb.

Section Eight
Catawba County Schools Early Head Start Staff

This section of the Catawba County Schools Early Head Start *Community Assessment* provides a brief overview of the characteristics and qualifications of the CCS-EHS staff.

Qualifications and Characteristics of CCS-EHS Staff

As of May 2014 the Catawba County Schools Early Head Start program was staffed by 11 people, and increase of one since April 2011.

Education Level

As recently as 2004, only 21% of EHS staff members nationwide had obtained a bachelor's degree, and only 1% had earned an advanced degree.[1] As of January, 2011, however, all 11 CCS-EHS staff members (100%) possessed bachelor's degrees in various fields of education, psychology, early childhood development and social work. In addition, four of the program's personnel (36%) had earned advanced degrees in educational administration, education, social work or early childhood development.

Language

Of the 11 staff members, ten spoke only English, and one was bilingual in English and Spanish. This level of Spanish capability appeared to be generally short of the needs of their potential clientele, as 19.8% of births in Catawba County from 2008 through 2012 were Hispanic.[2]

Ethnicity / Race

Of the 11 staff members, nine (81.8%) were White non-Hispanic, one (9.1%) was African-American and one (9.1%) was Latino. This was somewhat less diverse than the program's children, who were 18.0% African-American and 22.6% Hispanic.

With the exception of a shortage of workers who speak Spanish, the staff members of the CCS-EHS program appear to possess the qualifications and capabilities needed to assist program participants and their families.

[1] Source: Hamm, Katie and Danielle Ewen, "From the Beginning: Early Head Start Children, Families, Staff, and Programs in 2004," Center for Law and Social Policy, Washington DC (March 2006). Accessed on April 28, 2011 at: http://www.clasp.org/admin/site/publications/files/0284.pdf

[2] Source: Birth certificate data provided by the NC State Center for Health Statistics, 2008-2012.

Section Nine
Results and Analysis of Community Needs Survey

This section of the Catawba County Schools Early Head Start *Community Assessment* provides the results of a survey taken by CCS-EHS staff, parents/guardians of CCS-EHS enrolled children and local agencies regarding the challenges faced by CCS-EHS eligible families and how the program can achieve its goals.

Survey Participants

A total of sixty-four (64) Community Needs Surveys were completed. Surveys were completed by four (4) CCS-EHS staff members, thirty-five (35) parents/guardians of children currently in Early Head Start and twenty-five (25) leaders representing governmental, medical and advocacy organizations throughout Catawba County that work on behalf of the interests of very young children. The agencies participating in the survey are listed below:

- Catawba County Department of Social Services, Early Childhood Support Team
- Catawba County Department of Social Services, Medicaid Unit
- Catawba County Department of Social Services, Family Preservation Unit
- Catawba County Department of Social Services, Family Builders (Foster Care)
- Catawba County Partnership for Children / Smart Start
- Catawba County Parenting Network
- Catawba County Public Health Department
- Catawba Pediatrics Medical Practice
- North Carolina Cooperative Extension – Catawba County Office
- The Children's Resource Center
- Catawba County Schools
- Newton-Conover City Schools
- Children's Developmental Services Agencies

Survey Results

Questions #1 and #2

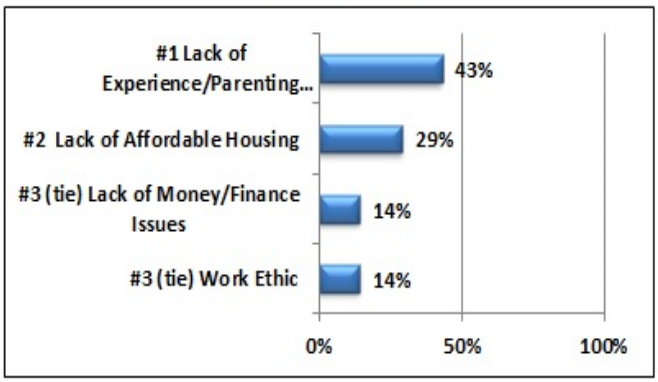
Questions #1 and #2 establish the category of participant and their relationship to Catawba County's very young children in lower-income households and their families.

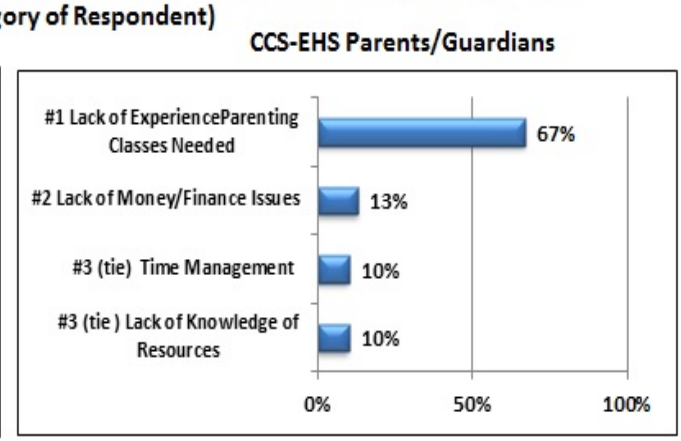
Responses to survey questions #3 through #5 were in the form of written, qualitative answers, which allowed respondents to fully express their opinions. These answers were each examined, and then consolidated into similar categories, which allowed for qualitative analysis of the results. This section identifies the top three responses received by each type of respondent: CCS-EHS parents/guardians, CCS-EHS Staff, and agencies cooperating with CCS-EHS, and then discusses the meaning of these responses for the future direction of the Early Head Start program.

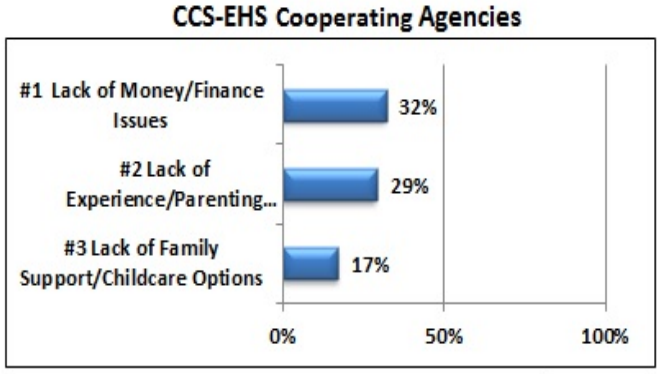
Question #3

Question #3 asked respondents about their observations of the challenges faced by Catawba County parents and parents-to-be.

Figure 9-1. Top Three Responses to Survey Question #3:
"In your view, what challenges are facing new parents and parents-to-be whom you may know?"
(by Category of Respondent)







Results in Figure 9-1 show that CCS-EHS Staff prioritized the challenges faced by new parents in the program slightly differently than the cooperating agencies and parents/guardians, discussing most often issues dealing with "Lack of Experience/Parenting Classes Needed" (which came in second place among the cooperating agency surveys), followed by a "Lack of Affordable Housing." Similar to the parent/guardian and agency responses, a lack of education, particularly regarding child development, was viewed as a major issue. CCS-EHS staff mentioned the following concerns:

"Appropriate developmental education as to what to expect from their children. Many times young parent are unprepared and have unrealistic expectations."

"Not having a person to explain doubts and questions about child development."

Parents and guardians noted issues like "getting baby stuff" and "having [and] keeping a steady job," as primary issues. When it came to the second-place response that parents gave regarding education, comments received included:

"Don't know how to take care [of] their child, their needs and development"

"[Parents] need to know what to do and what is appropriate child development. They need parenting classes"

As indicated in Figure 9-1, the staff of cooperating agencies generated very similar responses to Question #3 as the CCS-EHS parents/guardians, most often listing "Lack of Money/Finance Issues" followed by "Lack of Experience/Parenting Classes Needed" as challenges faced by Catawba County Schools Early Head Start families. As one respondent from a cooperating agency stated,

"The main challenges I see are lack of money and education. I also see a lack of parenting skills, and knowing what is educationally and developmentally appropriate and needed for their children."

Another respondent who works for a CCS-EHS cooperating agency stated:

"Challenges for the population that we work with are a lack of appropriate nurturing and skills as they relate to parenting children. The clients lack fundamental knowledge as it relates to age appropriate developmental expectations and how to identify and manage normal and/or abnormal behaviors."

The problems associated with "Lack of Money/Finance Issues" (which comprised the most mentioned category among CCS-EHS cooperating agencies and the second most-often-mentioned category among parent/guardians) facing CCS-EHS eligible families included lack of funds for "basic essentials" such as diapers, formula and clothing. Others mentioned difficulty in paying for child care:

"Finding safe and affordable care for their children while they work."

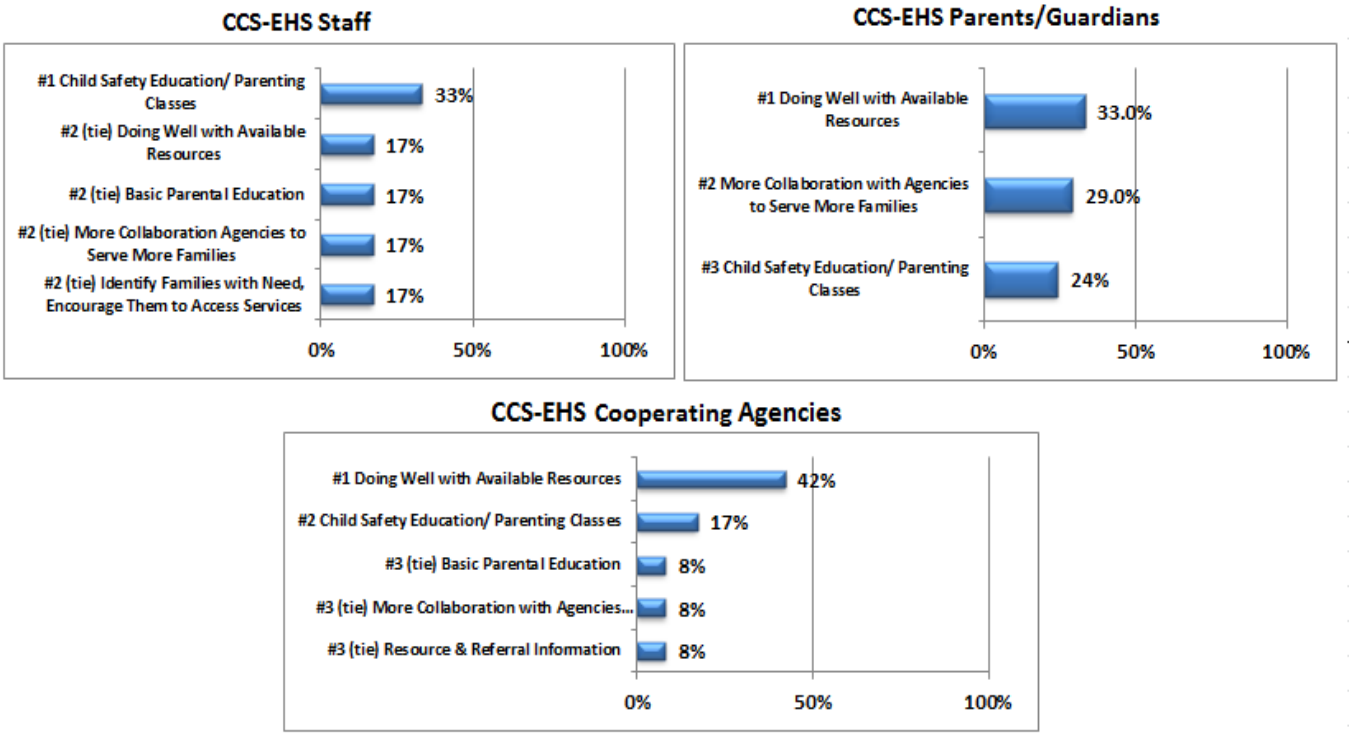
Cooperating agencies also placed emphasis on CCS-EHS eligible children's "Lack Family Support/Childcare Options," while Early Head Start staff members discussed "Lack of Affordable Housing" (second most mentioned among CCS-EHS staff), which results in safety issues for their very small children and adds to familial stress. One Early Head Start staff member who mentioned housing in her response touched on the other two top responses to Question #3 from parents/guardians and cooperating agency members stating that the challenges facing new parents and parents-to-be included:

"Low income, lack of appropriate housing, and parenting skills."

Question #4

Question #4 asked respondents their opinions of actions that CCS-EHS could take to better serve the needs of parents and parents-to-be. The top three responses to Question #4 from CCS-EHS staff, CCS-EHS parents/guardians and CCS-EHS cooperating agencies are displayed in Figure 9-2 on page 86.

Figure 9-2. Top Three Responses to Survey Question #4:
"What would you like to see CCS-EHS do to serve these parents/parents-to-be?"
(by Category of Respondent)



For this question, CCS-EHS parents and guardians and cooperating agencies chose the same top response, that CCS-EHS is "Doing a Good Job With Available Resources." All three groups included "Child Safety Education/Parenting Classes" and "More Collaboration with Agencies to Serve More Families" as one of their top three responses.

Early Head Start staff members expressed a need for parenting classes and other types of adult education as well as expansion of CCS-EHS to serve more families. One respondent also mentioned the importance of continuing home visits. CCS-EHS staff responses to question #4 are below.

"Continue to complete home visits."

"Offer incentives for taking parenting workshops."

"Provide as many services as possible such as more Pre-K classes and a 3 year old class for children in transition."

"Offer the program to more families, and offer a mornings day out for parents to give them [a] chance to go to take classes themselves."

The response most frequently given by Early Head Start parents/guardians was that CCS-EHS is currently doing an excellent job in providing services (Figure 9-2). The second most popular response was that "More Collaboration with Other County Agencies" is needed "to Serve More Families." "Child Safety Education/Parenting Classes" was also mentioned as a critical need

for CCS-EHS parents. The following include some common themes regarding education, collaboration with cooperating agencies and praise for CCS-EHS among answers provided by parents and guardians.

"Teaching new parents how to communicate, play with, and teach their children. Also teach them about safety issues that come with having children."

"Keep doing workshops and give more information. A theme could be importance of language development and questions about bilingual kids."

"Let agencies know that Early Head Start is available to them when they are pregnant [,] especially at the Public Health Department."

"Everything they do to serve me. EHS has truly helped me."

"I am satisfied with all the services."

As seen in Figure 9-2 on page 84, the representatives of cooperating agencies believe that CCS-EHS is doing well with its current program. These respondents also generally encouraged CCS-EHS to provide additional child development classes as well as general education to parents. These agencies also noted that it is important for CCS-EHS to act as an information and referral source to families regarding County-provided social and health services, and to coordinate CCS-EHS's service provision with County agencies. To achieve these goals, respondents recommended to CCS-EHS:

"We would like to see mandatory parenting classes for all participating services (Headstart, NC Peek, etc)."

"Would like us to continue to get the GED program up and running."

"Continue current services. Perhaps collaborate with Public Health to jointly offer parenting education and resource linkage. Joint case management/coordination of services with CC4C for shared clients. Expand services to age 5 if possible."

"Provide information regarding care facilities and services at OB-GYN offices."

"Regular home visitations, possibly a person like a success coach at DSS who can take them places as needed to apply for a job, complete housing paperwork, etc."

"They are doing a great job serving families 4x per month. Ideally, there would be money and/or easy access to child care AND more ways of helping with transportation (i.e. gas, vouchers, volunteer drivers, etc...)"

Many personnel from cooperating agencies praised the current efforts of CCS-EHS and encouraged the program to continue maintaining and strengthen its current programs. Some examples of the praise that cooperating agencies gave CCS-EHS include the following:

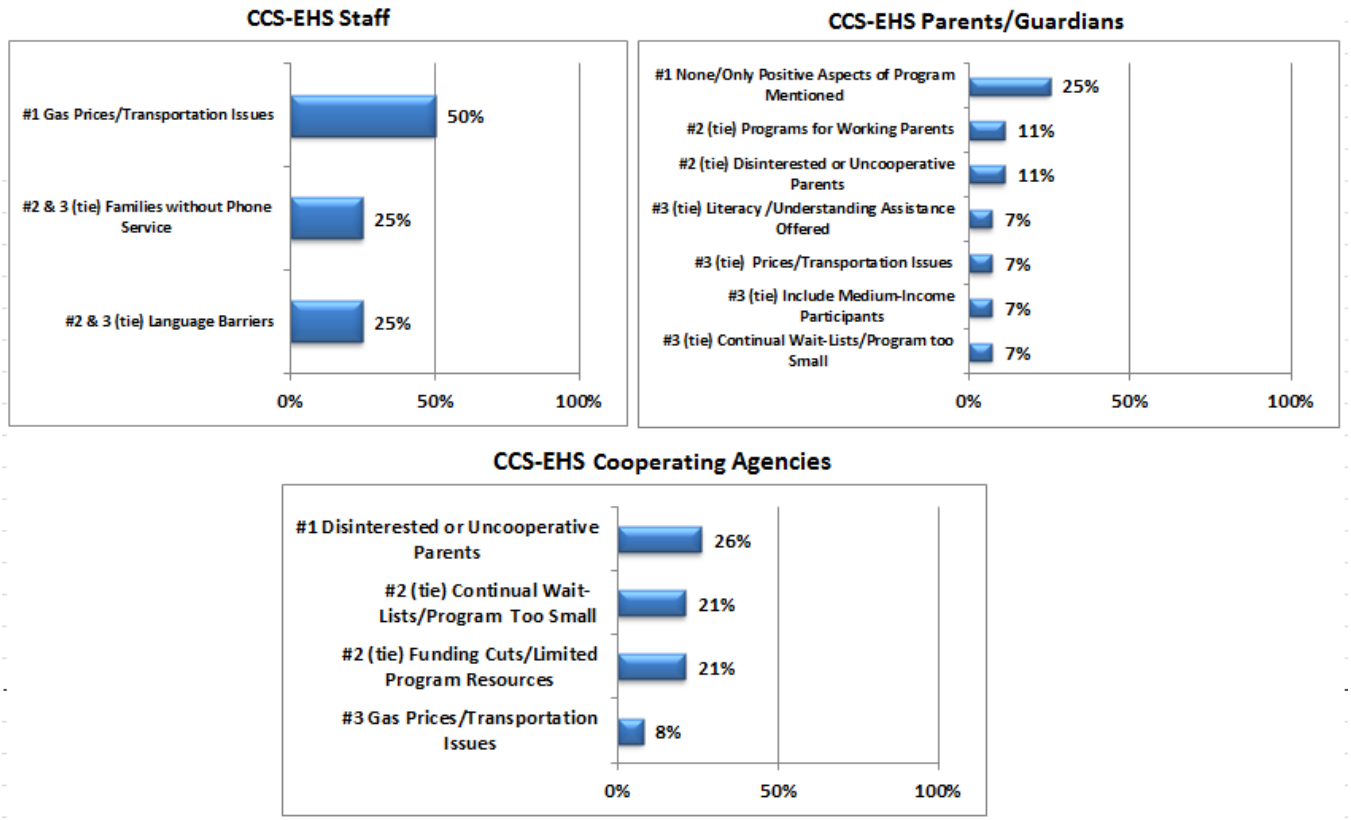
"Continuing serving them in current capacity."

"Keep doing the excellent work they do."

Question #5

Question #5 asked respondents what obstacles CCS-EHS might experience in serving their clients (very young children and their families in Catawba County). Top responses from CCS-EHS staff, parents/guardians and cooperating agencies are revealed in Figure 9-3.

Figure 9-3. Top Three Responses to Survey Question #5:
"What obstacles do you foresee in CCS-EHS serving this population?"
(by Category of Respondent)



The obstacles mentioned most often by Early Head Start staff members were "Gas Prices/Transportation Issues," "Families without Phone Service" and "Language Barriers" (Figure 9-3). Staff had the following responses to Question #5.

"Obstacles are usually families relocating and losing phone service therefore making it difficult for the educators to get in contact with the family."

"No transportation for the families."

"Transportation is a big issue due to limited funds for gas. It would be good if CCS could purchase a bus so that more transportation could be provided."

"Need more Latino educators to reach more Latino families."

The largest obstacles that CCS-EHS services faces according to the CCS-EHS parents/guardians are "Programs for Working Parents" and "Disinterest or Uncooperative Parents" (Figure 9-3). Other concerns included the need for literacy programs, transportation

issues, the desire to include medium-income participants and continual waiting lists to be accepted into the program. Several parents/guardians also expressed concerns about their peers' "follow-through" and knowledge-level about the program. Four respondents explained as follows:

"People don't trust and understand how the program works."

"Helping families learn about the program."

"People keeping their appointments[,] and clients fully participating in the program."

"Parents not wanting to do the program."

Regarding work and desired programs within Catawba County Schools-Early Head Start, parents made the following observations:

"When parents work[,] it will be hard for them to receive services and manage time between work and parenthood."

"An obstacle would be parents that work."

"Offer the program for parents that work, like Morning Out."

Thoughts about expanding the program and including medium-income families came up multiple times throughout the parent/guardian surveys as well:

"Raise the qualifications about income to participate in the program[,] like offering the program for medium income families."

"Requirements to participate only accepts low income; what about medium income families[?}"

"I will like to expand the program to help more families."

And transportation issues are also mentioned in two of the parent/guardian surveys:

"Transportation"

"No driver's license to participate in parents events."

For cooperating agencies the top concern was "Disinterested or Uncooperative Parents" followed by concern that the CCS-EHS program is too small and does not have adequate funding (Figure 9-3, page 88). Some of the respondents wrote potential reasons for participant disinterest or uncooperativeness, some of which fit in to other obstacle categories. These include crisis events, lack of priority given to parenting, language barriers and a lack of education, transportation, and financial problems. The following statements are examples of cooperating agency survey responses with regards to uncooperative parents, program size and funding issues and other CCS-EHS obstacles:

Responses related to lack of cooperation/disinterest:

"Parent's commitment to keep appointments, crisis-type events that seem to come up often and interrupt regular visits with EHS staff."

"I see a language obstacle, as many families speak Spanish. I also see a willingness of the families to do the work to be a problem."

"Transience, lack of responsibility/commitment to following through, priority not given to parenting."

"Consistency in the families' EHS serves actively participating."

"Language barriers or parent hesitation."

"One obstacle may be with teen parents, but they are less likely to be emotionally mature, so they are less receptive to services. Since poverty is the strongest predictor of child abuse and neglect, continue to utilize links and resources, services as parenting transitions after the EHS years."

Program size and funding-related responses:

"Program eligibility guidelines can prevent needy clients from accessing these services. Also, at times the demand for services seems to be greater than the program's capacity to serve (capacity issue). This population has many barriers and limitations (lack of education, transportation, financial resources, etc.) which can create obstacles for CCS-EHS's in their effort to serve. Limited program resources (staff, money, etc.) can also be obstacles to the provision of services."

"With the increase of families losing their jobs/housing, I am sure the need for program will increase and that will increase their case loads resulting in the need for increased staff and then funding."

"As with everything else today, the need for services is increasing at a faster pace than the funds available to provide those services."

"Funding and space."

Below are a variety of additional Question #5 responses from cooperating agency members. These responses include issues that were brought up by both staff and parents/guardians as well, such as transportation problems (lack of license, lack of money for gas and lack of vehicle).

"Budget decreases, lack of manpower, lack of transportation for the families."

"I think they are doing a great job!"

"Addiction brings forward many obstacles."

"Many families with high needs are transient, so sometimes it's just keeping up with them and/or finding them. Getting families to job sites or interviews is another issue with serving high needs families."

"The biggest obstacle is that many teachers falsely believe in inappropriate readiness skills to the detriment of children. Families look to their childcare, EHS, and pre-k teachers for the correct answers about this and they are not getting it."

Questions #6, #7 and #8

Questions #6, #7 and #8 were for CCS-EHS parents and guardians only. Each question dealt with an aspect of the Catawba County Schools' Early Head Start services.

Below are the questions along with responses (It should also be noted that for questions #6 and #8, some respondents picked multiple answers (but not necessarily "all of the above")):

6) Early Head Start services have helped me better understand:	
a) My child's social-emotional development	
b) My child's language development	
c) How my child learns concepts (shapes, sizes, etc.) through play	
d) My child's motor development	
e) All of the above	
Survey Responses	
a	1
b	0
c	0
d	1
e	35

7) Early Head Start staff have assisted us/our child in staying current with well child exams and finding a dentist to see our child.	
a) Yes	
b) No	
Survey Responses	
a	31
b	5

8) I am satisfied with the Early Head Start services my family receives:	
a) On home visits	
b) At Take Me To Play	
c) At parent meetings	
d) Overall services of Early Head Start program	
Survey Responses	
a	10
b	2
c	0
d	25

For Question #6 respondents overwhelmingly felt that Early Head Start services have helped them better understand their children's social-emotional development, language development, how children learn concepts through play, and children's motor development. A majority of respondents also stated through their answers to Question #7 that Early Head Start has assisted them in staying current with well child exams and finding dentists for their children.

In response to a more general question (Question 8): are respondents satisfied with the Early Head Start services their families receive, persons participating in the survey answered primarily that they are satisfied with the "overall services" of Early Head Start. The next most chosen response was "Home Visits." Three respondents to Question 8 noted on this question that they have not yet gotten a chance to use all of the services CCS-EHS provides

Community Needs Survey Overview

Throughout the survey, a number of issues faced by CCS-EHS and their clients repeatedly surface, especially the need of clients to be trained in childhood development and the need for supportive communities and programs. Expanding CCS-EHS needs to expand in order to accommodate more low-income families was also mentioned by several respondents. The need for expansion to medium-income families comes up as well. Two (2) respondents who took the survey mentioned that CCS-EHS would do well to acquire a bus to help with parent/guardian transportation issues, which are brought up quite frequently in the surveys. Cooperating agencies and parents both seem grateful for the services provided by CCS-EHS, and see the importance of embracing opportunities for these agencies to build strong working partnerships with CCS-EHS to best serve the County's population of disadvantaged families with very young children.

Section Ten
Catawba County Comprehensive Need Index for Early Head Start Services

This section of the Catawba County Schools Early Head Start *Community Assessment* consolidates the previously examined economic, social and demographic characteristics of disadvantaged very young children in Catawba County into one comprehensive map. The purpose of the map is to assist Catawba County educational leaders as they allocate Early Head Start resources.

Comprehensive Need Index Description

Throughout the *Assessment*, much data has been examined to determine the needs and characteristics of disadvantaged very young children and their families in Catawba County. Some information was available only as a County-wide statistic, such as childhood obesity data or the percentage of households without telephone access. Where possible this County-level information has been shown alongside statewide and national data in order to gauge how the County has fared compared to other areas.

Much of the information, however, is available in smaller geographic units, such as Census tracts, Census block groups and elementary school districts. Using the maps included in the report contain these types of sub-county data, readers can select locations within the County and compare them against other areas to determine the relative severity of each category of need.

In order to gain a thorough understanding of how various types of need combine to affect very young children and their families throughout the County, multiple categories of sub-county data were combined to create a "Comprehensive Need Index" to measure the need for Early Head Start services across Catawba County.

Methodology

The components of the Index were statistically weighted based on an estimation of how much each individual category contributed to a given area's overall need for Early Head Start services, based on the eligibility criteria of CCS-EHS, as well as its mandates to serve various populations (lower income, racial and ethnic diversity). The categories which compose the Index and the amount of each factor's relative contribution are listed in Table 10-1 on page 96.

The index combines data from sub-county groupings into 2010 Census Block Group boundaries (the smallest available), including data from Census Tracts and elementary school districts among others. Block group boundaries are the smallest available for many types of data, and they provide a more detailed assessment of need than would larger areas such as Census Tracts. Data from areas which were not contiguous with Census Block Groups were converted into block group form using the percentage of how much an area fell within each block group, such as areas with limited access to public transit, or by using a centroid-based

(center of polygon) method, which was used for data from elementary school districts. Birth certificate (point) data was also calculated on a Census Block Group level.

Table 10-1. Components and Weighting of Catawba County Comprehensive Need Index for Early Head Start Services, 2014

Category	Weight	Category	Weight
Economic Need (total)	**40%**	**Minority / Cultural Status (total)**	**25%**
Median Household Income	*15%*	Minority Birth Density per Square Mile (2008-2012)	*20%*
% of Children in Poverty	*15%*		
% of Children with Free/Reduced Lunch	*5%*	Inability to Speak English Fluently	*5%*
% of Workforce in Manufacturing	*5%*	**Lack of Access to Services (total)**	**15%**
Family Structure (total)	**10%**	Access to Affordable Nutrition ("Food Deserts")	*6%*
Single-Parent Homes as % of Homes with Children	*10%*	Access to 4- and 5-Star Day Care	*5%*
Educational Attainment (total)	**10%**	Access to Public Transit	*3%*
% of Adults Age 25+ Not Completing High School	*10%*	Access to High-Speed Internet	*1%*

The Index places each need into a percentage scale, with a score of "0" given to the block group which experienced the least amount of the need in each category and "100" given to the block group exhibiting the highest need. The other block groups are given a score for each category between 0 and 100 by percentage of the data relative to the lowest and highest scores (footnote one gives a simplified example of the process).[1] In this way, all block groups were given an index score in each of the 12 categories listed. These scores were then multiplied by the percentage with which each category was weighted, resulting in the score of the Comprehensive Need Index. Theoretically, a Census Block Group which experienced the highest need in the County in every category would receive a total index score of 100, while a block group that experienced the lowest need in every category would result in an index score of 0.

The methodology for the 2014 Comprehensive Need Index was almost identical to that of the Index which was included with the 2011 Assessment, which allows for comparisons between the two indexes. The two adjustments were:

- Census and birth certificate data was sorted according to 2010 Census Boundaries (the 2011 report used 2000 Census boundaries);

[1] Here is a simplified example of the process: Imagine that the lowest median household income in the County, by block group, was $25,000 and the highest was $75,000. The block group (or groups) with a household income of $25,000 would receive an index score of zero for that category, while the group (or groups) with $75,000 would receive an index score of 100 for that category. Scores for other block groups were calculated on a percentage scale of how far their values fall between $25,000 and $75,000. A block group with a median income of $60,000 would receive a score of 70, as $60,000 covers 70% of the distance between $25,000 and $75,000. In the case of household income, however, the results are inverted, because for all components of the Index, a higher score determines need, not lower, so the final score for that category would be a 30.

- In the “Minority/Cultural Status” category, the 5% attributed to “Minorities as Percent of Elementary Enrollment” was not used in this version. This 5% was instead moved to “Minority Birth Density per Square Mile,” thus increasing that subcategory from 15% to 20%, but maintaining the entire category at 25% of the total index. This change was made because an analysis of the data reveals that current school enrollment had no effect upon the upcoming proportion of minorities within the County’s very young child population, while the births was very relevant to the makeup of this cohort.

Results

Map 10-1 consists of a shaded (or chloropleth) depiction by Census Block Group of the scores produced by the Early Head Start Comprehensive Need Index across Catawba County. The results are comparable to those found in the 2011 Index, with a few differences. As in the 2011 Index, there were four areas which indicated the lowest level of need for Early Head Start services:

- The community of Viewmont displayed the lowest Index scores in the County (with values of 8.7 and 7.4), overtaking Sherrills Ford, which posted the lowest Index scores in the 2011 Index. The difference appears to be that the population of children overall is falling more quickly in Viewmont than in Sherrills Ford;
- The Sherrills Ford area had very low index scores (from 11.9 to 13.3), due to higher income and education levels;
- The Mountain View area was the third area of relatively low need for Early Head Start, with scores from 13.4 to 14.1, almost the same as in 2011;
- The area of central and eastern Conover maintains relatively low need for Early Head Start Services (23.0 to 24.3), though this was considerably higher than in 2011. Since that time this area has experienced a significant loss of median household income (see Map 2-10) and an increase in number of single-parent led homes (Map 2-11). The area, which was heavy in new home construction and young families in the early 2000s, may also be suffering more than others from the loss of young adults.

The vicinity possessing the highest indication of need for Early Head Start services remains south-central Hickory (including the Highland and Ridgeview communities), especially south of downtown between US 321 and NC 127 and north of US 70. The Need Index scores rose slightly in this part of Hickory since 2011, from a range of 66.6–71.1 to a range of 75.5–76.9. The main reason behind the higher scores is an increase in the child poverty rate in the area (Map 2-13). It is important to point out, however, that the actual numbers of minority births (Map 2-3, inset) and the numbers of children living in poverty (Map 2-13, inset) are decreasing in the area.

Portions of Long View also showed a high need for Early Head Start services. A closer look shows that the portion south of Main Avenue in Long View increased in indicators of need, especially in the child poverty rate (42.4% to 58.5%, Map 2-13).

One area, though still indicating higher levels of need, which has decreased its index scores is the western part of Newton, where indicators fell in all four block groups since 2011. One particular change in this part of Long View has been a drop in the percentage of adults without a high school diploma (Map 2-16).

Perhaps the most apparent change in the need index map has been the growth in need for Early Head Start services in an area along the Lincoln County border lying between the Town of Maiden eastward to the intersection of NC 16 and NC 150. This area experienced substantial growth in the rate of child poverty (from 13.2% to 39.0%), single-parent homes (from 8.3% to 20.5%) and population speaking English other than “very well” (Map 2-7). It may be worthwhile to meet with community and school leaders in this part of Catawba County to determine the particular needs of very young children living there.

The results of the Comprehensive Need Index should be helpful to school administrators as they determine how to allocate Early Head Start resources to serve disadvantaged families with young children across Catawba County. The data from the Index (or any component data sets) can be combined with other geographic data (zoning, land value, etc.) to assist Early Head Start in its efforts to serve this population.