

Harnett County

Community Health Assessment 2013



Harnett County

2013 Community Health Assessment

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Acknowledgements. . .

Acknowledgement should be made that the 2013 Community Health Assessment(CHA) team, a work group was formed which included the Harnett Health System, Campbell University College of Pharmacy & Health Sciences Department of Public Health, Healthy Harnett, the Healthy Carolinians partnership for Harnett County and the First Choice Community Health Centers (FCCHC). The team followed the initial frame work established by Sheila S. Pfaender, Consultant for the previous assessments (2006 & 2010) from both the structure and the content. Previously, the Harnett County Public Health Department (HCPHD),and Healthy Harnett (the Harnett County Healthy Carolinians Partnership), contracted with Pfaender, Public Health Consultant, to assist in conducting the CHA for Harnett County. The present document retains much of the framework and language from Pfaender’s earlier documents.

Introduction

Local public health agencies in North Carolina (NC) are required to conduct a Comprehensive Community Health Assessment (CHA) once every four years. The community health assessment, which is both a process and a document, investigates and describes the current health status of the community, what has changed since the last assessment, and what still needs to change to improve the health of the community. The *process* involves the collection and analysis of a large range of data, including demographic, socioeconomic and health statistics, environmental data, and public opinion. The *document* is a summary of all the available evidence and serves as a resource until the next assessment. Together they provide a basis for prioritizing the community's health needs, and for planning to meet those needs.

The Harnett County Public Health Department (HCPHD) began discussions aimed at developing a shared CHA with several community partners. Although each entity had a different timetable for its assessment, schedules were adjusted with of goal of completing a joint assessment, during 2013, that could then be simultaneously used by all partners and the community. Therefore the HCPHD agreed to began a three year cycle for the CHA document. A work group was formed which included the Harnett Health System (Harnett Health) which was known as Betsy Johnson Hospital, before the addition of Central Hospital, Campbell University College of Pharmacy & Health Sciences Department of Public Health, Healthy Harnett, the Healthy Carolinians partnership for Harnett County and the First Choice Community Health Centers (FCCHC).

This group which represents and consist of motivated individuals who can act as advocates for a broad range of community members and can appropriately represent the concerns of various populations within the community. Together, the Harnett County Assessment Team developed a multi-phase plan for conducting the assessment, following the guidance provided by the *Community Assessment Guidebook: North Carolina Division of Public Health*, published by the NC Department of Health and Human Services (Revised December 2011).

The assessment also adheres to the 2013 standards for community assessment stipulated by the North Carolina Local Health Department Accreditation (NCLHDA) Program. The phases included: (1) Establish a CHA team, (2) Collect primary data, (3) Collect secondary data, (4) Collect and analyze primary and secondary data (5) Determine health priorities, a prioritization phase and the development of specific strategies to address identified needs, (6) Create the CHA document (7) Disseminate the CHA Document and lastly, (8) Develop community health Action Plans. Upon completion of this work the Harnett County CHA team will develop plans and activities that will improve the health and well-being of the people living in Harnett County.

Assessment Methodology

In order to learn about the specific factors affecting the health and quality of life of Harnett County residents, the consultant tapped numerous readily available secondary data sources. For data on Harnett County demographic, economic and social characteristics sources included: the US Census Bureau; Log Into North Carolina (LINC); NC Office of State Budget and Management; NC Department of Commerce; Employment Security Commission of NC; NC Division of Aging and Adult Services; NC Child Advocacy Institute; NC Department of Public Instruction; NC Department of Justice; NC Department of Juvenile Justice and Delinquency Prevention; NC Department of Administration; NC Division of Medical Assistance; NC Division of Child Development; NC State Board of Elections; NC Division of Health Services Regulation; the Cecil B. Sheps Center for Health Services Research; and the Annie E. Casey Foundation Kids Count Data Center. Local sources for socioeconomic data included: the Harnett County Department of Social Services; local affiliates of the Chamber of Commerce; local governments, and the Harnett County Visitors Bureau. The consultant made every effort to obtain the most current data available at the time the report was prepared.

The primary source of health data for this report was the NC State Center for Health Statistics (NC-SCHS), including especially the County Health Data Books, Behavioral Risk Factor Surveillance System, Vital Statistics unit and Cancer Registry. Other health data sources included: NC Division of Public Health (DPH) Epidemiology Section; NC Division of Mental Health, Developmental Disabilities and Substance Abuse Services; National Center for Health Statistics; Healthy People 2020; NC DPH Nutrition Services Branch; UNC Highway Safety Research Center; NC Department of Transportation; and the NC DPH Oral Health Section. Local (e.g., health department and department of social services) data has been included where appropriate. Because in any community health assessment it is instructive to relate local data to similar data in other jurisdictions, Harnett County data is compared to like data describing the state of North Carolina as a whole, as well as to data from a “peer” county. In previous reports from the community health assessment process, the NC-CATCH data system recommended that counties similar enough to Harnett County in terms of certain selected population and economic indicators to be considered peer counties are Craven, Franklin, Lee, and Onslow counties. Among these four comparators, Onslow County is perhaps most like Harnett, especially in terms of its significant presence of military families. As a result of these congruencies as well as the historical value of comparisons with previous community assessments, the assessment team retained Onslow County as the primary peer county for purposes of data comparison. In some cases Harnett County data is compared to US-level data, or to Healthy People 2020 goals or other standardized measures. Where appropriate, trend data has been used to show changes in indicators over time, at least since the previous assessment in 2010, but sometimes further back than that.

The Department of Public Health synthesized and analyzed all Harnett County-specific secondary and primary data described above and prepared this Harnett County Community Health Assessment in two volumes: Volume I covers demographic, socioeconomic, health and community survey data. In addition, the Campbell University College of Pharmacy & Health Sciences

Department of Public Health has included separate documents representing summary presentations made to the Harnett County Board of Health, November 2013.

Chapter One

Demographic & Socioeconomic Data

Chapter One: Demographic and Socioeconomic Data

Location and Geography

Harnett County is a landlocked county located in central North Carolina. It is bordered by Wake County to the northeast, Johnston County to the east, Sampson County to the southeast, Cumberland County to the south, Moore County to the southwest, Lee County to the northwest, and Chatham County to the north-northwest. Harnett County encompasses a land area of approximately 595 square miles, and a water area of six square miles. The county is divided geopolitically into 13 townships: Anderson Creek, Averagesboro, Barbecue, Black River, Buckhorn, Duke, Grove, Hectors Creek, Johnsonville, Lillington, Neills Creek, Stewards Creek, and Upper Little River townships (Figure 1). The Town of Lillington (Lillington Township) is the county seat. Other municipalities recognized as “cities” or “towns” by the US Census Bureau include Angier (Black River Township), Coats (Grove Township), Dunn (Averagesboro Township), and Erwin (Duke Township). County geopolitical divisions also include 22 unincorporated communities.

Harnett County is a growing yet still predominately rural county linked by proximity to the economic and cultural opportunities in its more populous surrounding counties, especially Wake County, home to Raleigh, the state’s capitol city. Harnett County is not a major tourist destination; it is favored instead by residents seeking the relatively greater affordability of housing and quieter lifestyle possible within striking distance of major employment, healthcare and military centers.

Only one Interstate Highway traverses Harnett County: Interstate 95 runs from the northeast to the southeast along the easternmost edge of the county, through the City of Dunn. Three major US routes serve the county: US 301 parallels I-95 just to its west; US 401 runs north-south through the county and US 421 runs east-west. The southwest corner of the county is served by NC 87 and the north and eastern parts of the county are served by NC 55.

There is no passenger train service or major commercial airport in Harnett County. The nearest large commercial airport is Raleigh-Durham International Airport, located approximately 45 miles north of Lillington, the geographic center of Harnett County. The county does own and support one “business class airport”, the Harnett Regional Jetport (located four miles northwest of Erwin) which can accommodate corporate business jets as well as most propeller aircraft. This facility, which has a 5,000x75-foot runway and full parallel taxiway, hosts approximately 51,000 aircraft operations per year (1).

No regularly-scheduled long-distance passenger bus companies serve cities or towns in Harnett County. The nearest commercial bus station is a Greyhound Terminal in Fayetteville (2).

General Population Characteristics

The following general population characteristics are based on 2012 population estimates presented in Table 1:

- Harnett County has an estimated permanent population of 120,900, which is approximately gender-balanced.
- The median age of Harnett County residents is 33.82, 3.98 years younger than the median age statewide (37.80). As a group, males in Harnett County have a median age (33.00) that is 1.60 years younger than females (34.60). Median ages for these groups in Harnett County are all lower than the 2010 estimates reported in the CHA2010.

Table 1: 2012 Population Estimates

Location	Total Pop.	Number Males	Median Age Males	Number Females	Median Age Females	Median Age Overall
Harnett County	120,900	59,386	33.00	61,514	34.60	33.82
Onslow County	190,187	101,360	24.74	88,827	28.38	26.14
State of NC	9,765,229	4,753,345	36.38	5,011,884	39.14	37.80

a - NC Office of State Budget and Management, Facts and Figures, Socioeconomic Data, Population Estimates and Projections, County Estimates, County Projections; http://www.osbm.state.nc.us/demog/countytotals_agegroup_2010.html

b - NC Office of State Budget and Management, Facts and Figures, Socioeconomic Data, Population Estimates and Projections, County Estimates and Projections http://www.osbm.state.nc.us/demog/countytotals_agegroup_males_2010.html

c - NC Office of State Budget and Management, Facts and Figures, Socioeconomic Data, Population Estimates and Projections, County Estimates, County Projections; http://www.osbm.state.nc.us/demog/countytotals_agegroup_females_2010.html

Projected Population Growth

- The population will continue to grow but rate of growth will decrease.
- The population growth rate will exceed the state growth rate by ~30% through 2030.
- The population is projected to be more than 188,000 by 2030.

Location	1980	1990	2000	2010	2020 (Projected)	2030 (Projected)
Harnett County	59,570	67,833	91,085	114,678	151,914	188,251
Onslow County	112,784	149,838	156,355	177,772	238,164	298,420
State of NC	5,880,095	6,632,448	8,046,813	9,535,483	11,039,342	12,463,244

- The population in Harnett County has grown each decade between 1980 and 2000. The projected rate of increase from 2000 to 2010 is estimated at 25.9% a rate expected to increase in the decade from 2010-2020 to 32.5% and decelerate in the decade 2020-2030 to 23.9 (Table 2).
- The growth rates in Harnett County have exceeded the comparable growth rates for the state as a whole in every decade noted in Table 2.

Table 2: Decadal Population Growth (1980-2030)

Location	Number of Persons and Percent Change										
	1980	1990	% change 1980-90	2000	% change 1990-00	2010	% change 2000-10	2020 (Projected)	% change 2010-20	2030 (Projected)	% change 2020-30
Harnett County	59,570	67,833	13.9	91,085	34.3	114,678	25.9	151,914	32.5	188,251	23.9
Onslow County	112,784	149,838	32.9	156,355	0.3	177,772	13.7	238,164	34.0	298,420	25.3
State of NC	5,880,095	6,632,448	12.8	8,046,813	21.3	9,535,483	18.5	11,039,342	15.8	12,463,244	12.9

Source: Log Into North Carolina (LINC) Database, Topic Group Population and Housing, Total Population, Population (Data Item 5001); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show

- Harnett County is becoming more densely populated, but is still slightly less densely populated than the average NC county.
- As reported in Table 3, the projections of population density in 2020 and 2030 indicate that Harnett County is likely to be much more populated than the state average in the future
- By 2020, however, the population density in Harnett County is projected to exceed the NC average (Table 3).
- In 2030, after 10 additional years growth, the population density in Harnett County is predicted to exceed the population density of the state as calculated from data in Table 3.

Table 3: Decadal Population Density (1980-2030)

Location	Persons per Square Mile					
	1980	1990	2000	2010	2020 (Projection)	2030 (Projection)
Harnett	99.1	114	153	189.2	229.5	271.2
Onslow	147.9	195.4	196.1	208	214.8	219.7
State of NC	120.4	136.1	165.2	191.9	219.9	248.2

Source: Log Into North Carolina (LINC) Database, Topic Group Population and Housing, Total Population, Population Density (Data Item 5004) http://data.osbm.state.nc/pls/linc/dyn_linc_main.show

The US Census Bureau defines “urban” populations as resident populations in urbanized areas and places of 2,500 or more inhabitants outside urbanized areas. An urbanized area contains a population concentration of at least 50,000 inhabitants, generally consisting of a central city and the surrounding, closely settled, contiguous territory (suburbs). A “rural” population is a resident population other than that classified as urban.

- The population of Harnett County was categorized as predominately rural in the 1980, 1990 and 2000 Censuses (**Table 4**), although the proportion of the county population considered “urban” increased by almost 48% over that period as calculated from the data in the table. The population of Harnett County was categorized as predominantly rural in the 1980, 1990, and 2000 Censuses.

Table 4: Decadal Rural/Urban Population Distribution (1980-2000)

Location	Percent of Population					
	1980	1980	1990	1990	2000	2000
	Rural	Urban	Rural	Urban	Rural	Urban
Harnett County	77.1	22.9	76.7	23.3	66.2	33.8
Onslow County	35.3	64.7	32.5	67.5	28.8	71.2
State of NC	52.0	48.0	49.7	50.3	39.8	60.2

Source: Log into North Carolina (LINC) Database, Topic Group Population and Housing, Special Populations (Data Items 6002, 6003); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show

- The population of Harnett County is broadly distributed among all 13 townships, with no township attaining 12% of the total.
- The following population information is derived from 2000 US Census data presented in **Table 5**.

Table 5. Harnett County Population by Township (2000)

Township	Number of Persons	% of County Population	Median Age
Anderson Creek Township	14,257	10.1	27.8
Averasboro Township	13,251	9.4	39.4
City of Dunn	9,278	6.5	40.2
Remainder of Township	3,951	2.8	
Barbecue Township	16,073	11.3	31.9

Black River Township	9,231	6.5	37.3
Town of Angier	4,239	3	35.5
Remainder of Township	4,992	3.5	
Buckhorn Township	2,496	1.8	39.6
Duke Township	6,103	4.3	39.4
Town of Erwin	4,406	3.1	39.9
Remainder of Township	1,697	1.2	
Grove Township	10,139	7.2	40.5
Town of Coats	2,319	1.6	37.5
Remainder of Township	7,820	5.5	
Hectors Creek Township	5,175	3.7	33.8
Johnsonville Township	10,014	7.1	29.1
Lillington Township	5,133	3.6	38.3
Town of Lillington	3,214	2.3	44
Remainder of Township	1,919	1.4	
Neills Creek Township	7,994	5.6	22.7
Stewarts Creek Township	4,267	3	37
Upper Little River Township	8,154	5.8	37.8
Harnett County Total (a)	114,678	100	33.5

Source: http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_5YR_DP05&

Race and Ethnicity

The population of Harnett County is approximately as racially and ethnically diverse as the state as a whole, and somewhat more diverse than its peer county, Onslow County (**Table 6**).

- The predominant racial minority in Harnett County is the Black/African American population, comprising 21.0% of the overall county population and 72.7% of the population is White.
- In 2012, the Hispanic/Latino population (which may be of any race) was estimated as 9.1% of total county population. (Hispanics were estimated as 7.7% of the population statewide.

	White		American Indian/Alaska Native		Asian/Pacific Islander		Black/African-American		Two or More Races		Total
	Population	%	Population	%	Population	%	Population	%	Population	%	
Harnett	87834	72.7%	2412	2.0%	1415	1.2%	25354	21.0%	3885	3.2%	120900
Onslow	147206	77.4%	1462	0.8%	4539	2.4%	29302	15.4%	7678	4.0%	190187
State of NC	7018600	71.9%	156953	1.6%	246978	2.5%	2145803	22.0%	196895	2.0%	9765229

Table 6: Race and Ethnicity

Population by Race/Ethnicity, by Township

- The population of every municipality and township in Harnett County except Stewarts Creek Township is predominately white. In Stewarts Creek Township Blacks/African Americans constitute the largest racial population group. **Table 7** which follows provides information about racial and ethnic population diversity at the township level in Harnett County as derived from 2010 US Census data.

Table 7: Harnett County Population by Race/Ethnicity, by Township (2011)

Township	Total Pop.	White		Black/African American		American Indian/Alaska Native		Asian		Native Hawaiian/Pacific Islander		Hispanic/Latino	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Anderson Creek Township	14,257	9,189	8.0%	3,358	2.9	152	0.1%	232	0.2%	17	<.1%	1,306	0.9%
Averasboro Township	13,251	7,775	6.8%	4,169	3.6%	202	0.2%	155	0.1%	0	0%	1,104	0.8%
City of Dunn	9,278	4,473	3.4%	3,932	2.8%	67	<.1%	147	0.1%	0	0%	674	0.5%
Remainder of Township	3,951	3,302	2.9%	237	0.2%	135	<.1%	8	<.1%	0	0%	430	0.3%
Barbecue Township	16,073	10,829	7.6%	3,271	2.3%	40	<.1%	333	0.2%	16	<.1%	1,381	1%
Black River Township	9,231	6,888	4.9%	1,181	0.8%	24	<.1%	24	<.1%	10	<.1%	1,438	1%
Town of Angier	4,239	2,935	2.1%	630	0.4%	12	<.1%	0	0%	0	0%	843	0.6%
Remainder of Township	4,992	3,953	2.8%	551	40%	12	<.1%	24	<.1%	10	<.1%	595	0.4%

Buckhorn Township	2,496	2,344	1.7%	24	<.1%	0	0%	0	0%	0	0%	191	0.1%
Duke Township	6,103	4,777	3.4%	810	0.6%	92	<.1%	5	<.1%	0	0%	469	0.3%
Town of Erwin	4,406	3,540	2.5%	587	0.4%	29	<.1%	5	<.1%	0	0%	267	0.2%
Remainder of Township	1,697	1,237	0.9%	223	0.2%	63	<.1%	0	0%	0	0%	202	0.1%
Grove Township	10,139	8,398	5.9%	1,148	0.8%	29	<.1%	6	<.1%	0	0%	1,036	0.7%
Town of Coats	2,319	1,809	1.3%	383	0.3%	11	<.1%	0	<.1%	0	0%	376	0.3%
Remainder of Township	7,820	6,589	4.7%	765	0.5%	18	<.1%	6	<.1%	0	0%	660	0.5%
Hectors Creek Township	5,175	4,463	3.2%	625	0.4%	0	0%	12	<.1%	0	0%	297	0.2%
Johnsonville Township	10,014	6,107	4.3%	2,212	1.6%	187	0.1%	36	<.1%	0	0%	1,610	1.1%
Lillington Township	5,133	2,814	2.0%	2,122	1.5%	22	<.1%	0	0%	0	0%	426	0.3%
Town of Lillington	3,214	1,931	1.4%	1,109	0.8%	11	<.1%	0	0%	0	0%	314	0.2%
Remainder of Township	1,919	883	0.6%	1,013	0.7%	11	<.1%	0	0%	0	0%	112	<.1%
Neills Creek Township	7,994	5,737	4%	1,139	0.8%	47	<.1%	209	0.1%	0	0%	1,299	0.9%
Stewarts Creek Township	4,267	1,984	1.4%	2,020	1.4%	66	<.1%	34	<.1%	0	0%	97	<.1%
Upper Little River Township	8,154	6,136	4.3%	1,149	0.8%	125	<.1%	10	<.1%	0	0%	1,001	0.7%
Harnett County Total	114,678	78,300	68.3	23,973	20.9	1,392	1.2	1,029	0.09%	139	0.1	12,359	10.8

Source: Factfinder page, advanced search, DP05 (the 2011 data); <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none>

Age and Gender

The following information about the age and gender distribution of the Harnett County population data is presented in Table 8.

Regarding Age:

- In Harnett, the age group of the 25-34 make up 16,524 or (14.3%), followed by the 35-44 age group which make up 16,518 and (14.3%) percent of the adult population.
- In NC the age group of the 45-54 composes the largest number with (1,370,934) or (14.3%) of the state's adult population as well.
- Persons younger than 15 years compose 24.9 % of the population in Harnett County, but 19.8% of the population in NC.
- Persons aged 15 to 24 compose 14.5% of the population in Harnett County, but 13.7% of the population in NC
- Persons aged 55 to 64 compost 10.2% of the population in Harnett County, but 12.0% of the population in NC.
- Persons over the age of 65 compose 6.2% of the population in Harnett County, but 7.4% of the population in NC.

Regarding Gender:

- In both Harnett County 49% of the population is male, and 51% if female.
- Beginning with the 55 to 64 age group, the proportion of females is larger than the proportion of males in Harnett County.
- In NC as a whole, this proportional difference first appears in the 45 to 55 age group.

Table 8: Population Distribution by Age and Gender, Number and Percent (2010)

Age Group	Harnett						NC					
	Number in Population			Percent of Total Population			The Number in Population			Percent of Total Population		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Ages	115,793	56,758	59,035	100%	49%	51%	9,575,674	4,665,625	4,910,049	100%	48.7%	51.3%
0 to 2	5488	2,805	2,683	4.7%	2.4%	2%	375,062	191,685	183,377	3.9%	2.0%	1.9%
3 to 4	3838	1,930	1,908	3.3%	1.7%	1.6%	256,489	130,980	125,509	2.7%	1.4%	1.3%
5	1849	963	886	1.6%	0.8%	0.8%	126,647	64,473	62,174	1.3%	0.7%	0.6%
6 to 9	7257	3,717	3,540	6.3%	3.2%	3.1%	509,909	260,803	249,106	5.3%	2.7%	2.6%
10 to 13	7032	3,634	3,398	6.1%	3.1%	3.0%	510,915	261,242	249,673	5.3%	2.7%	2.6%
14	1702	863	839	1.5%	0.7%	0.8%	124,467	63,887	60,580	1.3%	0.7%	0.6%
15	1625	827	798	1.4%	0.7%	0.7%	125,557	64,652	60,905	1.3%	0.7%	0.6%
16 to 17	3306	1,709	1,597	2.9%	1.5%	1.4%	256,611	132,086	124,525	2.7%	1.4%	1.3%
18 to 19	3649	1,785	1,864	3.2%	1.5%	1.7%	278,903	142,423	136,480	2.9%	1.5%	1.4%
20 to 24	8048	3,970	4,078	7.0%	3.4%	3.6%	655,229	338,141	327,088	6.8%	3.5%	3.3%
25 to 34	16524	8,059	8,465	14.3%	7.0%	7.3%	1,253,002	618,832	634,190	13.1%	6.5%	6.6%
35 to 44	16518	8,273	8,245	14.3%	7.1%	7.2%	1,327,246	654,382	672,864	13.9%	6.8%	7.1%
45 to 54	15054	7,516	7,538	13.0%	6.5%	6.5%	1,370,934	666,809	704,125	14.3%	7.0%	7.3%
55 to 59	6278	2,991	3,287	5.4%	2.6%	2.8%	605,685	287,734	317,951	6.3%	3.0%	3.3%
60 to 64	5509	2,583	2,926	4.8%	2.2%	2.6%	544,488	258,068	286,420	5.7%	2.7%	3%
65 to 74	7172	3,355	3,817	6.2%	2.9%	3.3%	704,290	324,637	379,653	7.4%	3.4%	4%
75 to 84	3718	1,434	2,284	3.2%	1.2%	2.0%	391,145	159,830	231,315	4.1%	1.7%	2.4%
85 to 99	1213	342	871	1.0%	0.3%	0.7%	147,600	44,738	102,862	1.5%	0.5%	1%
100+	13	2	11	<.1%	<.1%	<.1%	1,475	223	1,252	<.1%	<.1%	<.1%
Source	a	b	c	a	b	c	a	b	c	a	b	c

a. http://www.osbm.state.nc.us/demog/countytotals_agegroup_2010.html b. http://www.osbm.state.nc.us/demog/countytotals_agegroup_males_2010.html
c. http://www.osbm.state.nc.us/demog/countytotals_agegroup_females_2010.html

Households

Table 9 presents 2000 US Census data summarizing some of the characteristics of households in Harnett County, Onslow County, and the state of NC as a whole.

- According to calculations made from the data in the table, the percentage of households that are one-person households is slightly lower in Harnett County (24%) than in the state of NC (25%), but 20% higher than in Onslow County (20%).
- According to similar calculations, the percentage of one person households inhabited by a person age 65 and older is 36% in Harnett County, 30% in Onslow County, and 34% in NC as a whole. Given the age distribution of Harnett County and NC in particular (Figure 2), this result indicates a higher-than-expected proportion of solo elderly householders in Harnett.

Table 9: Household Characteristics

Location	Total No. Households	Persons per Household	No. One-person Households	No. One-person Age >65 Households
Harnett County	40,637	2.63	9,733	3,492
Onslow County	59,865	2.34	12,183	3,442
State of NC	3,132,013	2.49	1,011,348	341,864

Source: Log Into North Carolina (LINC) Database, Topic Group Population and Housing, Living Arrangements/Marital Status (Data Items 221, 222, 6007, 6056, 6057); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show

Older Adults:

Although the 2010 proportion of the Harnett County population age 60 and older (15.0%) is smaller than the proportion of that age group statewide (19.9%), it merits closer examination, since the ≥ 60 age group in Harnett has grown since the 2000 Census. The population age 60 and older often requires more and different health and social services than the rest of the population, and understanding how that population will change in coming years will be an important consideration in community planning.

Growth of the Elderly Population

Figure 3 is a graphic representation of the growth of the Harnett County elderly population, ages 60-85+, by decade from 1970 projected through 2030. This graph is based on US Census data, either counted, estimated, or projected, depending on the year in question. The following information is derived from that graph.

- The proportion of every age group age 60 and older will grow through the year 2030.

- Though all segments of the elderly population will grow, the segment expected to grow by the largest percentage in the 20 years between 2010 and 2030 is the group aged 70-74, which is predicted to grow by 54% over that period, from 2.4% to 3.7% of the total county population.
- The population segments aged 65-69 and 75-79 are each predicted to increase by 42% and 44% respectively over the same period.

Location of the Elderly Population: Table 10 shows the distribution of the Harnett County population age 65 and older by township:

- The largest percentage of the Harnett County population age 65 and older (18.3%) resides in Averasboro Township, primarily in the City of Dunn (14.0%).
- The next largest proportion of Harnett County adults aged 65 and older (11.4%) resides in Grove Township
- The smallest percentage of the county population age 65 and older (2.8%) resides in Buckhorn Township.

Table 10: Harnett County Population Age 65 and Older, by Township

Township/Town	No.	% of County Population Age 65 and Older	% of County Population
Anderson Creek Township	881	7.5%	0.8%
Averasboro Township	2,133	18.3%	1.9%
City of Dunn	1,631	14.0%	1.5%
Remainder of Township	502	4.3%	0.4%
Barbecue Township	843	7.2%	0.8%
Black River Township	994	8.5%	0.9%
Town of Angier	446	3.8%	0.4%
Remainder of Township	548	4.7%	0.5%
Buckhorn Township	332	2.8%	0.3%
Duke Township	954	8.2%	0.8%
Town of Erwin	746	6.4%	0.7%
Remainder of Township	208	1.8%	0.2%
Grove Township	1,327	11.4%	1.2%
Town of Coats	426	3.7%	0.4%
Remainder of Township	901	7.7%	0.8%
Hectors Creek Township	430	3.7%	0.4%
Johnsonville Township	816	7.0%	0.7%

Lillington Township	643	5.5%	0.6%
Town of Lillington	460	3.9%	0.4%
Remainder of Township	183	1.6%	0.2%
Neills Creek Township	705	6.0%	0.6%
Stewarts Creek Township	477	4.1%	0.4%
Upper Little River Township	1,136	9.7%	1.0%
Total Harnett County Population Age >65	11,671	100%	10.4%
Total Harnett County Population	112,287	n/a	100%

Source: http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_5YR_DP05&prodType=table

Sociodemographic Characteristics of the Elderly Population

Characteristics of the elderly persons in a county can help service providers understand how this population can or cannot access and utilize community services. Factors such as educational level, mobility and disability are all useful predictors of service access and utilization. The NC Division of Aging and Adult Services collects and catalogues information about factors like these on the county level (10). Some of the Division’s US Census Bureau-derived data for Harnett County – and comparable data for Onslow County and the state as a whole – for persons age 65 and older are summarized below using the information in Tables 11 and 12.

Table 11. Sociodemographic Characteristics of the Population Age 65 and Older (Years as Noted)

Location	% Persons Age 65+ without HS Diploma (2000)	% Persons Age 65+ with Graduate Education (2000)	% Persons Age 65+ with Limited or No English (2000)	No. Grandparents Raising Grandchildren Under Age 18 (2000)	% Persons Age 65+ in Labor Force (2000)	No. Social Security Beneficiaries Age 65+ (2008)	Average Monthly Social Security Benefit for Persons Age 65+ (2008)
Harnett County	48.9	3.5	0.3	1148	3	10,095	1034
Onslow County	39.8	3.4	0.6	1206	2.7	12,025	993
State of NC	41.6	5.5	0.5	79810	3.5	1,090,908	1118

- NC DHHS Division of Aging and Adult Services, County Profiles; <http://www.dhhs.state.nc.us/aging/cprofile/cprofile.htm>
- Census Bureau Data for NC; <http://www.aging.unc.edu/infocenter/data/CensusBureauDataforNC.pdf>
- Social Security: 2011 North Carolina Quick Facts; <http://assets.aarp.org/rgcenter/econ/social-security-facts-2011-north-carolina.pdf>

Educational Attainment (Table 11)

- Elderly persons in Harnett County tend to have less formal education than their counterparts in Onslow County and NC. In Harnett County almost 48.9% of persons age 65 and older *lack* a high school diploma, compared to a comparable figure of 39.8% for Onslow County and 41.6% for the state as a whole.
- A smaller proportion of Harnett County residents age 65 and older than their counterparts statewide have had a graduate school education (3.5% vs. 5.5%). The figures are similar for Harnett County and Onslow County (3.5%)
- According to the source, in 2000 0.3% of persons age 65 and older in Harnett County had limited or no English language ability.

Living Conditions and Economics (Table 11)

- In 2000 1,148 persons in Harnett County were classified as grandparents raising grandchildren under the age of 18. The comparable figure for Onslow County was 1,206, a proportionally smaller figure than its 56% greater population size might predict.
- In both Harnett and Onslow counties the proportion of the population age 65 and older still in the labor force is lower than the average for the state as a whole (3.0% and 2.7% respectively vs. 3.5%).
- As might be expected from the relative difference in the size of their populations, the number of social security beneficiaries in Harnett County (10,095) is smaller than the number in Onslow County (12,025).
- The average monthly social security benefit for persons age 65 and older is slightly higher in Harnett County(1034) than in Onslow County(993) but lower than the average benefit for seniors in NC as a whole.

Disability (Table 12)

- The US Census Bureau definition of “disability” includes any long-lasting physical, mental or emotional condition that can make it difficult for persons to walk, climb stairs, dress, bathe, learn or remember. The elderly populations in Harnett County and Onslow County have similar proportions of disabled elderly persons (50.8% and 49.5% respectively) but significantly higher proportions of disabled persons than NC as a whole (45.7%).

Health and Health Care Access (Table 12)

- Persons age 65 and older would be expected to have medical care coverage through Medicare. Elderly persons living at certain levels of poverty also would be eligible for Medicaid. The numbers of persons age 65 and older eligible for Medicaid as well as those dually eligible for Medicaid and Medicare are unexpectedly **higher in Harnett County** than in Onslow County given the larger population of Onslow County. The difference perhaps is due in part to the higher poverty rate in Harnett County.
- Approximately comparable percentages of Medicare beneficiaries in all three jurisdictions noted in Table 12 take advantage of immunization for influenza.

Table 12: Health and Health Care Access Characteristics of the Population Age 65 and Older (Years as Noted)

Location	% of Persons Age 65+ with One or More Disabilities (2011)	% Persons Age 65+ with One or More Disabilities (2000)	No. Medicaid-eligible Persons Age 65+ (SFY 2009)	No. Medicare/Medicaid Dually Eligible Persons Age 65+ (SFY 2009)	% Medicare Beneficiaries Immunized for Influenza (2000)
Harnett County	47.8	50.8	2128	2147	42.8
Onslow County	44.6	49.5	1633	1626	42.7
State of NC	38.4	45.7	179051	176608	43.5

Source: NC DHHS Division of Aging and Adult Services, County Profiles; <http://www.ncdhhs.gov/aging/cprofile/2011Profile.pdf>

Non-English Speaking Population

North Carolina has seen continuous growth in the number of foreign-born residents, with this segment of the population increasing from 39,382 in 1969 to 430,000 in 2000, an almost 11-fold increase. According to demographers, this official count is likely an underestimate, since many in this population have not adequately participated in the US Census. The foreign-born population in a community is one that potentially does not speak English, and so is of concern to service providers. The 2010 US Census employed greater effort in locating and urging participation from the immigrant population, so the new numbers, when finally available, should be very helpful in community planning.

According to available Census data covering the period from 1965 to 2000, in NC the greatest proportion of the increase in foreign-born persons is represented by immigrants of Hispanic origin; however, statewide there has also been an influx of foreign-born immigrants from Southeast Asia. According to US Census data summarized in Table 13:

- As of the 2000 Census, there were 4,177 foreign-born residents in Harnett County. Using a base 2000 population figure of 91,085, that means that foreign-born residents made up 4.6% of the total county population at that time.
- The largest influx of the foreign-born population in Harnett County – 1,698, or 40.7% of the total foreign-born population in 2000 – had arrived between 1995 and 2000.
- The percent of increase in the foreign-born population in Harnett County between 1994 and 2000 was less than the percent of increase at the state level over the same period (68.5% vs. 76.2%), but more than three times higher than the comparable figure for Onslow County (20.0%)

Table 13: Foreign-Born Population, Number by Year of Entry (1965-2010)

Location	Number of Persons Arriving per Five-Year Period								
	<1965	1965-1969	1970-1974	1975-1979	1980-1984	1985-1989	1990-1994	1995-2000	Since 2000
Harnett County	359	121	109	231	279	560	820	1,698	3,018
Onslow County	644	386	299	565	995	1075	1134	1,049	2,504
State of NC	28217	11165	14,099	21,721	35,480	50,961	82,454	185,903	308,453

Source: US Census Bureau, American Fact Finder, SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES (2007-2011 American Community Survey 5-Year Estimates); <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none>

“Linguistic isolation” reflected as an inability to communicate because of a lack of language skills, can be a barrier preventing foreign-born residents from accessing needed services. The US Census Bureau tracks *linguistically isolated households* according to the following definition: A linguistically isolated household is one in which no member 14 years and over (1) speaks only English, or (2) speaks a non-English language and speaks English "very well". In other words, all members 14 years old and over have at least some difficulty with English. The following information about linguistically isolated households is derived from the 2000 US Census data presented in Table 14.

- Of the 33,837 Harnett County households canvassed in the 2000 US Census, 3,363, or approximately 10%, reported speaking a language other than English. Of these, 617, or 18%, reported being linguistically isolated.
- The largest group of linguistically isolated households in Harnett County were Spanish-speaking households.

Table 14: Household Language by Linguistic Isolation (2000 and 2010)

Location	Total Households (2000)	English-Speaking (2000)	Spanish-Speaking (2000)		Speaking Other Indo-European Languages (2000)		Speaking Asian or Pacific Island Languages (2000)		Speaking Other Languages (2000)	
			Isolated	Not Isolated	Isolated	Not Isolated	Isolated	Not Isolated	Isolated	Not Isolated
Harnett County	33837	30474	519	1805	56	637	42	263	0	41
Onslow County	48107	41993	339	3007	51	1266	77	1270	0	143
State of NC	3133282	2841028	43698	125889	6804	69246	8730	25143	1607	11127

Sources: United States Census Bureau, Harnett County, North Carolina; <http://quickfacts.census.gov/qfd/states/37/37085.html> United States Census Bureau, Onslow County, North Carolina; <http://quickfacts.census.gov/qfd/states/37/37133.html> United States Census Bureau, North Carolina; <http://quickfacts.census.gov/qfd/states/37000.html>

Since the Hispanic/Latino population is the principal linguistically-isolated group in Harnett County, further knowledge of the characteristics of this group is helpful in anticipating service needs.

In Harnett County, as in other counties in NC, a major impetus for immigration is the prospect of employment opportunities. One would expect then that the age groups predominant in immigrant populations would be those in their “prime” for work, especially the physical labor-type jobs in construction and agricultural industries that are available to them. Spouses of these workers would be in the midst of their childbearing years, so it also might be expected that this population would have children.

Other Special Populations

There are other population groups whose special needs are important considerations in health and social service planning, including military veterans, visually impaired persons, and developmentally disabled persons. **Table 15** summarizes available Census data describing these special population groups in Harnett County, Onslow County, and the state of NC.

Note particularly the large numbers of military veterans in both counties (possibly a result of the presence of military bases in or adjacent to each county) which far exceed the per-county NC average of approximately 7,700.

Table 15: Special Populations (Total Number of Persons; Years as Noted)

Location	Estimated Military Veterans (2011)	Estimated Military Veterans (2010)	Blind/Visually Impaired (2011)	Blind/Visually Impaired (2009)	Estimated with Developmental Disabilities, Ages 3-17 (2008)	Estimated with Developmental Disabilities, Age 18+ (2008)
Harnett County	10913	11488	149	147	763	657
Onslow County	20492	17832	215	248	1045	1295
State of NC	743377	765942	20972	21543	59559	55200

Sources: United States Census Bureau, Harnett County, North Carolina; <http://quickfacts.census.gov/qfd/states/37/37085.html>
 United States Census Bureau, Onslow County, North Carolina; <http://quickfacts.census.gov/qfd/states/37/37133.html>

Government and Civic Participation

Government: Harnett County is governed according to the County Manager/Board of Commissioners model. There is a five-member Board of Commissioners each of whom is elected from a specific district. The Board meets twice each month to discharge their responsibilities which include overseeing the budget, zoning and planning issues, promoting growth, and improving the quality of life for citizens of Harnett County (11). The Commissioners value citizen involvement in the business of the county, and so the Board of Commissioners makes appointments to a number of advisory boards, committees and commissions from among a pool of interested and qualified citizen-applicants. The boards and commissions for which the commissioners accept applications include (Table 16):

Table 16: Non-Governmental Community Organizations in Harnett County (2013)

Angier 2013	Coats 2013	Dunn 2013	Erwin 2013	Lillington 2013
Ambassador Extension Homemakers and Community Association American Legion Post #436 Angier Chamber of Commerce Angier Civic Association Angier Kiwanis Club Angier Lions Club Angier Museum Committee Angier Senior Citizens Harnett Central High School Boster's Club Harnett County Literacy Association Masoic Lodge Order of the Eastern Star Pleasant Grove Senior Center Rotary Club of Angier VFW Post #6983	Coats Lions Club Coats Museum Coats Women's Club Kiwanis Club of Coats	American Legion Post #59 Averasboro Garden Club Boy Scouts of America, Occonneechee Council Dunn Intermediate Women's Club Dunn Shrine Club / Shrine Center Dunn-Erwin Rotary Club Harnett County Home Builders Kiwanis Club of Dunn Lions Club of Dunn Rotary Club of Dunn Woman's Club of Dunn, Inc.	American Legion Post #59 Averasboro Battlefield Commision, Inc. Averasboro Garden Club Boy Scouts of America, Occoneechee Council Dunn-Erwin Rotary Club Erwin Garden Club Erwin Historical Society Erwin Lions Club Erwin Red Hat Society Girls Scouts Pines of Carolina Harnett County Coharie Indian Association Harnett County Home Builders Association Harnett County Literacy Association Harnett County Partnership for Children Harnett County Uplift Operations, Inc.	American Post #28 Boone Trail Ruritan Club Boy Scout Troop 61 Buies Creek Garden Club Four Seasons Garden Club Friends of Harnett County Library Harnett County 4H Harnett County Arts Council Harnett County Association for Retarded Citizens Harnett County Extension Homemakers Harnett County Historical Society Harnett County Shrine Club Harnett County Shrinettes Harnett Regional Theatre Heart of Harnett Playhouse

			Harnett Cruisers Moose Lodge Neill S. Stewart Lodge #556 Salvation Army Service Unit The James A. Campbell House - Harnett County Historical Society United Way of Harnett County, Inc	Lillington Business and Professional Women Lillington Improvement Council Lillington Kiwanis Club Lillington Lions Club Lillington Masonic Lodge Lillington Order of the Eastern Star Lillington Rotary Club Pines of Carolina Girl Scouts Progressive Club Tea and Topics Book Club VFW Post #6722

Civic Engagement

Electoral Process: One measure of a population’s engagement in community affairs is its participation in the electoral process. Tables 16 and 17 summarize current voter registration and historical voter turn-out data. It should be noted that turnout in any particular election is at least partially determined by the voters’ interest and investment in the particular issues on the table at that time. The turnout data presented represents turnout for *general* elections, some of which were contested in presidential election years.

- As of December 2012, 98.5% percent of the voting age population in Harnett County was registered to vote in comparison to December 4, 2010, 75.3% This figure compares to overall voter registration percentages of 72.6% in Onslow County and 89.8.% for NC as a whole (Table 16).
- White voters make up 69.9% of the registered voters in Harnett County (Table 16), while composing 74.1% of the total county population; Black voters make up 23.3% of the registered voters in the county while composing 22.2% of the total county population (Table 6, cited previously).
- Voter turnout has been *higher* in Harnett County than in NC as a whole *only* for years involving a Presidential election (Table 17).
- Voter turnout has been somewhat *higher* in Harnett County than in Onslow County in all general election years except 2000 and 2006 (Table 17).

Table 17: Registered Voters, by Number and Percent

Location	Voting Age Population		Total		Total	
	(2012)	(2010)	(2012)	(2010)	(2010)	(2010)
			No.	%	No.	%
Harnett County	68344	83736	69357	98.5	63057	75.3
Onslow County	91649	120988	92109		87784	72.6
State of NC	7368808	7116821	6624136	89.8	6109872	85.9

Table 18: Registered Voters, by Race/Ethnicity, Number and Percent

Number and Percent of Voting Age Population Registered to Vote

	White (2012)		White (2010)		Black (2012)		Black (2010)		American Indian (2012)		American Indian (2010)		Other (2012)		Other (2010)		Hispanic (2012)		Hispanic (2010)	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Harnett	48535	69.9	45521	72.2	16204	23.3	14248	22.6	470	0.7	417	0.7	4148	6.0	1241	2.0	1864	3.7	1249	2
Onslow	66375	72.1	64981	74	17511	19.0	16351	18.6	313	0.3	273	0.3	7910	9.6	3238	3.7	3406	3.7	2686	3
State of NC	4698878	71.0	4474143	73.2	1489771	22.5	1320288	21.6	53833	0.8	47671	0.8	381654	5.8	102117	1.7	114149	1.7	74303	1
	b	c	b	c	b	c	b	c	b	c	b	c	b	c	b	c	b	c	b	c

The total number of registered voters reported by the NC State Board of Elections is based on the sum of registrations by party affiliation, and does not necessarily equal the sum of registrations by race, which is a smaller figure. Therefore, the sum of the percentages is less than 100%. Source: a. Harnett County Election Results, Harnett County, North Carolina; <http://results.enr.clarityelections.com/NC/Harnett/42958/113952/Web01/en/summary.html>; Onslow County, North Carolina Data Center;

Table 19: Voter Turnout in General Elections (1998-2012)

Location	Percent of Registered Voters that Voted							
	1998	2000	2002	2004	2006	2008	2010	2012
Harnett County	44	45	43	60	25	66	42	64
Onslow County	41	54	40	53	33	58	30	53
State of NC	70	37	64	47	59	43	44	68

Source: a - Harnett County Election Results, Harnett County, North Carolina; <http://results.enr.clarityelections.com/NC/Harnett/42958/113952/Web01/en/summary.htm>
 b -Board of Elections - Onslow County, North Carolina; <http://results.enr.clarityelections.com/NC/Onslow/42990/113987/Web01/en/summary.html>
 c - North Carolina State Board of Elections; <http://results.enr.clarityelections.com/NC/42923/114645/Web01/en/summary.html>

Religious Life

The fabric of a community is often maintained and repaired through its citizens’ participation in organized religion. Increasingly, health and human service providers have come to realize that the faith community can be an important partner in assuring the health and well-being of at least its members if not greater segments of the population.

Table 20 lists the number of churches and adherents in Harnett County, by denomination. There are 112 congregations representing 20 demonimations and 29,610 adherents in 2011 in comparison to 29,682 in 2010 . There there is a broad range of options for exploring faith and religion in Harnett County.

Table 20: Churches in Harnett County, Number by Denomination by Location (March 2013)

Denomination	Number of Congregation (2011)	Number of Congregation (2010)	Percent of All Congregation (2011)	Percent of All Congregation (2010)	Number of Adherents (2011)	Number of Adherents (2010)	Percent of All Adherents (2011)	Percent of All Adherents (2010)
Assemblies of God	1	1	0.5	0.9	66	66	0.2	0.2
Baha’i	0	0	0	0	22	22	0.4	0.1
Catholic Church	1	1	0.6	0.9	843	843	0.3	2.8
Christian and Missionary Alliance	1	1	2.0	0.9	76	76	1	0.3
Christian Church (Disciples of Christ)	3	3	2.2	2.7	482	482	1.3	1.6
Church of God (Cleveland, Tennessee)	6	6	1.3	5.4	1019	1019	1.3	3.4
Church of God of Prophecy	7	7	4.6	6.3	371	371	4.7	1.2
Church of Jesus Christ of Latter –day Saints (Mormon)	1	1	0.9	0.9	290	290	1.0	1.0
Episcopal Church	1	1	0.4	0.9	102	102	0.1	0.3
Friends (Quakers)	2	2	1.8	1.8	288	288	2.0	1.0
International Pentecostal Holiness Church	6	6	1.8	5.4	1348	1348	2.7	4.5

National Association of Free Will Baptists	4	4	2.0	3.6	532	532	2.0	1.8
Original Free Will Baptists	1	1	0.4	0.9	177	249	0.4	0.8
Presbyterian Church (USA)	18	18	2.4	16.1	3016	3016	1.5	10.2
Primitive Baptist Church	4	4	4.3	3.6				
Seventh-Day Adventist Church	1	1	0.9	0.9	101	101	0.4	0.3
Southern Baptist Convention	37	37	1.0	33.0	16216	16216	1.1	54.6
Southwide Baptist Fellowship	1	1	1.37	0.9				
United Church of Christ	1	1	0.4	0.9	177	177	0.4	0.6
United Methodist Church	16	16	0.8	14.3	4484	4484	0.7	15.1
TOTAL	112	112	30.3	100.3	29610	29682	21.5	99.8

Source: Jones, Dale E., et al 2002. Congregations and Membership in the United States in 2000. Nashville TN: Glenmary Research Center. Available at: <http://www.city-data.com/county/religion/Harnett-County-NC.html> (accessed March, 2013)

Voluntary Participation in Community Organizations

As noted previously in this report, people in Harnett County have many opportunities to support their community through voluntary participation on governmental boards, commissions and committees. Another option for civic engagement is voluntary participation in non-governmental community organizations, and there are many options in this category for Harnett County citizens.

Table 21 lists, by municipality, examples of the non-governmental community organizations in Harnett County, with a brief description of the purpose of each organization. It is impossible to assure that such a list is current and complete at any moment in time; however, this table, to the extent that its sources are accurate, demonstrates the variety of community engagement opportunities available to the people of the county at the present time.

Table 21: Non-Governmental Community Organizations in Harnett County (2013)

Angier 2013	Coats 2013	Dunn 2013	Erwin 2013	Lillington 2013
Ambassador Extension Homemakers and Community Association American Legion Post #436 Angier Chamber of Commerce Angier Civic Association Angier Kiwanis Club Angier Lions Club	Coats Lions Club Coats Museum Coats Women's Club Kiwanis Club of Coats	American Legion Post #59 Averasboro Garden Club Boy Scouts of America, Occoneechee Council Dunn Intermediate Women's Club Dunn Shrine Club / Shrine Center	American Legion Post #59 Averasboro Battlefield Commission, Inc. Averasboro Garden Club Boy Scouts of America, Occoneechee Council Dunn-Erwin Rotary Club Erwin Garden Club	American Post #28 Boone Trail Ruritan Club Boy Scout Troop 61 Buies Creek Garden Club Four Seasons Garden Club Friends of Harnett County Library Harnett County 4H

Angier Museum Committee Angier Senior Citizens Harnett Central High School Boster's Club Harnett County Literacy Association Masoic Lodge Order of the Eastern Star Pleasant Grove Senior Center Rotary Club of Angier VFW Post #6983		Dunn-Erwin Rotary Club Harnett County Home Builders Kiwanis Club of Dunn Lions Club of Dunn Rotary Club of Dunn Woman's Club of Dunn, Inc.	Erwin Historical Society Erwin Lions Club Erwin Red Hat Society Girls Scouts Pines of Carolina Harnett County Coharie Indian Association Harnett County Home Builders Association Harnett County Literacy Association Harnett County Partnership for Children Harnett County Uplift Operations, Inc. Harnett Cruisers Moose Lodge Neill S. Stewart Lodge #556 Salvation Army Service Unit The James A. Campbell House - Harnett County Historical Society United Way of Harnett County, Inc	Harnett County Arts Council Harnett County Association for Retarded Citizens Harnett County Extension Homemakers Harnett County Historical Society Harnett County Shrine Club Harnett County Shrinettes Harnett Regional Theatre Heart of Harnett Playhouse Lillington Business and Professional Women Lillington Improvement Council Lillington Kiwanis Club Lillington Lions Club Lillington Masonic Lodge Lillington Order of the Eastern Star Lillington Rotary Club Pines of Carolina Girl Scouts Progressive Club Tea and Topics Book Club VFW Post #6722
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Sources (Accessed December, 2011):

- 1 Angier North Carolina, Chamber of Commerce, Area Civic Groups; <http://www.angierchamber.org/angiercivic.cfm>
- 2 Coats Chamber of Commerce, Civic Groups; http://www.coatschamber.com/civic_groups.cfm
- 3 Dunn, North Carolina Area Chamber of Commerce, Civic Groups; http://www.cunnchamber.com/civic_groups.cfm

A very special group of Harnett County citizens are those who serve as firemen and firewomen, many of whom are volunteers. In Harnett County there are a number of all-volunteer fire departments as well as a number of “combination” fire departments, which have both permanent staff and volunteers. Table 22 lists the fire departments and or rescue squads in Harnett County as of March 2013.

Table 22: Fire Departments and Rescue Squads in Harnett County (March, 2013)

Department Name	Location	Type	Insurance Rating	
			2011	2012
Spout Springs Fire Department I & II	Cameron	Combination	5/9s	5/9s
Flat Branch Fire Department	Bunnlevel	Volunteer	6	6
Anderson Creek Fire and Rescue Department	Spring Lake	Combination	6/9s	6/9s
Flatwoods Community Fire Department	Lillington	Volunteer	9s	9s

Erwin Fire and Rescue Department	Erwin	Volunteer	Erwin 3m Duke 3/9s	Erwin 4 Duke 4/9s
Coats Grove Fire and Rescue Department	Coats	Volunteer	Coats 3m Grove 3/9s	Coats 4 Grove 4/9s
Lillington Fire Department	Lillington	Volunteer	5	5
Buies Creek Fire and Rescue Department	Buies Creek	Combination	5/9s	5/9s
Angier/Black River Fire Department	Angier	Combination	Angier 5m Black River 5/9s	Angier 5 Black River 5/9s
Summerville Fire Department	Lillington	Combination	7/9s	7/9s
Boone Trail Emergency Services	Lillington Mamers	Commercial	9s	7
Benhaven Fire and Rescue Department I & II	Sanford, Olivia	Volunteer	6/9s	6/9s
Northwest Harnett Fire Department	Fuquay-Varina	Volunteer	6/9s	6/9s
Dunn Emergency Services	Dunn	Combination	5/9s	4
Bunnlevel Fire Department	Bunnlevel	Volunteer	9s	9s
Circle V Fire Department	Vass	Combination		
Crain's Creek Fire Department	Vass	Volunteer		
Harnett County EMS	Buies Creek			
Cypress Point Fire Department	Vass			
West Area	Linden	Professional, Volunteer		6
Godwin Falcon	Falcon	Volunteer		7
Banner (Benson)	Benson	Volunteer		5/9s

Source: Harnett County North Carolina, Fire Marshall/Emergency Management, Fire Department Information and Contacts, Harnett County Fire and Rescue Directory; <http://www.harnett.org/fire/fire-department-information.asp>

Economic Climate

Income: There are several income measures that can be used to compare the economic well-being of communities, among them per capita personal income, median household income, and median family income. **Table 23** summarizes recent (2012) income data for Harnett County, Onslow County and the state of NC.

- In 2010, the per capita personal income in Harnett County (\$19,749) in comparison to the 2009 of (\$19,968) a difference of -17,300 lower than the comparable figure for NC as a whole.
- Median household income in Harnett County in 2011 was (\$42,965) in comparison to 2009 (\$47,561)
- Median family income in Harnett County in 2011 was (\$39,584) in comparison to (\$53,040), in 2009

Table 23: Income (2012)

Location	Per Capita Personal Income (2010)	Per Capita Personal Income (2009)	Per Capita Income Difference from State (2012)	Per Capita Income Difference from State (2009)	Median Household Income (2011)	Median Household Income (2009)	Median Household Income Difference from State (2012)	Median Household Income Difference from State (2009)	Median Family Income (2011)	Median Family Income (2009)	Median Family Income Difference from State (2012)	Median Family Income Difference from State (2009)
Harnett County	\$19,749	\$19,968	(-) \$17,300	(-) \$6,021	\$42,965	\$47,561	(-) \$3326	(-) \$3,857	\$39,584	\$53,040	(-) \$7394	(-) \$7,394
Onslow County	\$21,391	\$19,495	(-) 15,658	(-) \$6,494	\$45,457	\$45,065	(-) \$834	(-) 6,353	\$41,787	\$48,835	(-) \$11599	(-) \$11,599
State of NC	\$37,049	\$25,989	n/a	n/a	\$46,291	\$51,418	n/a	n/a	\$54,082	\$60,434	n/a	n/a

Source: NC Dept of Commerce, Economic Intelligence Development System (EDIS), Community Demographics, County Report, County Profile, <https://edis.commerce.state.nc.us/EDIS/demographics.html> Per Capita Personal Income by State, <http://bber.unm.edu/econ/us-pci.htm> U.S. Department of Commerce, United States Census Bureau, State & County QuickFacts, North Carolina, <http://quickfacts.census.gov/qfd/states/37000.html> U.S. Department of Commerce, United States Census Bureau, State & County QuickFacts, Harnett County, North Carolina, <http://quickfacts.census.gov/qfd/states/37/37085.html> U.S. Department of Commerce, United States Census Bureau, State & County QuickFacts, Onslow County, North Carolina, <http://quickfacts.census.gov/qfd/states/37/37133.html> Department of Numbers, North Carolina Household Income, North Carolina Family Income; <http://www.deptofnumbers.com/income/north-carolina/USA>, Harnett County Income and Careers, Household Income; Median Household Income; <http://www.usa.com/harnett-county-nc-income-and-careers.htm> USA, Onslow County Income and Careers, Household Income; Median Household Income; <http://www.usa.com/onslow-county-nc-income-and-careers.htm>

Business and Commerce

The income earned by a county’s citizens relates directly to the nature of the employing businesses in the county, which in turn relates to not only human and natural resources but also the local climate for economic development. One factor that plays a role in improving and maintaining economic development in a county is economic incentive.

Tier Designation

- While personal, household and family income matter especially to individual citizens, the assignment of a *Tier Designation* matters especially to community planners. The NC Department of Commerce annually ranks the state’s 100 counties based on economic well-being and assigns a Tier Designation. The 40 most distressed counties are designated as Tier 1, the next 40 as Tier 2, and the 20 least distressed as Tier 3. This Tier system is incorporated into various state programs, including a system of tax credits (Article 3J Tax Credits) that encourage economic activity and business investment in the less prosperous areas of the state.
- **For 2011 Harnett County was assigned a Tier 2 Designation.** At the same time, Onslow County was assigned a Tier 3 Designation. The Harnett County Tier Designation has been Tier 2 since at least 2007. The Onslow County Tier Designation was raised from Tier 2 to Tier 3 in 2010 (13). Employment, unemployment and poverty are among the factors influencing the Tier

Designation; each will be discussed subsequently. Recent values for some simple indicators that can be used to compare the business vitality of counties are presented in Table 24.

Table 24: County Business Indicators

Business Indicator	Harnett County (2013)	Harnett County (2010)	Onslow County (2013)	Onslow County (2010)
Available Industrial Buildings	14	13	2	4
Establishments: Total Private Industry	1637	1646	2871	2797
Establishments: Manufacturing	62	62	43	49
Total Retail Businesses: With Food/Drink	629	612	1075	1110
Total Retail Sales: With Food/Drink	\$783.6 million	\$624.0 million	\$1,471.6 million	\$1,470.0 million
Average Sales / Business Total: With Food/Drink	1245743	1019536	1368888	1324282
Annual Taxable Retail Sales	\$564.7 million	\$493.2 million	\$1,817.1 million	\$1,438.8 million
Property Tax Rate per \$100 Value	0.73	0.725	0.59	0.585

Source: Thrive in North Carolina, Harnett County (NC), Commercial/Retail/Industrial; <http://accessnc.commerce.state.nc.us/docs/countyProfile/NC/37085.pdf> Thrive in North Carolina, Harnett County (NC), Commercial/Retail/Industrial; <http://accessnc.commerce.state.nc.us/docs/countyProfile/NC/37133.pdf>

Employment

The following definitions will be useful in understanding the data in this section.

- Labor force – includes all persons over the age of 16 who, during the week, are employed, unemployed or in the armed services.
- Civilian labor force – excludes the Armed Forces from that equation.
- Unemployed – civilians not currently employed but are available for work and have actively looked for a job within the four weeks prior to the date of analysis; also, laid-off civilians waiting to be called back to their jobs, as well as those who will be starting new jobs in the next 30 days.
- Unemployment rate – calculated by dividing the number of unemployed persons by the number of people in the civilian labor force.

Table 25 lists by name the top 25 employers in Harnett County as of the end of the 3rd Quarter, 2012.

- Three of the employers listed employ as many as 1,000 people.
- The largest employer is Harnett County Schools, followed by Food Lion, LLC
- Since CHA2010, Campbell University has joined the ranks of 1000+ employed for the first time.

Table 25: Top 25 Employers in Harnett County (3rd Quarter 2012)

Rank	Employer	Industry	No. Employed
1	Harnett County Schools	Education & Health Services	1,000+
2	Food Lion Llc	Trade, Transp., & Utilities	1,000+
3	Campbell University Inc	Education & Health Services	1,000+
4	County of Harnett	Public Administration	500-999
5	Betsy Johnson Memorial Hospital	Education & Health Services	500-999
6	Carlie C's Operation Center Inc	Trade, Transp., & Utilities	250-499
7	State of Nc Dept of Correction	Public Administration	250-499
8	Wal-Mart Associates Inc	Trade, Transp., & Utilities	250-499
9	Edwards Brothers Inc-Carolina	Information	100-249
10	Moody Dunbar Inc	Manufacturing	100-249
11	Central Carolina Community College	Education & Health Services	100-249
12	Principle Long Term Care Inc	Professional & Business Services	100-249
13	Family Medical Supply Inc	Trade, Transp., & Utilities	100-249
14	Tri-Arc Food Systems Inc.	Leisure & Hospitality	100-249
15	Ktl Mcdonalds Llc	Leisure & Hospitality	100-249
16	Affinity Health Services Inc	Education & Health Services	100-249
17	City of Dunn	Public Administration	100-249
18	Godwin Manufacturing Co Inc	Manufacturing	100-249
19	John Hiester Chevrolet	Trade, Transp., & Utilities	100-249
20	Champion Home Builders Inc	Manufacturing	100-249
21	The Pantry Inc.	Trade, Transp., & Utilities	100-249
22	Aramark Food and Support Services G	Leisure & Hospitality	100-249
23	Lowes Home Centers Inc	Trade, Transp., & Utilities	100-249
24	Cracker Barrel Old Country Store Inc	Leisure & Hospitality	100-249
25	Universal Healthcare/Lillington Inc	Education & Health Services	100-249

Source: NC Commerce, Labor and Economic Analysis Division, Top 25 Employers by NC County; http://accessnc.commerce.state.nc.us/docs/topEmployers/topEmp_37085.pdf

Unemployment

Table 26 shows the number of active job applicants registered for work with the NC Employment Security Commission (NCESC) for the 12 months between December 2009 and January 2011. This data, which perhaps represents a recession recovery period, gives an estimate of the number of unemployed people who are actively seeking employment.

- The number of active job applicants in Harnett County during the 14 months cited fluctuated monthly without a clear pattern, ranging from a low of 4,163 to a high of 4,571 and averaging 4,377 per month.
- There is possibly a category of unemployed workers who have “given up” on their job search due to lack of success in finding employment; persons in that category may not appear in this data if they have let their NCESC registration status lapse.

Table 26: Active Job Applicants Registered to Work with the NC Employment Security Commission

Location	Number of Active Job Applicants													
	2009	2010												2011
	<i>Dec</i>	<i>Jan</i>	<i>Feb</i>	<i>March</i>	<i>April</i>	<i>May</i>	<i>June</i>	<i>July</i>	<i>Aug</i>	<i>Sept</i>	<i>Oct</i>	<i>Nov</i>	<i>Dec</i>	<i>Jan</i>
Harnett County	4163	4382	4175	4363	4322	4329	4446	4349	4510	4571	4500	4474	4334	4365
Onslow County	5402	5464	5414	5657	5719	5630	5607	5253	5649	5903	6095	5769	5654	5744
State of NC	586608	453608	456160	453453	449762	449520	467074	456074	470240	456636	448253	454491	443277	441289

Source: North Carolina Department of Commerce, Division of Employment Security, Labor Market Information, Workforce Statistics, Job Applicant Registered with ESC; <http://www.ncesc1.com/lmi/workForceStats/jobApplicantsRegistered.asp>

Besides serving as an indicator of environmentalism, the mode of transportation workers use to get to their places of employment can also point to the relative convenience of local workplaces and the extent of the local public transportation system. **Table 27** compares data on modes of transportation to work gathered in the 2000 US Census and 2009 US Census Bureau estimate.

- Very small numbers of Harnett County workers used public transportation to get to work, a direct reflection of the lack of a robust public transportation system in the county.
- The number of Harnett County workers who carpooled actually declined by one-third between 2000 and 2009.
- The number of Harnett County workers who walked to work increased by 40% between 2000 and 2009.
- The number of Harnett County workers who worked at home increased by 80% between 2000 and 2009.

Table 27: Modes of Transportation to Work

Number of Persons															
Location	Drove Alone			Carpooled			Used Public Transportation			Walked			Worked at Home		
	2000	2009 (est.)	2012	2000	2009 (est.)	2012	2000	2009 (est.)	2012	2000	2009 (est.)	2012	2000	2009 (est.)	2012
Harnett County	32094	39087	32094	6564	4408	6564	146	29	294	524	734	524	784	1429	784
Onslow County	52948	55340	52948	13629	14542	13629	660	0	85	8219	6346	8219	1945	13923	1945
State of NC	3046666	3355251		5382664	445097		34803	42214		74147	82681		102951	180743	
Source:	a	b		a	b		a	b		a	b		a		b

Sources: USA, Harnett County, Commuters, Workers Age 16 and over, 2011 Est; <http://www.usa.com/harnett-county-nc-income-and-careers.htm>
 USA, Onslow County, Commuters, Workers Age 16 and over, 2011 Est; <http://www.usa.com/onslow-county-nc-income-and-careers.htm>
 City-Data.com, Harnett County, North Carolina (NC); http://www.city-data.com/county/Harnett_County-NC.html
 Justia, North Carolina, Harnett County Type of Commute; <http://stats.justia.com/north-carolina/harnett-county/>
 City-Data.com, Onslow County, North Carolina (NC); http://www.city-data.com/county/Onslow_County-NC.html

At the time this report was prepared, the only public transportation in Harnett County was provided by the Harnett Area Rural Transit System (HARTS). HARTS, based in Lillington, serves the general public throughout the county, especially human service consumers, via subscription routes, Dial-a-Ride, and Demand-Response services. It operates its fleet of 25 vehicles Monday through Friday from 4:00 a.m. to 6:00 p.m.; services are not provided on weekends or holidays. Consumers schedule rides by calling in advance. HARTS’ door-to-door service is available for medical, personal, human service, employment and educational purposes (14). In 2009 HARTS ridership totaled 86,925 passengers, a 2% increase over the 2008 figure. System ridership, in fact, has increased every year since 2006 (15).

Poverty

The *poverty rate* is the percent of the population (both individuals and families) whose money income (which includes job earnings, unemployment compensation, social security income, public assistance, pension/retirement, royalties, child support, etc.) is below the threshold established by the Census Bureau. (Note that the threshold changes over time, so old poverty rate data may not be comparable to more recent data.)

Table 28 shows the annual poverty rate at the time of each decennial US Census from 1970 to 2010. The table also includes a US Census Bureau poverty rate *estimate* for the year 2010. The data in this table describe an overall rate, representing the entire population of each jurisdiction. As subsequent data will show, poverty may have strong racial and age components that are not detectable in these numbers.

- The poverty rate in Harnett County has been consistently *above* the comparable state and Onslow County rates since 1970.

Table 28. Decadal Annual Total Poverty Rate

Percent of All People in Poverty						
Location	1970	1980	1990	2000	2009	2010
Harnett County	25.7	19.3	17.5	14.9	17.7	16.9
Onslow County	21.7	17	12.1	12.9	13.4	13.8
State of NC	20.3	14.8	13	12.3	16.3	16.1

Sources: Log Into North Carolina (LINC) Database, Topic Group Employment and Income (Data Item 6094); http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show; US Census Bureau, American Fact Finder, American Community Survey, 2009 American Community Survey 1-Year Estimates, Data Profiles, County, North Carolina (Counties as listed); http://factfinder.census.gov/servlet/ADPGeoSearchByListServlet?ds_name=ACS_2009_1YR_G00_&lang=en&ts=307136541751

Poverty and Race

Table 29 shows the number and percent of persons in poverty, by race, as assessed by the decennial US Census in 1980, 1990 and 2000. These data are admittedly old, but the patterns are consistent throughout the period cited.

- The decadal poverty rate among blacks in Harnett County exceeded the comparable rates in both Onslow County and the state as a whole for every census presented in Table 29.
- In Harnett County the percent of blacks in poverty decreased 19.8% (from 39.9% to 32.0%) between 1980 and 1990, and 25.3% (from 32.0% to 23.9%) between 1990 and 2000; the overall decrease for the entire period was 40.1%. The overall decrease of the percent of blacks in poverty in Onslow County over the same 20 year period was 34.6%.
- The poverty rate among blacks in the state as a whole decreased over the same period by 24.7%.

Table 29. Persons in Poverty, Number and Percent, by Race by Decade

Location	1980				1990				2000				2012			
	Total No. in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	Total No. in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	Total No. in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	Total No. in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty
Harnett County	11,497	19.3	12.9	39.9	11,871	17.5	12.8	32	13,572	14.9	11.3	23.9	18,369	16.9	15	22
Onslow County	19,173	17	13.3	33.2	18,130	12.1	9.7	20.7	19,396	12.9	10.3	21.7	21,525	13.8	11	21
State of NC	839,950	14.8	10	30.4	829,858	13	8.7	27.1	958,667	12.3	8.5	22.9	1,970,300	16.1	14	33

Source: U.S. Department of Commerce, United States Census Bureau, State & County QuickFacts, North Carolina; <http://quickfacts.census.gov/qfd/states/37000.html> U.S. Department of Commerce, United States Census Bureau, State & County QuickFacts, Harnett County, North Carolina; <http://quickfacts.census.gov/qfd/states/37/37085.html> U.S. Department of Commerce, United States Census Bureau, State & County QuickFacts, Onslow County, North Carolina; <http://quickfacts.census.gov/qfd/states/37/37133.html> The Henry J. Kaiser Family Foundation, North Carolina: People in Poverty;

<http://statehealthfacts.org/profileind.jsp?cat=1&sub=2&rgn=35> City-Data.com, Onslow County, North Carolina (NC), Percentage of residents living in poverty; http://www.city-data.com/county/Onslow_County-NC.html

Poverty and Age: Table 30 presents data on the number of persons in poverty by age. This is US Census data associated with the decennial census in 1980, 1990 and 2000 and 2010.

- While the percentages of both children under the age of 18 and under the age of six living in poverty in Harnett County decreased between 1980 and 1990 and again between 1990 and 2000, they both *increased* between 2000 and 2009.
- In Harnett County adults age 65 or older experienced the highest decadal poverty rates until 2009, when the under six age group had the highest poverty rate. The estimated 2009 poverty rate in the under six age group is the highest rate of any of the age groups in any of the jurisdictions over the entire period cited.

Table 30. Persons in Poverty by Age and Percent

Location	1980				1990				2000				2010			
	Total % in Poverty	% Children Under 18 in Poverty	% Children Under 6 in Poverty	% Adults 65 or Older in Poverty	Total % in Poverty	% Children Under 18 in Poverty	% Children Under 6 in Poverty	% Adults 65 or Older in Poverty	Total % in Poverty	% Children Under 18 in Poverty	% Children Under 6 in Poverty	% Adults 65 or Older in Poverty	Total % in Poverty	% Children Under 18 in Poverty	% Children Under 5 in Poverty	% Adults 65 or Older in Poverty (2006-2010)
Harnett	19.3	24.7	25.5	28.8	21.7	17.5	24.9	26.1	14.9	17.2	19.4	19.4	16.9	24	24.8	15
Onslow	17	21.8	26.5	29	16.1	12.1	17.7	19.3	12.9	16.7	19.1	14.7	13.8	22	21.6	10
State of NC	14.8	18.3	19.7	23.9	13	16.9	19.1	19.5	12.3	15.7	17.8	13.2	16.1	24.6	25.5	8.7
Source:	a	a	a	a	a	a	a	a	a	a	a	a	b	b	c	b

Source: Food Bank of Central & Eastern North Carolina, Harnett County Profile: 2011-2012, Percentage of Children Living in Poverty <http://www.foodbankcenc.org/site/DocServer/Harnett1011.pdf?docID=3773> Rural Data Bank, County Profiles; <http://www.ncruralcenter.org/databank/profile.php?county=Harnett&county2=Onslow> 2012 Child Health Report County Cards, Health Risk Behaviors; http://www.ncchild.org/sites/default/files/2012_CHRC--Onslow_0.pdf

Another measure of poverty among children is the number and/or percent of school-age children who are eligible for and receive free or reduced-price school lunch. Table 31 shows the *percent* of students eligible for, and Table 32 the *number* of students receiving, free or reduced-price school lunch in Harnett County, Onslow County and NC as a whole over various periods of time.

Table 30 presents recent figures for the number of students actually receiving free or reduced-price school lunch, which is an effective way to grasp the extent of the problem, especially at the county level. In Harnett and Onslow Counties, the number of children receiving these benefits in School Year (SY) 2011-12 was the highest over the period cited. In the state as a whole, the SY2004-05 figures represent the lowest over the period cited.

While the data in **Table 31** are somewhat dated, there are two important take-away messages relative to child poverty in Harnett County:

- The percentage of students eligible for free and reduced-price school lunch in Harnett County was higher than the comparable percentages in either Onslow County or the state as a whole for both periods cited.
- The percentages of students eligible for free and reduced-price school lunch decreased in Harnett County between 2005 and 2006. However, these years preceded the onset of the present recession, so more recent figures would perhaps be expected to be higher.

Table 31 presents more recent figures for the number of students actually receiving free or reduced-price school lunch, which perhaps is a more effective way to grasp the extent of the problem, especially at the county level.

- In Harnett, the percentage of children receiving these benefits in School Year (SY) 2010-11 (56.1%) and increased (57.9%)
- In 2011-12 for Harnett, Onslow and NC figures represent an increase in the percentage over the past five years.

Table 31. Number of Students Receiving Free- or Reduced-Price Lunch (SY2003-04 through SY2011-12)

Percentage of Students Receiving Free or Reduced-Price Lunch									
Location	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Harnett County	52.5%	51.4%	64.8%	52.3%	51.0%	53.1%	52.4%	56.1%	57.9%
Onslow County	40.7%	42.5%	42.3%	42.3%	41.2%	43.2%	45.3%	43.4%	47.7%
State of NC	48.2%	47.7%	48.4%	48.5%	48.4%	49.9%	53.7%	53.9%	56.0%

Source: KidsCount DataCenter, Percentage of Students Receiving Free or Reduced Price Lunch; <http://datacenter.kidscount.org/data/tables/2239-percent-of-students-enrolled-in-free-and-reduced-lunch?loc=35#detailed/5/4910-5009/false/104,19,22,21/any/4682>

Economic Services Utilization

The Harnett County Department of Social Services (DSS) has the responsibility for managing a number of programs that provide assistance to low-income people. These programs include general economic services, WorkFirst Family Assistance, and Food and Nutrition Services (FNS, formerly known as Food Stamps). WorkFirst is North Carolina's Temporary Assistance for Needy Families (TANF) program. It is based on the premise that parents have a responsibility to support themselves and their children. Through WorkFirst, parents can get short-term training and other services, including cash supports, to help them become employed and self-sufficient.

- **Table 32** presents data on the economic services provided by Harnett County DSS from 2007 through 2012.
- While the number of WorkFirst Assistance applications and cases have decreased over the time period cited, many of the county residents who inquired about this service were referred to other assistance programs, which include Child Support, Food and Nutrition Services, Child Care, Employment Services, and Medicaid. These programs offer assistance to help meet the needs of the

family and many families opt not to apply for the WorkFirst Assistance program since there is now a requirement that recipients meet certain goals prior to receiving benefit assistance.

- During the past four years Harnett County DSS has seen an increase of 75% in the number of active FNS cases and an increase of 74% in the number of individuals receiving assistance.
- Participation rate is based on 130% of the Federal Poverty Level and 2000 census data.

Table 32. Economic Services Provided by Harnett County Department of Social Services (2007-2012)

Service / Activity	2007	2008	2009	2010	2011	2012
Work First Family Assistance						
Average Monthly No. Applications	57	58	38	23	31	30
No. Individuals in Applications	157	148	112	76	ND	ND
No. Active Cases	285	220	216	199	185	179
No. Individuals in Active Cases	560	410	423	361	327	327
Food and Nutrition Services (Formerly Food Stamps)						
Average Monthly No. Applications	595	768	711	740	ND	ND
No. of Active Cases	4,834	5,399	6,910	8,436	ND	ND
No. of Individuals in Active Cases	11,553	13,151	14,739	20,095	ND	ND

Housing

Affordable housing is thought to be one of the community characteristics drawing residents to Harnett County. Table 33 presents US Census housing data for Harnett County.

- In Harnett County the total number of housing units increased 22% (from 38,605 to 47,164) between 2000 and 2009, while in 2010 decreased from (47,164 to 46, 731). The percentage of housing units that were occupied decreased 1.6% (from 87.6% to 86.2%) while in 2010 increased to (89.0%).

Table 33. Housing by Type

2010										
Location	Total Housing Units	Occupied Housing Units	Occupied Housing Units	Owner Occupied Units	Owner Occupied Units	Median Monthly Cost, Owner with Mortgage	Renter Occupied Units	Renter Occupied Units	Median Monthly Rent	Mobile Home Units
	Number	Number	Percent	Number	Percent	Dollars	Number	Dollars	Dollars	Number
Harnett County	46,731	41,594	89.0	27,817	66.9	1,212	13,777	33.1	724	11,190
Onslow County	68,226	60,092	88.1	34,332	57.1	1,260	25,760	42.9	858	12,938
State of NC	4,327,528	3,745,155	86.5	2,497,900	66.7	1,282	1,247,255	33.3	744	604,286
Source	b	b	b	b	b	a	b	b	a	a

Source: a. 2007-2011 American Community Survey 5-Year Estimates b. 2010 Demographic Profile http://factfinder2.census.gov/faces/nav/jsf/pages/community_facts.xhtml

Affordable Housing

The lower cost of housing in Harnett County is also apparent from Table 33 (cited previously)

- In Harnett County, the median monthly cost of a mortgage in 2009 was \$1,186, increased to \$1,212 for 2010, a figure lower than the median monthly mortgage cost in Onslow County (\$1,260) and lower than the median mortgage cost statewide (\$1,282).
- Renters in Harnett County in 2009 fared proportionally better as well: the median monthly rent in Harnett County was \$692, in 2010 the median monthly rent \$724 a figure lower than the median rent in Onslow County and lower than in NC as a whole.

According to data from the NC Rural Economic Development Center based on the 2000 US Census, 20.0% of housing in Harnett County was classified as “unaffordable”, compared to 19.8% in Onslow County and 20.7% statewide. This data represents the percent of the population living in households that pay more than 30% of the household income for housing costs (16). According to calculations based on updated US Census figures (estimates) for 2009, housing costs totaled 35% or more of total household income for 28% of the occupied housing units in Harnett County.

The US Department of Housing and Urban Development maintains a system for tracking “affordable” housing for its low-income clients, to whom it provides housing subsidies. HUD services are delivered through Public and Indian Housing Authority (PHA) offices throughout NC, including two in Harnett County: Harnett County Housing Authority (Lillington) and Dunn Housing Authority (Dunn) (17).

- On January 17, 2011 there were five single-family HUD-subsidized homes available in Harnett County: one in Angier, two in Coats, one in Erwin and one in Lillington (18). On the same date HUD listed 11 “affordable” apartment properties in Harnett County: three ARC properties for the developmentally disabled (two in Angier and one in Coats); three properties serving the elderly (two in Dunn and one in Erwin); and four facilities suitable for families (three in Dunn and one in Spring Lake) (19).

The US Department of Agriculture (USDA) catalogues information about rental properties available in rural areas. The agency’s Multi-Family Housing (MFH) Rental website provides an online guide to Government assisted rental properties. As of January 17, 2011 the MFH website listed 21 qualifying rental properties County: four in Angier, two in Coats, eight in Dunn, two in Erwin, and five in Lillington (20).

Homelessness

According to the NC Department of Health and Human Services, the homeless in NC include mostly people in urban areas who are literally homeless—on the streets or in shelters—and people who face eviction within a week from a private dwelling or institution who have no subsequent residence or resources to obtain housing. In rural areas homeless people are likely to live with relatives in overcrowded or substandard housing (21). *Enumerating* the homeless population is as difficult in Harnett County as elsewhere, but it is likely that homelessness is increasing in these difficult economic times. The North Carolina Coalition to End Homeless coordinates an annual statewide, single point-in-time count of the homeless. Table 36 shows results for the 2009 and 2010 Point-in Time (PiT) counts for Harnett and Onslow counties. The 2011 PiT homeless count will be conducted on January 26, 2011 (22).

- The Harnett County PiT count results for families and children show a decrease in total persons and total households from 2009 to 2010. In Onslow County those results increased over the same period.
- The Harnett County PiT count results for single people also show a decrease in total persons and total households from 2009 to 2010 while the Onslow County PiT count results show a *three-fold increase* over the same period.

Table 34. Results of Annual Point-in Time Count of Homeless in Harnett County and Onslow County

Location	Homeless People in Families with Children										Homeless Single people								Total Homeless People	
	Men		Women		Children		Total Persons		Total Households		Men		Women		Total Persons		Total Households			
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Harnett County	1	1	4	5	8	14	13	20	5	5	1	1	9	4	10	5	9	5	23	25
Onslow County	5	2	9	15	22	31	36	48	11	15	70	49	47	29	117	78	102	57	153	126
Source:	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a

Source: a. 2012 Point-in-time count North Carolina Coalition to End Homelessness, Practice, Point-In-Time Count Data, Continua of Care Data, and North Carolina Balance of State by County http://www.ncceh.org/attachments/contentmanagers/825/2012_BoS_by_County.pdf b. 2011 Point-in-time count North Carolina Coalition to End Homelessness, Practice, Point-In-Time Count Data, Continua of Care Data, North Carolina Balance of State by County http://www.ncceh.org/attachments/contentmanagers/825/BoS_PIT_by_County_2011.pdf

Facilities in Harnett County serving the community’s homeless include the Beacon Shelter for men, women, children and families (an outreach program of the faith-based Beacon Rescue Mission), located in Dunn. According to the Beacon Rescue Mission website (23), the shelters provided 1,834 nights’ lodging between January and September 2010. Other county facilities serving the homeless include SAFE of Harnett County, a domestic violence shelter for women (no location cited for security purposes), and Oxford House for women (in Dunn) one of a nationwide system of peer-run substance abuse recovery homes.

Children and Families

Table 35 presents data describing the distribution of the Harnett County population under the age of 18 by township from the 2000 Census, when this group represented 27.0% of the county population. According to the 2010 estimate (Table 8) the current percentage is 25.0%.

- The townships with the *highest* proportion of the county’s children under the age of 18 are Barbecue Township (17.10%) and Anderson Creek Township (15.9%).
- The township with the *lowest* percentage of the county’s minor children (1.9%) is Buckhorn Township.

Table 35. Harnett County Population Under Age 18, by Township (2010)

Township	No. of Persons Under Age 18	% of County Population Under Age 18	% of County Population
Anderson Creek Township	4,927	15.90%	4.40%
Averasboro Township	3,209	10.30%	2.90%
City of Dunn	2,199	7.10%	2%
Remainder of Township	1,010	3.30%	0.90%
Barbecue Township	5,289	17.10%	4.70%
Black River Township	2,156	7%	1.90%
Town of Angier	1,177	3.80%	1%
Remainder of Township	979	3.20%	0.90%
Buckhorn Township	604	1.90%	0.50%

Duke Township	1,519	4.90%	1.40%
Town of Erwin	1,063	3.40%	0.90%
Remainder of Township	456	1.50%	0.50%
Grove Township	2,410	7.80%	2.10%
Town of Coats	483	1.60%	0.40%
Remainder of Township	1,927	6.20%	1.70%
Hectors Creek Township	1,578	5.10%	1.40%
Johnsonville Township	3,646	11.80%	3.20%
Lillington Township	1,022	3.30%	0.90%
Town of Lillington	405	1.30%	0.40%
Remainder of Township	617	2%	0.50%
Neills Creek Township	1,452	4.70%	1.30%
Stewarts Creek Township	1,108	3.60%	1%
Upper Little River Township	2,086	6.70%	1.90%
Total Harnett County Population Age <18	31,006	100%	27.60%
Total Harnett County Population	112,287	n/a	100%

Source: US Census Bureau, American Fact Finder, DP05 Tables in Fact Finder;

http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_5YR_DP05&prodType=table

Single Parent Families

Table 36 presents data from the 2010 US Census on family households with children (under age 18) headed by single parents; also included is a 2009 estimate of some of the same parameters.

- The total percentage of Harnett County family households headed by a single family householder (male or female) and with children under the age of 18 increased from 12.1% in 1990 to 16.4% in 2009 (a 35.5% increase) and a decrease in 2010 12.0%).
- The percentage of all households that are headed by a single female and have children under the age of 18 was estimated in 2009 at 10.3% and decrease to 9.1% in 2010.
- The percentage of all households in Harnett County that are headed by a single male and have children under the age of 18 was estimated in 2009 at 6.1% and decreased to 2.8 in 2010.

Table 36. Single Parent Families (2010)

Location	2010						
	Total Family Households	Female Family Householders with Children <18		Male Family Householders with Children <18		Children <18 Living with Both Parents	Children <18 Not Living with Both Parents
	Number	Number	%	Number	%	Number	Number
Harnett County	41,594	3,796	9.10%	1,172	2.80%	19,180	12,647
Onslow County	44,274	5,159	8.60%	1,387	2.30%	29,545	15,393
State of NC	2,499,174	292,504	7.80%	85,199	2.30%	1,359,045	922,590
Source	a	a	a	a	a	b	b

Source: a. INC database, Item numbers 6050, 6051; http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1
 b. http://data.osbm.state.nc.us/pls/linc/dyn_linc_report.show?p_arg_names=geoid&p_arg_values=0,43,67,&p_arg_names=count&p_arg_values=3&p_arg_names=varid&p_arg_values=60,6051,&p_arg_names=countv&p_arg_values=2&p_arg_names=year&p_arg_values=2010,&p_arg_names=count_y&p_arg_values=1

Child Care

Child Care Facilities: The NC Division of Child Development is the state agency charged with overseeing the child care industry in the state, including the regulation of child care programs. The Division licenses child care facilities that keep more than two unrelated children for more than four hours a day. In NC, regulated child day care facilities are divided into two categories – Child Care Centers and Family Child Care Homes – with the categories determined on the basis of enrollment. A child care center is a larger program providing care for three or more children, but not in a residential setting. The number of children in care is based upon the size of individual classrooms and having sufficient staff, equipment and materials. A family child care home is a smaller program offered in the provider's residence where three to five preschool children are in care. A family child care home may also provide care for three school age children (24).

In September 2000, the NC Division of Child Development began issuing “star rated” licenses to all eligible Child Care Centers and Family Child Care Homes. NC’s Star Rated License System gives stars to child care programs based on how well they are doing in providing quality child care. Child Care programs receive a rating of one to five stars. A rating of one star means that a child care program meets the state’s minimum licensing standards for child care. Programs that choose to voluntarily meet higher standards can apply for a two to five star license. (Note: Religious-sponsored child care programs can opt to continue to operate with a notice of compliance and not receive a star rating.)

Three areas of child care provider performance are assessed in the star system: program standards, staff education, and compliance history. Each area has a range of one through five points. The star rating is based on the total points earned for all three areas. A five-star facility has earned a total of from 14-15 points, a four-star facility from 11-13 points, a three-star facility from 8-10 points, a two-star facility from 5-7 points, and a one-star facility from 3-4 points. **Table 37** presents counts of the NC-regulated child care facilities in Harnett County.

Table 37. NC-Regulated Child Care Facilities in Harnett County (2013)

Type of Facility	Number
Child Care Centers (ALL)	53
Five-Star	13
Four-Star	17
Three-Star	14
Two-Star	4
One-Star	0
GS 110-106 (Church affiliated)	4
Temporary	1
Family Child Care Homes (ALL)	49
Five-Star	5
Four-Star	7
Three-Star	13
Two-Star	9
One-Star	15

Source: <http://ncchildcaresearch.dhhs.state.nc.us/search.asp>

Child Care Enrollment

Table 38 shows the number of children enrolled in NC-regulated child care over a period of time. Enrollment appears to have increased annually over the period cited 2008 in Harnett County for children in the 0-5 age group.

Table 38. Children Enrolled in NC-Regulated Child Care (Years as Noted)

Location	No. of Children (0-5) Enrolled in Regulated Day Care				No. of Children (0-12) Enrolled in Regulated Daycare			
	2008	2009	2010	2011	2008	2009	2010	2011
Harnett County	1,735	1,848	1,846	2,300	1,735	1,848	1,846	2,639
Onslow County	2,888	3,137	3,135	3,542	2,938	3,154	3,135	4,201
State of NC	188,110	183,889	184,236	207,953	188,110	184,254	184,236	251,665

Source: Annie E. Casey Foundation, Kids Count Data Center, Community Level Data, North Carolina Indicators ; <http://datacenter.kidscount.org/>

Subsidized Child Care

The WorkFirst Employment Program discussed previously includes child care subsidies for families that qualify. Table 39 presents the number and percent of children in receiving WorkFirst Working Connections Child Care Subsidies.

- While the numbers and percents of children receiving child care subsidies statewide declined steadily across the span of years cited,

Table 39. Children Receiving WorkFirst Working Connections Child Care Subsidy (2007-2010)

Location	2007		2008		2009		2010	
	No.	%	No.	%	No.	%	No.	%
Harnett County	482	1.6%	396	1.3%	340	1.1%	313	1.0%
Onslow County	572	2.3%	563	2.2%	514	2.0%	489	1.9%
State of NC	41,075	1.9%	43,124	2.0%	42,944	2.0%	39,341	1.8%

*Percent calculated from children under age 18 for specific area North Carolina Indicators;
<http://datacenter.kidscount.org/data/bystate/Default.aspx?state=NC>

Education

Schools and School Enrollment

Institutions of Higher Education; There is one four-year college, one community college, and one bible college in Harnett County.

Campbell University was founded as Buies Creek Academy in 1887 by James Archibald Campbell, a North Carolina preacher who believed that no student should be denied admission because of lack of funds. In 1926, the school attained junior college status and changed its name from Buies Creek Academy to Campbell Junior College. In 1961, Campbell became a senior college. The name was changed to Campbell University in 1979.

Graduate Programs were begun in 1977, with the Master of Education degree. The Master of Science in Government was established in 1982. The Campbell University School of Law was founded in 1976, and the Lundy-Fetterman School of Business was begun in 1983. The Schools of Pharmacy and Education were established in 1985, and the Divinity School was established in 1996.

Undergraduate Degrees currently offered include Associate in Arts, Bachelor of Arts, Bachelor of Science, Bachelor of Applied Science, Bachelor of Health Science, Bachelor of Social Work, and Bachelor of Business Administration. Graduate degrees offered are Master of Education, Master of Science, Master of Arts, Master of Business Administration, Master of Divinity, and Master of Clinical Research. Professional degrees are Juris Doctor and Doctor of Pharmacy. Campbell offers more than 90 undergraduate tracks and concentrations. Students may declare a double major and a minor. Seventy percent of available majors involve internships. Students also have opportunities for foreign study and independent study.

Its current total enrollment is more than 9,400 students. The main campus total enrollment is over 3,900 students, which includes over 2,500 undergraduate students and over 1,400 graduate students. In an average year, the student body comes from about ninety North Carolina counties, all fifty states, and over forty countries. Sixty-six percent of the students come from North Carolina (25).

Central Carolina Community College (CCCC) is a public two-year college and a member of the NC Community College System. Each member of the administrative and teaching staff meets the standards of the North Carolina State Board of Community Colleges, the Southern Association of Colleges and Schools, and other agencies that accredit individual programs. Although established primarily for North Carolina residents, the college accepts students from other states. CCCC operates on campuses located in Lee, Chatham and Harnett Counties.

CCCC offers Associate in Arts and Associate in Science degree programs that transfer to four-year colleges and universities, two-year programs that lead to an Associate in Applied Science degree, and one-year programs that lead to a diploma and/or a certificate. Articulation agreements with four-year colleges and universities enable its graduates to move seamlessly into additional education, if that is their goal.

The college also offers non-curriculum courses in basic education, technical, vocational, enrichment, and general interest areas. These non-curriculum courses do not count toward a college degree or diploma, but a certificate of completion is given and continuing education units are awarded. The Adult High School/GED program awards a diploma or certificate.

CCCC's Harnett County Campus is located on 26 acres at 1075 E. Cornelius Harnett Blvd. (U.S. Highway 421 East), between Lillington and Buies Creek. This campus has 76,000 square feet of building space for classrooms, labs and offices, plus a full-service library and an Academic Assistance Center. The new 8,500-square-foot West Harnett Center, in the Western Harnett Industrial Park, houses Barbering and Sustainable Agriculture classes. It also provides training for businesses in the park, which is located on Olive Farm Drive, Sanford. Triangle South Enterprise Center, 600 Magnolia Ave., Dunn, is a joint venture of the College, Dunn Committee of 100, and Harnett County. It provides space for classes and serves as a small business incubator and the College's Harnett County Small Business Center. The College also operates a Cosmetology School in Dunn in a leased 4,400 square foot facility at 1733 W. Cumberland St. (26).

Heritage Bible College located in Dunn is a coeducational Bible college founded in 1971 and sponsored by the Pentecostal Free Will Baptist denomination; it is accredited by the Transnational Association of Christian Colleges and Schools. Heritage Bible College accepts students from all denominations who wish to pursue the College's programs, which focus primarily on preparation for church and ministry-focused callings.

Degrees offered by the college include two Associate Degrees (Associate of Christian Studies and Associate of Religious Education) and two Bachelor's Degrees (Bachelor of Religious Education in Biblical Studies and Bachelor of Religious Education in Pastoral Ministry). In addition, graduates of Heritage may enter a master's program at Regent University in Virginia Beach, VA for advanced training in church-related callings other than ministry (27).

Primary and Secondary Education

Tables 41 through 43 focus on data pertaining to primary and secondary (mostly public) schools in Harnett County (and Onslow County and the state of NC where appropriate).

Tables 41, 42 and 43 focus on the numbers and kinds of schools and their enrollment.

- K-12 public school enrollment in Harnett County increased steadily from SY2004-05 through SY2012-13, increasing each year (Table 41).

Table 41. K-12 Public School Average Daily Membership, Including Charter Schools (School Years as Noted)

Number of Students									
Location	SY 2004-05	SY 2005-06	SY 2006-07	SY 2007-08	SY 2008-09	SY 2009-10	SY 2010-11	SY 2011-12	SY 2012-13
Harnett County	16,783	17,310	17,912	18,291	18,682	18,951	19,211	19,378	20,065
Onslow County	21,947	22,593	22,787	23,227	23,361	23,493	23,365	24,161	24,657
State of NC	1,356,405	1,390,168	1,417,426	1,436,562	1,445,628	1,440,212	1,451,133	1,462,134	1,476,257

Source: North Carolina Department of Public Instruction, Average Daily Membership by LEA, Annual Reports 2004-05 through 2012-13; <http://www.ncpublicschools.org/fbs/accounting/data/>

- The largest schools (by grade level) in Harnett County are: Elementary Overhills School (941 students), Overhills Middle (1,824), Harnett Central High School (1,474 students).
- There are 26 public schools in the Harnett County school district: 22 elementary schools and four high schools. There also are eight private schools in the county.

Table 42. Public K-12 Schools in Harnett County

School	City	School Type/ Calendar	Grade Range	Average Daily Membership 2012-2013
Anderson Creek Primary	Bunnlevel	Regular School, Traditional Calendar	PK-2	662
Angier Elementary	Angier	Regular School, Traditional Calendar	3-5.	424
Benhaven Elementary	Olivia	Regular School, Traditional Calendar	K-5	473
Boone Trail Elementary	Lillington	Regular School, Traditional Calendar	K-5	591
Buies Creek Elementary	Buies Creek	Regular School, Traditional Calendar	K-5	308
Coats Elementary	Coats	Regular School, Traditional Calendar	PK-5	724
Coats-Erwin Middle	Dunn	Regular School, Traditional Calendar	6-8.	691
Dunn Middle	Dunn	Regular School, Traditional Calendar	6-8.	439
Erwin Elementary	Erwin	Regular School, Traditional Calendar	3-5.	279
Gentry Primary	Erwin	Regular School, Traditional Calendar	K-2	290
Harnett Central High	Angier	Regular School, Traditional Calendar	9-12.	1,474
Harnett Central Middle	Angier	Regular School, Traditional Calendar	6-8.	1,257
Harnett Primary	Dunn	Regular School, Traditional Calendar	PK-3	593
Highland Elementary	Sanford	Regular School, Traditional Calendar	K-5	908
Johnsonville Elementary	Cameron	Regular School, Traditional Calendar	K-5	646
LaFayette Elementary	Kipling	Regular School, Traditional Calendar	K-5	763
Lillington-Shawton Elementary	Lillington	Regular School, Traditional Calendar	PK-5	621
North Harnett Primary	Angier	Regular School, Traditional Calendar	PK-2	458
Overhills Elementary	Spring Lake	Regular School, Traditional Calendar	PK-5	941
Overhills High	Spring Lake	Regular School, Traditional Calendar	9-12.	1,225
Overhills Middle	Spring Lake	Regular School, Traditional Calendar	6-8.	1,824
South Harnett Elementary	Bunnlevel	Regular School, Traditional Calendar	3-5.	554
Star Academy	Lillington	Alternative Education, Traditional Calendar	6-12.	56
Triton High	Erwin	Regular School, Traditional Calendar	9-12.	1,386
Wayne Avenue Elementary	Dunn	Regular School, Traditional Calendar	4-5.	298
Western Harnett High	Lillington	Regular School, Traditional Calendar	9-12.	1,246
Western Harnett Middle	Lillington	Regular School, Traditional Calendar	6-8.	1,126

a.NC Department of Public Instruction, Financial and Business Services, Data and Reports, Statistical Profile/Facts and Figures; <http://www.ncpublicschools.org/fbs/resources/data/> b - Private School Review, North Carolina Private Schools, Search by Zip Code; <http://www.privateschoolreview.com/zipsearch.php>

Educational Attainment and Investment

Table 43 presents data on several measures of educational attainment and investment in public education.

- Harnett County had *lower* percentages of both high school graduates and residents with a bachelor’s degree or higher than either Onslow County or NC as a whole. The percentage of high school graduates in Harnett County (81.70%) was *lower* than in NC overall (84.0%). The percentage of the population with a bachelor’s degree or higher in Harnett County (16.90%) was *lower* than in NC overall (26.50%).
- In the 2011 school year the total per pupil expenditure (the sum of Federal, state and local investments) in Harnett County (\$7,803) was higher than the total in Onslow County (\$7,512) but *lower* than the total for the state as a whole (\$8,417).
- According to SY2011 End of Grade (EOG) Test results, *lower* percentages of third graders and eighth graders in Harnett County public schools demonstrated grade-appropriate proficiency in reading and in math than students statewide or in Onslow County.
- In SY2008-09 the average total SAT score for students in the Harnett County schools (950) was 24 points below the Onslow County average (974), and 47 points below the average for NC as a whole (997).

Table 43. Educational Attainment and Investment (Years as Noted)

Location	% Pop High School Graduate or Higher	% Pop Bachelor's Degree or Higher	Per Pupil Expenditure State, Federal, Local	% 3rd Graders At or Above Grade Level, ABCs EOG Reading Test	% 3rd Graders At or Above Grade Level, ABCs EOG Math Test	% 8th Graders At or Above Grade Level, ABCs EOG Reading Test	%8th Graders At or Above Grade Level, ABCs EOG Math Test	SAT Participation Rate	Average Total SAT Scores
	2011	2011	2011	2011	2011	2011	2011	2012	2012
Harnett County	81.70%	16.90%	7,803	56.30%	72.70%	61.10%	74.30%	50.80%	950
Onslow County	88.30%	18%	7,512	70.50%	82.20%	73.20%	86.90%	63.00%	974
State of NC	84.10%	26.50%	8,417	68.80%	82.80%	71.10%	85.20%	68.00%	997
Source	a	a	b	b	b	b	b	c	c

Sources: a. <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml> b. <http://www.ncschoolreportcard.org/src/> c. <http://www.ncpublicschools.org/data/reports/>

High School Dropout Rate

Table 44 shows data on the high school (grades 9-12) dropout rate in Harnett County, Onslow County, and NC as a whole. According to the NC Department of Public Instruction, a "dropout" is any student who leaves school for any reason before graduation or completion of a program of study without transferring to another elementary or secondary school. For reporting purposes, a dropout is a student who was enrolled at some time during the previous school year, but who was not enrolled (and who does not meet reporting exclusions) on day 20 of the current school year.

- Although the high school dropout rate in Harnett County fluctuated over the period cited, it was higher in every point from the comparable rates in either Onslow County or NC as a whole.

Table 44. High School (Grades 9-12) Dropout Rate (School Years as Noted)

Location	Drop-Out Rates				
	SY 2007-08	SY 2008-09	SY 2009-10	SY 2010-11	SY 2011-12
Harnett County	5.16%	4.15%	5.12%	4.48%	4.13%
Onslow County	4.48%	4.15%	3.15%	2.84%	2.32%
State of NC	4.97%	4.27%	3.75%	3.43%	3.01%

Source: <http://www.ncpublicschools.org/research/dropout/reports>

Crime and Violence in Schools

Along with test scores and dropout rates, schools now also track and report acts of crime and violence that occur on school property. The NC State Board of Education has defined 17 criminal acts that are to be monitored and reported, ten of which are considered dangerous and violent:

- Homicide
- Assault resulting in serious bodily injury
- Assault involving the use of a weapon
- Rape
- Sexual offense
- Sexual assault
- Kidnapping
- Robbery with a dangerous weapon

- Robbery without a dangerous weapon
- Taking indecent liberties with a minor

The other seven criminal acts are:

- Assault on school personnel
- Bomb threat
- Burning of a school building
- Possession of alcoholic beverage
- Possession of controlled substance in violation of law
- Possession of a firearm or powerful explosive
- Possession of a weapon

Table 45 summarizes crime and violence reported for schools in Harnett County, Onslow County, and the state of NC.

- The number and rate of acts of school crime and violence in Harnett County fluctuated dramatically over the period cited. The most recent rate (22.3), in SY2011-12. The Harnett County rate is also twice the comparable rate in Onslow County (9.79).

Table 45. School Crime and Violence, All Grades (School Years as Noted)

Location	SY 2007-08		SY 2008-09		SY 2009-10		SY 2010-11		SY 2011-12	
	No. Acts	Rate								
Harnett County	105	5.74	110	20.76	74	13.73	129	23.20	125	22.3
Onslow County	125	5.38	82	12.88	88	13.62	69	10.93	63	9.79
State of NC	6,418	15.57	6,428	15.70	6,524	15.89	6,132	14.60	5,980	14.15
Source	b	B	a	a	b	b	a	a	a	a

Source: a. Consolidated Data Reports; <http://www.ncpublicschools.org/research/dropout/reports/> b. <http://www.ncpublicschools.org/research/discipline/reports/#consolidated>

Acts of crime and violence detected on school property often result in disciplinary responses. The usual disciplinary action is either a short-term (up to 10-day) suspension, a long-term (11 or more days) suspension, or expulsion. **Table 46** summarizes school disciplinary activity in high schools (grades 9-12) in Harnett County, Onslow County and NC as a whole.

- In Harnett County, the most commonly employed disciplinary action is the short-term suspension, with 6,633 having been issued over the school years cited in Table 46. Harnett County high schools issued 10 long-term suspensions and 1 expulsions over the same period

Table 46. School Disciplinary Activity, Grades 9-12 (SY 2009-10 & SY 2011-12)

Location	SY 2009-10	SY 2009-10	SY 2009-10	SY 2011-12	SY 2011-12	SY 2011-12
	No. Short-Term Suspensions	No. Long-Term Suspensions	No. Expulsions	No. Short-Term Suspensions	No. Long-Term Suspensions	No. Expulsions
Harnett County	3,323	5	0	3,310	5	1
Onslow County	2,629	3	0	2,339	2	1
State of NC	277,206	3,368	88	258,197	1,609	30

Source: Consolidated Data Reports: <http://www.ncpublicschools.org/research/discipline/reports/#consolidated>

Crime and Safety

Crime Rates: All crime statistics reported below were obtained from the NC Department of Justice, State Bureau of Investigation unless otherwise noted. Table 47 shows the rates for “index crime”, which consists of violent crime (murder, forcible rape, robbery, and aggravated assault) plus property crime (burglary, larceny, arson, and motor vehicle theft) for Harnett County, Onslow County, and the state of NC from 2007 through 2011.

- The overall index crime rate in Harnett County fluctuated between 2007 and 2011 but was *lower* than the index crime rate for the state as a whole throughout the period.
- The largest component of Harnett County index crime is property crime, rates for which also were consistently *lower* than comparable rates in NC as a whole.
- The violent crime rate in Harnett County also fluctuated between 2007 and 2011 but was *lower* than the violent crime rate for either Onslow County or NC as a whole throughout the period, with the exception of 2011 Onslow (263.50) in comparison of Harnett (311.30)

Table 47. Index Crime Rates

Location	Crimes per 100,000 Population														
	2007			2008			2009			2010			2011		
	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime
Harnett County	4,137.20	476.3	3,660.90	4,004.60	400.60	3,604.00	3,064.40	285.30	2,779.10	3,458.20	313.50	3,144.70	3,205.40	311.30	2,894.00
Onslow County	4,308.50	422.7	3,885.70	4,502.50	414.80	4,087.70	4,489.70	379.70	4,110.00	3,888.10	315.90	3,572.20	3,620.10	263.50	3,356.70
State of NC	4,658.90	480.2	4,178.70	4,554.60	474.20	4,080.40	4,178.40	417.20	3,761.20	3,955.30	373.90	3,581.40	3,919.80	354.60	3,565.20

Source: NC Department of Justice, State Bureau of Investigation, Crime, View Crime Statistics, Crime Statistics (by Year); <http://ncdoj.gov/Crime/View-Crime-Statistics.aspx>

Table 48. Number of Index Crimes Reported in Harnett County (2007-2011)

Type of Crime	Number of Crimes				
	2007	2008	2009	2010	2011
Violent Crime	494	444	313	360	331
<i>Murder</i>	8	3	3	12	6
<i>Rape</i>	26	29	25	23	16
<i>Robbery</i>	82	83	62	56	38
<i>Aggravated Assault</i>	378	329	223	269	271
Property Crime	3,797	4,050	3,049	3,555	3,077
<i>Burglary</i>	1,336	1,411	1,207	1,118	1,134
<i>Larceny</i>	2,183	2,301	1,634	2,220	1,770
<i>Motor Vehicle Theft</i>	278	318	208	217	173
Total Index Crimes	4,291	4,474	3,362	3,915	3,408

Source: NC State Bureau of Investigation, Crime in North Carolina, North Carolina Crime Statistics, Crime Statistics in Detailed Reports (By Year), Index Offenses in County Order; <http://crimereporting.ncdoj.gov/>

Table 48 shows the numbers of index crimes by type that occurred in Harnett County from 2007 through 2011.

- The most common violent crime throughout the period cited was aggravated assault. The largest number of aggravated assaults committed during the period was 271 in 2011.
- The most common property crime throughout the period cited was larceny. The largest number of larcenies committed during the period was 1770 in 2011.

Other Criminal Activity

Table 49 summarizes some of the other types of criminal activity that are tracked: sex offenders, gangs, and methamphetamine lab busts.

- Of the 14,891*registered sex offenders living in NC as of April 10, 2013, 161 resided in Harnett County and 234 in Onslow County.
- There were verified reports of 38 gangs in Harnett County in 2012.
- There were 77 recorded methamphetamine lab busts in Harnett County from 2008 through 2012.

Table 49. Other Criminal Activity

Location	No. Registered Sex Offenders	No. Gangs	No. Gangs	No. Methamphetamine Lab Busts				
	4/10/2013	2010	2012	2008	2009	2010	2011	2012
Harnett County	161	37	38	35	8	14	10	10
Onslow County	234	n/a	n/a	1	6	2	3	15
State of NC	14,891*	891	963	197	206	235	344	460
	a	b	b	c	C	c	c	c

* Doesn't include those out of the state (3,521) Source: a. NC Department of Justice, Sex Offender Statistics, Offender Statistics; <http://sexoffender.ncdoj.gov/stats.aspx> b. Gangs in North Carolina: The 2010 Report to the General Assembly, Gangs in North Carolina: An Analysis of GangNET Data; <https://www.ncdps.gov/Index2.cfm?a=000003.000011.000644> c. Meth Lab Busts by County: <http://www.ncdoj.gov/getdoc/b1f6f30e-df89-4679-9889-53a3f185c849/2-0-1-1-3-3-Meth-Lab-Busts.aspx>

Juvenile Crime

The following definitions will be useful in understanding the subsequent data and discussion.

- **Complaint** – A formal allegation that a juvenile committed an offense, which will be reviewed by a counselor who decides whether to approve or not approve the complaint. If approved, it will be heard in juvenile court.
- **Undisciplined** – Describes a juvenile between six and 16, who is unlawfully absent from school, or regularly disobedient and beyond disciplinary control of parent/guardian, or is regularly found where it is unlawful for juveniles to be, or has run away from home for more than 24 hours. It also includes 16-17 year olds who have done any of the above except being absent from school.
- **Delinquent** – Describes a juvenile between six and not yet 16 who commits an offense that would be a crime under state or local law if committed by an adult.
- **Diversion** – If a complaint is not approved, it may be diverted to a community resource or placed on a diversion contract or plan that lays out stipulations for the juvenile (like community service) to keep the juvenile out of court.
- **Non-divertible** – Non-divertible offenses include offenses like: murder, rape, sexual offense, arson, first degree burglary, crime against nature, willful infliction of serious bodily harm, assault with deadly weapon, etc.
- **Transfer to Superior Court** – A juvenile who is 13, 14 or 15 who is alleged to have committed a felony may be transferred to Superior Court and tried and sentenced as an adult. If a juvenile is over 13 and charged with first degree murder, the judge must transfer the case to Superior Court if probable cause is found.
- **Rate** – The number per 1,000 persons that are aged 6 to 17 in the county.

Table 50 presents a summary of juvenile justice complaints and outcomes for 2010 and 2011.

- Between 2008 and 2009 both the *number* and *rate* of complaints of **undisciplined** youth ages 6-17 in Harnett County decreased from (92) in 2010 to (59) in 2011.

- Over the same period both the *number* and *rate* of complaints of **delinquent** youth ages 6-15 in the Harnett County remained at (31.45) for 2010 and (31.87) in 2011
- In 2010 the rate of complaints of undisciplined youth in Harnett County was **below** the comparable rates for both Onslow County and NC as a whole.
- In 2011 the rate of complaints of delinquent youth in Harnett County was higher (31.87) than the comparable rates for both Onslow County and NC as a whole.
- The most common outcome of juvenile complaints in Harnett County is the offender being sent to secure detention. Rarely are offenders sent to Youth Development Centers, and no juvenile complaints in Harnett County were transferred to Superior Court in 2010 or 2011.

Table 50. Juvenile Justice Complaint and Outcomes (2010 and 2011)

Location	Complaints								Outcomes					
	No. Undisciplined		No. Delinquent		Rate Undisciplined (Complaints per 1,000 Ages 6-17)		Rate Delinquent (Complaints per 1,000 Age 6 to 15)		No. Sent to Secure Detention		No. Sent to Youth Development Center		No. Transferred to Superior Court	
	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
Harnett County	92	59	496	585	3.23	2.72	31.45	31.87	58	20	7	3	0	0
Onslow County	114	122	1,014	656	5	4.48	40.54	28.33	132	105	9	4	0	0
State of NC	206	181	33,152	1,241	0.14	3.7	27.43	29.89	190	124	16	7	0	0

Source: NC Department of Juvenile Justice and Delinquency Prevention, Statistics and Legislative Reports, County Data Books; <http://www.ncdjjdp.org/statistics/databook.html>

Sexual Assault and Domestic Violence

Table 51 summarizes the number of individuals who filed complaints of sexual assault in Harnett County, Onslow County and the state of NC from FY2009-05 through FY2010-11.

- The annual number of complaints varies without a clear pattern in all three jurisdictions over the period covered.
- Since the figures are counts and not rates, they are difficult to compare from one jurisdiction to another.

Table 51. Sexual Assault Trend (FY2006-07 through FY2008-11)

Location	Number of Individuals Filing Complaints					
	FY 2005-2006	FY 2006-2007	FY 2007-2008	FY 2008-2009	FY 2009-2010	FY 2010-2011

Harnett County	15	31	0	30	31	49
Onslow County	120	58	44	69	66	53
State of NC	8,721	7,444	6,527	8,494	13,392	13,881

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, County Statistics; <http://www.doa.state.nc.us/cfw/stats.htm>

Tables 52 and 53 offer details of sexual assault complaints in Harnett County, Onslow County and NC in FY2010-11. The Table 52 describes the types of assaults involved in the complaints.

According to data:

- The largest proportion of the 49 sexual assault complaints in a specific category in Harnett County for the period cited
- Marital Rape **36.70%** . The second highest proportion was Dated Rape **20.40%**. The third highest proportion was for Child Sexual Offense **14.30%**.

Table 52. Sexual Assault Complaint Details: Types of Assault (FY2010-11)

Location	Type of Assault														
	Total Assault Clients	Adult Rape		Date Rape		Adult Survivor of Child Sexual Assault		Marital Rape		Child Sexual Offense		Incest		Other	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Harnett County	49	3	6.10%	10	20.40%	5	10.20%	18	36.70%	7	14.30%	4	8.20%	2	4.10%
Onslow County	53	50	94.30%	3	5.70%	0	0%	0	0%	0	0%	0	0%	0	0%
State of NC	13,881	3,289	23.70%	1,328	9.60%	2,393	17.20%	1,162	8.40%	3,086	22.20%	1,216	8.80%	1,407	10.10%

Source: NC Department of Administration, Council on Women, Sexual Assault Annual Report,2010-2011; <http://www.doa.state.nc.us/cfw/stats.aspx>

- In Harnett County the most common type of known sexual assault offender was an **Relative**, cited in 22 or 44.90% of the complaints during the period cited. The second most common type of offender was a Acquaintance cited in 14 or 28.60% of the complaints.

Table 53. Sexual Assault Complaint Details: Offender Relationship (FY2010-11)

Location	Type of Offender										
	Total Offenders	Relative		Acquaintance		Boy/Girl Friend		Stranger		Unknown	
		No.	%	No.	%	No.	%	No.	%	No.	%
Harnett County	49	22	44.90%	14	28.60%	13	26.50%	0	0%	0	0%
Onslow County	53	4	7.50%	17	32.10%	8	15.10%	15	28.30%	9	17%
State of NC	13,603	4,978	36.60%	4,505	33.10%	1,635	12.00%	928	6.80%	1,557	11.40%

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, County Statistics; <http://www.doa.state.nc.us/cfw/stats.htm>

Table 54 presents data on the number of complaints of domestic violence in Harnett County, Onslow County and the state of NC for the period from FY2005-06 through FY2010-11.

- The number of individuals filing domestic violence complaints varied widely and without pattern in all three jurisdictions throughout the period cited. Harnett County data for FY2007-08 represented as “n/a” by the source appears to be missing.
- In Harnett County the maximum number of domestic violence complaints over the period (689) was lodged in FY2005-06. For FY 2010-2011 (692)
- The maximum number in Onslow County (742) was lodged in FY2009-10. This number is so much larger than the figures for other years that perhaps it contains an errant key stroke or transposition by the source compiler. In FY 2010-2011, in Onslow was (507).
- Throughout the period cited (with the exception of the missing data in FY2007-08 and the possibly errant Onslow data for FY2009-10) the numbers of complaints in Harnett County were surprisingly larger than in Onslow County, especially given that the population in Onslow County is so much larger than the population in Harnett County.
- Statewide the maximum number of complaints (66,320) was filed in FY2009-10 by FY2010-11 (61,283).

Table 54. Domestic Violence Trend (FY2005-06 through FY2010-11)

Location	Number of Individuals Filing Complaints					
	FY2005-2006	FY2006-2007	FY2007-2008	FY2008-2009	FY2009-2010	FY2010-2011
Harnett County	689	509	n/a	527	472	692
Onslow County	115	147	183	184	742	507
State of NC	48,173	47,305	41,787	51,873	66,320	61,283

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, County Statistics; <http://www.doa.state.nc.us/cfw/stats.htm>

Table 55 presents services received in connection with domestic violence complaints in all three jurisdictions for FY2009-10.

- The 692 victims of domestic violence in Harnett County were provided a total of 7,695 services.
- The largest numbers of services received by domestic violence complainants in Harnett County were for Advocacy (2,162) and Counseling (1,429), followed by Court (1,144) and Referral (1,012).
- The local domestic violence shelter in Harnett County was full on 129 days .

Table 55. Domestic Violence Complaint Details, by Services Received (FY2010-11)

Location	Total Domestic	Services Received									
		Total	Information	Advocacy	Referral	Transport	Counseling	Hospital	Court	Other	Days Local Shelter was

	Violence Clients										Full
Harnett County	692	7,695	543	2,162	1,012	673	1,429	32	1,144	700	129
Onslow County	507	507	304	12	243	64	201	72	61	0	77
State of NC	61,283	61,283	115,585	105,203	69,677	7,999	68,981	1,232	48,995	40,794	7,999

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, County Statistics; <http://www.doa.state.nc.us/cfw/stats.htm>

Child Abuse and Neglect

The responsibility for identifying and reporting cases of child abuse and neglect falls to the child protective services program within a county’s department of social services. Generally speaking, such a unit will have sufficient staff to handle intake of all reports. However, an agency’s ability to investigate and monitor reported cases may vary from year to year, depending on the number of properly trained staff available to it.

Table 56 presents child protective services data from the Harnett County DSS as catalogued by a State of NC Management Assistance system.

- The number of reports of abuse appear to fluctuate annually without a clear pattern. For the period cited, the highest number of reports was 1,116 in FY2010-11, and the lowest was 966 in FY2009-10. The number of substantiated findings of abuse, neglect, or abuse and neglect also varied considerably from year to year.
- Every year a large number of reported cases of child abuse and neglect cannot be substantiated.
- The age group with the highest number of reports is the Age 0-5 age group, representing (532) in 2011-12.

Table 56. Harnett County Reports of Child Abuse and Neglect

Category	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Total No. of Reports of Abuse, Neglect, Exploitation	1,113	1,045	1,056	966	1,116	1,095
Ages 0-5	540	472	548	469	552	532
Ages 6-12	339	371	321	342	379	386
Ages 13-17	223	189	177	152	182	168
Unknown/Missing	11	13	10	3	3	9
No. Substantiated Findings of Abuse and Neglect	5	6	22	10	6	17
No. Substantiated Findings of Abuse	5	4	3	2	4	3

No. Substantiated Findings of Neglect	52	43	80	32	45	46
Services Recommended	79	89	45	63	86	115
No. Unsubstantiated Findings	190	136	162	183	162	189
Services Not Recommended	557	566	544	425	488	456

Source: Child Welfare/WorkFirst/Food & Nutrition Services in North Carolina Management Assistance:
http://sasweb.unc.edu/cgiin/broker?_service=default&_program=cwweb.icans.sas&county=Harnett&label=County&entry=10

Adult Abuse, Neglect and Exploitation

Adults who are elderly, frail, or mentally challenged are also subject to abuse, neglect and exploitation. The Harnett County DSS maintains an Adult Protective Services (APS) unit with the responsibility to screen, investigate and evaluate reports of what may broadly be referred to as adult maltreatment. **Table 57** presents adult protective services data for 2009 and 2011 from Harnett County DSS submitted via survey to the NC Division of Aging and Adult Services.

- Reports of abuse, neglect, and exploitation increased significantly in Harnett County in 2011, as compared to 2009. The 143 reports in 2011 represent nearly four times as many reports as in 2009 (38).
- In Onslow County, the number of reports also increased, but much more modestly—increasing 30% in 2011.

Adults who are elderly, frail, or mentally challenged are also subject to abuse, neglect and exploitation. The Harnett County DSS maintains an Adult Protective Services (APS) unit with the responsibility to screen, investigate and evaluate reports of what may broadly be referred to as adult maltreatment.

Table 57 presents adult protective services data for 2011 from Harnett County DSS submitted via survey to the NC Division of Aging and Adult Services.

Table 57. Adult Protective Services Survey Results (2009 & 2011)

Service/Activity	Harnett County		Onslow County	
	2009	2011	2009	2011
Reports of Abuse, Neglect, Exploitation Received	38	143	221	288
Reports Screened In	33	72	153	203
Reports Screened Out	5	71	68	85
Cases Receiving Information and Referral	2	0	16	8
Cases Receiving Outreach Services	3	71	11	7

Cases Referred to Law Enforcement	3	0	1	6
Cases Referred to DHSR or Adult Home Specialist	2	0	4	2
Cases Referred to District Attorney	3	0	1	6
Cases Referred to Veterans Administration	2	0	0	0

Source: North Carolina Division of Aging and Adult Services, Adult Protective Services, 2011 APS Survey Data; http://www.ncdhhs.gov/aging/adultsvcs/2011_APS_survey_data.pdf

Chapter Two

Health Care and Health Promotion Resources

Chapter Two: Health Care and Health Promotion Resources

Medical Insurance

Access to and utilization of healthcare is affected by a range of variables including the availability of medical professionals in a county, insurance coverage, transportation, cultural expectations and other factors. Compilation of comprehensive health resources data was beyond the scope of this project; nevertheless, some overview-type data were collected and are presented here.

Medically Indigent Population

In most communities, citizens' utilization of health care services is related to their ability to pay for those services, either directly or through private or government health insurances plans/programs. People without these supports are called “medically indigent”, and theirs is often the segment of the population least likely to seek or to be able to access necessary health care.

Table 58 presents data on the proportion of the population (by age group) **without** health insurance of any kind. Although data of this type tends to be reported in several ways, this particular dataset was selected on the basis of the reliability of the source. The health insurance system in the US is built largely upon employer-based insurance coverage, so an increase in the number of unemployed people usually leads to an increase in the number of uninsured.

- Unemployment during the 2010-2011 period was high due to a recessionary economy, the overall percent of uninsured (ages 0-64) in Harnett County in (19.1%). The ages 19-64(24.3) and 0-18 (8.5%)

Table 58. Percent of Population without Health Insurance, by Age Group (2004-2011)

Year	2004			2005			2008-09			2009-10			2010-11		
	0-64	0-17	18-64	0-64	0-17	18-64	0-64	19-64	0-18	0-64	19-64	0-18	0-64	19-64	0-18
Harnett County	20.7	12.8	24.0	19.5	12.8	22.3	20.3%	24.2	12.0	21.3	26.8	10.5	19.1	24.3	8.5
Onslow County	24.8	12.7	30.6	21.9	12.8	26.2	23.4	28.6	11.4	21.8	27.1	10.1	19.2	24.0	8.0
State of NC	16.6	10.0	19.2	18.6	12.4	21.1	19.7	23.2	11.5	19.6	23.6	10.3	n/a	n/a	n/a
Source	a	a	a	a	a	a	b	b	b	d	d	d	c	c	c.

Sources: a. Sheps Center for Health Services Research, Publications, County-Level Estimates of the Uninsured: 2002-2004 and 2005 Updates; b. http://www.shepscenter.unc.edu/http://www.nciom.org/wp-content/uploads/2010/08/County-Level_Estimates_08-09.pdf c. http://nciom.org/wp-content/uploads/2010/08/County-Level_Estimates_10-11.pdf d. http://www.nciom.org/wp-content/uploads/2010/08/County-Level_Estimates_09-10-pdf.pdf

North Carolina Health Choice

Table 59 presents enrollment figures for NCHC for 2010-2012. It should be noted that enrollment is directly related to the funding available, which may change at either the Federal or state level.

- Both Harnett County and Onslow County enroll eligible children at a higher percentage than the state as a whole throughout the period cited.

Table 59. NC Health Choice (NCHC) Enrollment (2010-2012)

Location	2010			2011			2012		
	# Children Eligible	# Eligible Enrolled	% Eligible Enrolled	# Children Eligible	# Eligible Enrolled	% Eligible Enrolled	# Children Eligible	# Eligible Enrolled	% Eligible Enrolled
Harnett County	1,584	1,506	95%	1,828	1,792	98.03%	1,921	1,892	98.50%
Onslow County	1,623	1,586	98%	1,795	1,778	99.05%	1,896	1,857	97.90%
State of NC	131,499	108,533	83%	146,070	134,625	92.16%	151,745	144,257	95.10%

Source: N.C. Health Choice Monthly Enrollment/Exemption Reports: <http://www.ncdhhs.gov/dma/ca/nchcenroll/index.htm>

Medicaid

Medicaid is a health insurance program for low-income individuals and families who cannot afford health care costs. It serves low-income parents, children, seniors, and people with disabilities. The coverage is different for people with different kinds of needs, as are the eligibility requirements. Chief among these requirements is low income, which depending on service can range from 51% to 200% of the Federal Poverty Guideline.

Table 60 summarizes data on Medicaid eligibility and enrolled:

- The *number* of persons in Harnett County eligible for Medicaid rose every year throughout the period cited.

Table 60. Community Care of NC/Carolina ACCESS Enrollment, Biennial Counts

Location	2002 (December)		2004 (December)		2006 (December)		2008 (December)		2010 (December)		2012 (December)		2013 (March)	
	No. Enrolled in Medicaid	% Medicaid Eligibles Enrolled	No. Enrolled in Medicaid	% Medicaid Eligibles Enrolled	No. Enrolled in Medicaid	% Medicaid Eligibles Enrolled	No. Enrolled in Medicaid	% Medicaid Eligibles Enrolled	No. Enrolled in Medicaid	% Medicaid Eligibles Enrolled	No. Enrolled in Medicaid	% Medicaid Eligibles Enrolled	No. Enrolled in Medicaid	% Medicaid Eligibles Enrolled
Harnett County	14,196	77.79	14,347	77.25	15,263	76.04	17,424	80.77	18,291	83.39	16,838	90.34	17,269	92.6
Onslow County	13,622	81.71	13,781	80.18	14,725	79.97	17,072	83.68	17,497	86.67	17,285	91.99	17,698	93.3
State of NC	724,819	74.84	782,437	75.13	826,833	73.91	944,667	81.47	1,471,054	82.99	1,335,393	90.53	1,358,646	92.6

Source: NC Division of Medical Assistance, Statistics and Reports, CCNC/CA Medicaid Monthly Enrollment Reports (Selected Years); <http://www.dhhs.state.nc.us/dma/ca/enroll/index.htm>

- The percent of Medicaid-eligible persons in Harnett County has been consistently higher than the comparable figures for both Onslow County and the state as a whole, although the gap has closed in recent years as the percent of Medicaid-eligible persons increased statewide and remained approximately stable in Harnett County.

Table 61 summarizes data on Medicaid eligibility and expenditures from FY2008 through FY2010. The number of persons in Harnett County eligible for Medicaid rose every year throughout the period cited.

- The number eligible in 2010 (19,436) was 12.5% higher than the number eligible in 2008 (17,276). This same trend can be noted in Onslow County and at the state level.
- The percent of Medicaid-eligible persons in Harnett County has been consistently higher than the comparable figures for both Onslow County, though it has remained close to percentage for the state as a whole

Table 61. Medicaid Eligibility and Expenditures (FY2002-FY2010)

Location	FY2008			FY2009			FY2010		
	Number eligible	% eligible	Expenditure per eligible	Number eligible	% eligible	Expenditure per eligible	Number eligible	% eligible	Expenditure per eligible
Harnett	17,276	16%	\$7,447	18,551	16%	\$7,802	19,436	17%	\$7,267
Onslow	17,353	10%	\$7,785	18,473	10%	\$7,449	19,061	11%	\$7,190
State of NC	1,397,732	15%	\$7,244	1,500,204	16%	\$7,389	1,577,121	17%	\$7,256

Source: NC Division of Medical Assistance, County-Specific Snapshots for NC Medicaid Services; <http://www.ncdhhs.gov/dma/countyreports/index.htm>

Medicaid Managed Care: Community Care of North Carolina/Carolina ACCESS

The goal of Medicaid managed care is to create community health networks to achieve long-term quality, cost, access, and utilization objectives. North Carolina’s approach to Medicaid managed care is to create medical homes for eligible Medicaid recipients by enrolling them into Community Care of NC/Carolina ACCESS (CCNC).

Table 62 summarizes biennial CCNC enrollment data for the period from 2002-2013.

- The percent of Medicaid eligibles enrolled in CCNC increased fairly steady in all three jurisdictions.
- The percent of Harnett County Medicaid eligibles enrolled in CCNC was lower than the percent enrolled in Onslow County for all of the years cited in the table. The average percent enrolled in Harnett County increased significantly over the decade represented in the table.

Table 62. Community Care of NC/Carolina ACCESS Enrollment, Biennial Counts

Location	2002 (December)		2004 (December)		2006 (December)		2008 (December)		2010 (December)		2012 (December)		2013 (March)	
	No. Enrolled in Medicaid	% Medicaid Eligibles Enrolled	No. Enrolled in Medicaid	% Medicaid Eligibles Enrolled	No. Enrolled in Medicaid	% Medicaid Eligibles Enrolled	No. Enrolled in Medicaid	% Medicaid Eligibles Enrolled	No. Enrolled in Medicaid	% Medicaid Eligibles Enrolled	No. Enrolled in Medicaid	% Medicaid Eligibles Enrolled	No. Enrolled in Medicaid	% Medicaid Eligibles Enrolled
Harnett County	14,196	77.79	14,347	77.25	15,263	76.04	17,424	80.77	18,291	83.39	16,838	90.34	17,269	92.6
Onslow County	13,622	81.71	13,781	80.18	14,725	79.97	17,072	83.68	17,497	86.67	17,285	91.99	17,698	93.3
State of NC	724,819	74.84	782,437	75.13	826,833	73.91	944,667	81.47	1,471,054	82.99	1,335,393	90.53	1,358,646	92.6

Source: NC Division of Medical Assistance, Statistics and Reports, CCNC/CA Medicaid Monthly Enrollment Reports (Selected Years); <http://www.dhhs.state.nc.us/dma/ca/enroll/index.htm>

Medicare

Medicare is the US government's health insurance program for senior citizens (people 65 years of age or older), certain younger people with specific disabilities, and people with end-stage renal disease. Medicare is an entitlement program and is not based on financial need. Medicare benefits are available to all Americans or their spouses who have paid Social Security taxes through their working years. The Medicare program is funded by the Social Security Administration with a budget equal to about 10% of the entire US budget. In 2008 there were 45.3 million persons enrolled in the program nationwide. In NC in 2009, there were approximately 1.4 million beneficiaries, representing 15.3% of the state’s population.

Table 63 summarizes Medicare enrollment data for the period from 2004-2007.

- The total number of aged persons enrolled in Part A and/or Part B Medicare in Harnett County increased by 14.0% between 2004 and 2007. The number of disabled persons enrolled in Part A and/or Part B in the county increased by 17.6% over the same period. However, the numbers decreased slightly from 2007 to 2010.
- By comparison, the numbers in Onslow County rose steadily over this period.
- Information available from US DHHS/CMS is insufficient to provide comparable data the state of NC as a whole.

Table 63. Medicare Enrollment, Number of Aged and Disabled Persons

Location	2004						2007						2010					
	Aged			Disabled			Aged			Disabled			Aged			Disabled		
	HI/SMI	HI	SMI	HI/SMI	HI	SMI	HI/SMI	HI	SMI	HI/SMI	HI	SMI	HI/SMI	HI	SMI	HI/SMI	HI	SMI
Harnett County	8,704	8,688	8,485	2,784	2,784	2,575	9,924	9,912	9,591	3,273	3,273	3,020	9,238	9,233	8,897	2,893	2,892	2,721
Onslow County	10,360	10,324	10,142	2,631	2,631	2,343	11,920	11,885	11,625	3,263	3,263	2,978	12,953	12,933	12,560	3,355	3,354	3,072

Definition: HI = Hospital Insurance (Medicare Part A); SMI = Supplementary Medical age Age (Medicare Part B), which covers physician and outpatient services.

Source: US Department of Health and Human Services, Centers for Medicare and Medicaid Services (CMS); Research, Statistics, Data and Systems; Statistics, Trends and Reports; Medicare Enrollment Reports; <http://www.cms.gov/MedicareEnrpts/>

Health Care Practitioners

One way to judge the supply of health professionals in a jurisdiction is to calculate the ratio of the number of health care providers to the number of persons in the population of that jurisdiction. In NC, there is data on the ratio of active health professionals per 10,000 population calculated at the county level.

Table 64 presents those data (which for simplicity's sake will be referred to simply as the "ratio") for Harnett County, Onslow County and the state as a whole for five key categories of health care professionals: physicians, primary care physicians, registered nurses, dentists and pharmacists.

The periods covered are 2006, 2008, 2009, and 2011.

- The Harnett County ratios for most categories of health care providers have remained stable or increased slightly over the period cited in Table 64. Since the county population grew over the same period, the stability of the ratio indicates that the number of health care providers has increased more or less apace with population growth. Particularly noteworthy is the increase in the ratio of primary care physicians, since this typically is a category in short and sometimes dwindling supply in many parts of the state.
- On the downside, the ratio for every category of health care provider is lower in Harnett County than for the state as a whole. These lower ratios can be misleading in discussions of healthcare access, however, since abundant health care

services are available in neighboring counties, especially Wake County. While no data is yet available, the recent hospital opening and expansion of Harnett Health services should result in higher ratios in future CHAs.

Table 64. Active Health Professionals per 10,000 Population

Location	2006					2008					2009					2011				
	MDs	Primary Care MDs	RNs	DDSs	Pharms	MDs	Primary Care MDs	RNs	DDSs	Pharms	MDs	Primary Care MDs	RNs	DDSs	Pharms	MDs	Primary Care MDs	RNs	DDSs	Pharms
Harnett	5	3.3	34.2	1.7	5.8	5.6	3.8	35.4	1.7	6.5	5.5	3.9	35.4	1.8	5.9	5.3	3	34.1	1.8	7.6
Onslow	7.9	4.2	48.4	3.4	4.2	7.4	3.7	47.7	3.1	3.7	7.3	3.7	50.8	3.1	4.1	8.3	3.6	52.4	3	4.5
State of NC	20.8	9	92.9	4.4	8.9	21.2	9	95.1	4.3	9.3	21.2	9.2	96.9	4.4	9.3	22.1	7.8	98.6	4.4	9.5

Abbreviations used: MDs (Physicians), RNs (Registered Nurses), DDSs (Dentists), Pharms (Pharmacists)
 Source: Cecil G. Sheps Center for Health Services Research, NC Health Professions Data System (HPDS), Publications, NC Health Professions Data Books (Years as noted); <http://www.shepscenter.unc.edu/hp/publications.htm>

Table 65 lists active health professionals by specialty in 2009 and 2011. The major medical specialties with the smallest representation are general practice, obstetrics/gynecology, nurse midwifery, chiropractic, podiatry, and psychology. It is important to note that between 2009 and 2011 there was a decrease in primary care physicians particularly a 33% decrease in pediatricians.

Table 65. Active Health Professionals in Harnett County, by Specialty

Category of Professional	No. (2009)	No. (2011)
Physicians		
Primary Care Physicians	44	36
Family Practice	11	12
General Practice	1	0
Internal Medicine	17	13
Obstetrics/Gynecology	3	3
Pediatrics	12	8
Other Specialties	18	27
Dentists and Dental Hygienists		
Dentists	20	21
Dental Hygienists	53	68
Nurses		
Registered Nurses	400	404

Nurse Practitioners	11	14
Certified Nurse Midwives	1	1
Licensed Practical Nurses	161	145
Other Health Professionals		
Chiropractors	4	5
Occupational Therapists	26	23
Occupational Therapy/Assistants	17	14
Optometrists	10	10
Pharmacists	67	90
Physical Therapists	31	30
Physical Therapy Assistants	15	22
Physician Assistants	31	43
Podiatrists	3	3
Practicing Psychologists	3	2
Psychological Assistants	9	7
Respiratory Therapists	31	30

Source: Cecil G. Sheps Center for Health Services Research, NC Health Professions Data System (HPDS), Publications, NC Health Professions Data Book (2009); <http://www.shepscenter.unc.edu/hp/publications.htm>

Dentists Accepting Medicaid/Health Choice Patients

There is a shortage of dentists throughout rural North Carolina, and the number of dentists who accept Medicaid/Health Choice-reimbursements for services can be especially sparse in rural counties.

- Table 66 lists current data on the dental providers in Harnett County that have accepted Medicaid/Health Choice clients in the recent past, indicating those that may have current openings for these patients.

Table 66. Harnett County Dentists Who Accept Medicaid/Health Choice Clients (as of March 8, 2013)

Specialty Description	Group/Facility Name	City	Accepting new patients
FQHC	TRI COUNTY COMMUNITY HEALTH	DUNN	Y
FQHC	TRI COUNTY COMMUNITY HEALTH	DUNN	Y
FQHC	TRI COUNTY COMMUNITY HEALTH	DUNN	Y
FQHC	TRI COUNTY COMMUNITY HEALTH	DUNN	Y
FQHC	TRI COUNTY COMMUNITY HEALTH	DUNN	Y

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General Dentist	LANE & ASSOCIATES VII DDS DBA	LILLINGTON	Y
General Dentist	SANDHILLS PEDIATRIC AND	SANFORD	Y
General Dentist	DENTURE MAKERS	ERWIN	Y
General Dentist	LANE & ASSOCIATES DDS PA	ERWIN	Y
General Dentist	LANE & ASSOCIATES III DDS PA	ANGIER	Y
General Dentist	SANDHILLS PEDIATRIC AND	SANFORD	N
General Dentist	RANDOLPH K FAULK JR DDS	SANFORD	Y
General Dentist	DAVID E GALATAS DDS II PA	CAMERON	Y
General Dentist	LANE & ASSOCIATES VII DDS DBA	LILLINGTON	Y
General Dentist	LANE & ASSOCIATES VII DDS DBA	LILLINGTON	N
General Dentist	LANE & ASSOCIATES DDS PA	ERWIN	N
General Dentist	LANE & ASSOCIATES III DDS PA	ANGIER	N
General Dentist	LANE & ASSOCIATES VII DDS DBA	LILLINGTON	Y
General Dentist	LAURENCE R MESTER JR DDS	CAMERON	Y
General Dentist	LANE & ASSOCIATES III DDS PA	ANGIER	Y
General Dentist	LANE & ASSOCIATES VII DDS DBA	LILLINGTON	N
General Dentist	PRICE,DAVID,P	LILLINGTON	N
General Dentist	LANE & ASSOCIATES VII DDS DBA	LILLINGTON	Y
General Dentist	LANE & ASSOCIATES III DDS PA	ANGIER	Y
General Dentist	LANE & ASSOCIATES DDS PA	ERWIN	N
General Dentist	LANE & ASSOCIATES DDS PA	ERWIN	N
General Dentist	LANE & ASSOCIATES III DDS PA	ANGIER	Y
General Dentist	LANE & ASSOCIATES DDS PA	ERWIN	Y
General Dentist	LANE & ASSOCIATES III DDS PA	ANGIER	Y
General Dentist	LANE & ASSOCIATES DDS PA	ERWIN	Y

Source: NC Division of Medical Assistance, NC Medicaid and NC Health Choice Provider List; <http://www.ncdhhs.gov/dma/dental/dentalprov.htm>

Hospitals

Table 67, which lists the number of general hospital beds in Harnett County. While the most current Division of Health Services Regulation reports do not include it, the opening of Central Hospital as a part of the Harnett Health system will expand hospital beds by fifty (50) beds in 2013.

Table 67. Number of General Hospital Beds (2008-2013)

Location	2008	2009	2010	2011	2012	2013*
Harnett County	101	101	101	101	101	151*

* Increase due to opening of new hospital not yet reflected in official DHSR reporting. Source: NC Department of Health and Human Services-Division of Health Service Regulation, DHSR Report: Hospitals by County; <http://www.ncdhhs.gov/dhsr/data/hllistco.pdf>

Harnett Health System

Harnett Health is a private, not-for-profit healthcare organization that operates two hospitals and a number of primary care practices and outpatient centers in Harnett County (and also Johnston County).

Betsy Johnson Regional Hospital (BJRH) is a Harnett Health’s flagship, 101-bed not-for-profit private hospital located in Dunn, NC. Current BJRH programs and services include:

- Birthing Center – consisting of private suites, each of which includes a master bath and shower, sleeper sofa for a family member, glider rocker, TV/DVD/VCR, and stereo system. There is a nursery viewing area for siblings and other family members.
- Cancer Center – one of five locations of Cancer Centers of North Carolina, which provide integrated cancer care
- Cardiac Rehabilitation - a medically supervised program of monitored exercise, education and counseling to help patients recover from their heart condition and improve their overall quality of life.
- Emergency Room - providing a total of 23 treatment rooms including two trauma rooms and 14 cardiac monitored beds.
- Pediatrics – A dedicated six-bed pediatric unit offers a broad range of services for infants to teens 16 years of age. The staff includes registered nurses and licensed practical nurses that are certified in Pediatric Advanced Life Support (PALS) and/or Neonatal Resuscitation Program (NRP). Special features of the unit include a dedicated treatment room for procedures that are hurtful, so the children’s private rooms remain a safe and pleasant place; private rooms with a rocker glider, pull-out sofa and shower; complimentary meals for the parent or family member who is staying with the child, and a play therapy cart for children who feel well enough to play games. Special needs support is also available on an inpatient and outpatient basis and includes pediatric rehabilitation, speech therapy and aquatic therapy. and/or Neonatal Resuscitation Program (NRP). Special features of the unit include a dedicated treatment room for procedures that are hurtful, so the children’s private rooms remain a safe and pleasant place; private rooms with a rocker glider, pull-out sofa and shower; complimentary meals for the parent or family member who is staying with the child, and a play therapy cart for children who feel well enough to play games. Special needs support is also available on an inpatient and outpatient basis and includes pediatric rehabilitation, speech therapy and aquatic therapy.

- Surgical Services – surgical services are provided in the specialty fields of urology, podiatry, obstetrics, gynecology, orthopedics, ophthalmology, general surgery, gastroenterology, and endoscopy.
- Women’s Health – services include the Women's Breast Care Center offering mammography and stereotactic breast biopsy.
- Rehab/Wellness Center – offering inpatient and outpatient services at BJRH and outpatient physical therapy services at a site in Benson (in neighboring Johnston County). The Rehab/Wellness Center at BJRH is a 12,000 square foot facility, complete with a rehab gym equipped with Cybex fitness equipment plus an aquatic therapy pool. Rehab/Wellness Center staff include certified and licensed physical therapists, physical therapy assistants, occupational therapists, speech and language pathologists, and a massage therapist.
- Community Education and Outreach – offers a number of community wellness and education programs such as Breastfeeding Basics, Medication Management, smoking cessation, Newborn Care, and CPR.

Central Harnett Hospital is Harnett Health’s new hospital, which opened January 18, 2013. The hospital has 50 beds and approximately 225 staff. Current services at Central Harnett include:

- Emergency services
- Outpatient surgery
- Diagnostic imaging
- Inpatient nursing

Harnett Health also has six primary care practices and five outpatient centers in Harnett County.

- **Other Hospitals**

There are numerous hospitals located in the counties adjacent to or near Harnett County. In the seven counties bordering Harnett there is a total of 11 hospitals, including two major medical centers (in Wake and Cumberland Counties) and Womack Army Medical Center in Cumberland County. In addition, there are two major teaching/research hospitals within ~50 miles of Lillington: NC Memorial Hospital in Chapel Hill and Duke University Medical Center in Durham.

- **Emergency Services**

Harnett County EMS has been in existence since 1978 providing emergency care to the citizens of Harnett County. Harnett County EMS backs up any and all of the rescue squads throughout the county and provides non-emergency transport care for the hospitals, nursing homes, and the invalid citizens of Harnett County. The level of training among Harnett County EMS staff has become increasingly advanced over the years; at the present time there is Paramedic-level service available in all parts of the county. Note that this service is in addition to all the Rescue Squad services (at various levels) that already exist in Harnett County.

- The Paramedic Quick-Response Vehicle (QRV) and Transporting Advanced Life Support (ALS) Zones at the present time are as follows:

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- Benhaven/Spouts Springs - One QRV furnished by Harnett County EMS at the Paramedic Level. Transporting Units furnished by Benhaven EMS at the EMT-Intermediate Level.
- Anderson Creek - One QRV furnished by Harnett County EMS at the Paramedic Level. Transporting Units Furnished by Anderson Creek EMS at the EMT-Intermediate Level.
- Boone Trail - One QRV furnished by Harnett County EMS at the Paramedic Level. Transporting Units furnished by Boone Trail EMS at the EMT-Defibrillator Level.
- Buies Creek and Coats Grove - One QRV furnished by Harnett County EMS at the Paramedic Level. Transporting Units furnished by Buies Creek and Coats Grove at the EMT-Defibrillator Level.
- Lillington/ Summerville/Bunnlevel - One Paramedic Transport Unit furnished by Harnett County EMS.
- North Harnett - One Paramedic transporting unit furnished by Harnett County EMS.
- Angier/Black River - One Paramedic transporting unit furnished by Harnett County EMS.
- Erwin/Duke - One QRV furnished by Dunn Rescue at the Paramedic Level. Transporting unit furnished by Erwin Rescue at the EMT-Defibrillator Level.
- Dunn/Averasboro - QRV & Paramedic Transporting Unit furnished by Dunn Rescue.

This system enables EMS to provide a first duty response time of 10-12 minutes countywide. The county EMS program has not affected the operations of the individual Rescue Squads in Harnett County (covered previously in this report). Every squad operates independently as they have in the past to include the budgeting process and their elections of Officers and Board of Directors. Every squads continues to provide coverage 24/7.

Harnett County Department of Public Health

Public Health is the science of protecting and improving the health of communities through education, promotion of healthy lifestyles, and research for disease and injury prevention. Public health professionals try to prevent problems from happening or re-occurring through implementing educational programs, developing policies, and administering services. The Harnett County Department of Public Health professionals are concerned with protecting the health of entire populations; these populations can be as small as a local neighborhood, or as big as the entire county. The mission of the Harnett County Department of Public Health is to prevent illness, diseases, and injuries, promote healthy lifestyles, and keep the environment clean, healthy and safe. The service provided by the Health Department includes the following:

- **Adult Health:** The Adult Health Division offers a variety of services for adults ranging from blood pressure checks to examinations. These services are provided for men and women. The division provides the following screening services: cholesterol, blood sugar, blood pressure, HIV counseling and testing, and adult immunizations.
- **Child Health:** The Child Health Division provides healthcare for children. Services include well child checkups and complete physicals for kindergarten, daycare and head start programs, and a complete childhood immunization program. A Physician Extender is available to provide care for sick children and provide routine physical examinations.

- **Communicable Disease:** In order to identify and contain outbreaks of communicable diseases the Health Department, in compliance with state and federal regulations, maintains surveillance and investigates and reports certain communicable diseases. Control and prevention measures are implemented as needed. When necessary, staff conducts an investigation in an effort to slow the transmission of the disease, provide education, and make sure patients and contacts are treated appropriately. Staff assists with tracking trends and assists in the investigation of disease outbreaks within the community.
- **Environmental Health:** This Division has the following primary functions: provide inspections and active enforcement of county and state rules and regulations; issue on-site wastewater treatment (septic) system permits; issue well permits; and conduct sanitation inspections. As part of its sanitation focus the division oversees sanitation rules for restaurants, school lunchrooms, meat markets, other food-handling establishments, public swimming pools, child care centers, school buildings, tattoo establishments, lodging establishments, bed and breakfast homes, bed and breakfast inns, hospitals, nursing and rest homes, summer camps, local confinement facilities, and residential care facilities. Additionally, the division monitors and enforces drinking water quality.
- **Health Education:** Educating the public about health issues is a goal of public health. Programs are implemented to promote wellness and healthy lifestyles. Health Educators work to mobilize community partnerships and to identify and solve community health problems.
- **Home Health:** The Home Health Division provides health care within the home, enabling clients to enjoy the privacy and independence of home without sacrificing their medical needs. Health care professionals travel to the home or assisted living facility to provide a range of services that can include skilled nursing care, rehabilitation therapies, in-home assistance, occupational therapy, and medical nutrition therapy. Any Harnett County resident in need of skilled medical service is eligible to receive home health care with a physicians' order. Staff members prepare treatment plans under the guidance of the client's personal physician.
- **Social Work/Family Care Coordination:** This division offers two formal case management programs designed to support children, expectant parents and families: Specially trained social workers assist pregnant women in obtaining medical care and support services.
- **Women Infants and Children (WIC):** WIC is a federally-funded health and nutrition program for women, infants, and children. The goal of the program is to reduce and prevent nutrition related health problems. Participants must meet income guidelines and either be pregnant women, new mothers, infants or children under age five.
- **Women's Preventive Health:** Women's Preventive Health provides a variety of women's health services, including family planning, which is available for all women of childbearing age (including teens). Services provided include Pap tests, breast exams, testing for sexually transmitted diseases, education and birth control methods, pregnancy testing and more.
- **Prenatal Care:** The prenatal clinic has a professional staff of health care providers to assure quality health care for expectant mothers.

Other Health Care Facilities **(a non-comprehensive list in alphabetical order)**

Community Health Center

First Choice Community Health Centers was established in 1979 as a non-profit community health center and certified as a Federally Qualified Health Center (FQHC). First Choice Community Health Centers is dedicated to providing primary health care and dental service to the underserved citizens of Harnett and surrounding counties. Fees for services are on a household size/income sliding scale based on the Federal Poverty Guidelines, but no one is turned away because of inability to pay. The health centers also accept Medicare, Medicaid (traditional and Carolina Access) and most private insurance companies. First Choice Community Health Centers clinics are in-network for Blue Cross/Blue Shield of NC, United HealthCare, Cigna Healthcare, and MedCost. The system operates at six clinic locations: Lillington Medical Center, Benhaven Medical Center in Cameron, Boone Trail Medical Center in Mamers, Anderson Creek Medical Center, Benhaven Medical Center in Cameron, Boone Trail Medical Center in Mamers, Anderson Creek Medical Center and Anderson Creek Dental Clinic in Spring Lake, and Angier Medical Center in Angier, providing care to over 10,000 patients per year. Services include: family practice medicine for children, teens and adults; OB/GYN care including regular screenings, prenatal care, and family planning; dental care including preventative and restorative; pharmaceutical assistance for those who qualify; laboratory services, and X-Rays (at Lillington and Boone Trail Medical Centers). Professional staff includes board certified physicians, dentists, family nurse practitioners, physician assistants, dental hygienists, and nurses. Interpreting services are provided for Spanish speaking patients.

Home Health and Hospice

The NC Department of Health and Human Services, Division of Health Service Regulation maintains lists of NC-licensed home health and hospice facilities throughout the state. In this report, hospice and home health agencies are catalogued separately, although sometimes a single agency will provide both services.

As of December 2013, Home Health facilities in Harnett County:

- Harnett County Home Health Agency/ Harnett County Department of Public Health
307 Cornelius Harnett Blvd.
Lillington, NC 27546-0400
Phone: (910)893-7544
Home Health Provider: 347089
- Liberty Home Care
105 Hunt Valley Drive

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Dunn, NC 28334
Phone: (910)892-6427
Home Health Provider: 347306

As of December 2013, Hospice Facilities serving Harnett County:

- Community Home Care and Hospice
400 East H Street
Erwin, NC 28339
Phone: (910)892-7548
- Continuum Home Care & Hospice of Harnett County
604 Lucas Road
Dunn, NC 28334
Phone: (910)891-4600
- E. Carlton Powell Hospice Center
185 Pine State Street
Lillington, NC 27546
Phone: (910)893-5394
Hospice Inpatient Beds: 8
- Hospice of Wake County
111A North Ellis Avenue
Dunn, NC 28339
Phone: (919)828-0890
- Liberty Home Care and Hospice
105 Hunt Valley Drive
Dunn, NC 28334
Phone: (910)892-1906

Radiology

Carolina Regional Radiology --This group practice, headquartered in Fayetteville, operates an Imaging Center in Angier. The Imaging Center offers on-site diagnostic radiology, MRI, CT, diagnostic ultrasound, obstetric ultrasound, mammography, bone densitometry, vascular ultrasound, gastrointestinal imaging, and pediatric radiology.

Urgent Care

Clinics offering urgent and walk-in primary care represent a rapidly growing segment of health care services. Because of this growth precise point-in-time catalogs of urgent care facilities are both difficult to find and somewhat untrustworthy. A broad search of Internet-based lists discovered a number of urgent care centers and clinics in Harnett County, with specific entries for the communities of Angier, Dunn and Lillington, where several facilities listed for each location.

School Health

Harnett County Schools provide registered nurses to serve as a resource in caring for student and staff health care needs during the school day. Each nurse is assigned two to four schools and schedules visits based upon student needs and the demographics of each assigned school. Nurses work with parents and physicians to complete Individual Healthcare Plans or Emergency Action Plans to meet students' known or potential healthcare needs during the school day. School nurses instruct and monitor non-medical school staff to care for children in the classroom who may either be undergoing chemotherapy treatments, require catheterizations, feeding tubes, insulin pumps, tracheostomy care or other stoma care.

School nurses are often the only source of health care for many students. Nurses will work with parents, teachers, social workers and other school staff as well as accessing various community and state resources to meet the health care needs of students. Parents and teachers may refer student health concerns to the school nurse for evaluation and consideration. School nurses providing ongoing screenings, assessments, and interventions to ensure students have the necessary support to allow optimum learning.

Specific duties of the school nurse include:

- Identifying students with health needs and developing a written plan of care to be shared with teachers and staff;
- Providing emergency care to students and staff with illnesses or injuries while at her assigned school;
- Providing information about community and state resources to assist students in obtaining needed services;
- Monitoring student compliance with North Carolina immunization laws and other health related enrollment requirements;
- Providing training and supervision to school personnel in the proper administration of medications;
- Providing training and supervision to staff performing procedures necessary to care for chronically ill students during the school day;
- Assisting in development and review of health related policies and procedures for Harnett County Schools;
- Working with school staff to prevent health problems from becoming reason for poor educational performance;

- Providing staff training to comply with guidelines regarding bloodborne pathogens and diabetes;
- Providing CPR/First Aid training for staff; and
- Serving as a resource to students, parents, teachers and staff.

Table 68 presents the Student-to-School-Nurse Ratio for the three jurisdictions covered in this report. Note that the Student-to-School Nurse ratio in Harnett County decreased between each of the periods cited, even as student enrollment was growing. However, the latest ratio in Harnett County was higher than comparable ratios for Onslow County and NC as a whole.

Table 68. Student to School Nurse Ratio

Location	Student to School Nurse Ratio			
	2000	2003	2006	2009
Harnett County	2686	2369.9	2012.8	1963
Onslow County	5466	1797.8	1329	1161
State of NC	2075	1897.1	1340.7	1225

Source: North Carolina Annual School Health Services Report 2007-2008;

[http://www.ncdhhs.gov/dph/wch/doc/stats/School Health Services 2007-08_eov.pdf](http://www.ncdhhs.gov/dph/wch/doc/stats/School_Health_Services_2007-08_eov.pdf)

Long-Term Care Facilities

The NC Division of Aging and Adult Services is the state agency responsible for planning, monitoring and regulating services, benefits and protections to support older adults, persons with disabilities, and their families. That agency is the source for the following information on categories of long- and short-term adult care (46). Among the facilities under the agency’s regulatory jurisdiction are the long-term care facilities described below.

Nursing Homes

Nursing homes are facilities that provide skilled nursing or convalescent care for three or more persons unrelated to the licensee. A nursing home provides long-term care of chronic conditions, or short-term convalescent or rehabilitative care of remedial ailments for which medical and nursing care are indicated. All nursing homes must be licensed in accordance with state law by the NC Division of Facility Services, Licensure Section.

Table 69 shows the number of nursing facility beds in Harnett County, Onslow County, and the state of NC. The numbers of nursing facility beds in both Harnett County and Onslow County have been static from 2005 through 2009. At the state level the number of nursing facility beds grew by only 0.7% over that period.

Table 69: Number of Nursing Facility Beds¹ (2005-2009)

Location	2005	2006	2007	2008	2009
Harnett County	425	425	425	425	425
Onslow County	359	359	359	359	359
State of NC	43,987	44,248	44,210	44,234	44,315

Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 513); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show (no longer available) ¹This count includes beds licensed as nursing facility beds, meaning those offering a level of care less than that offered in an acute care hospital, but providing licensed nursing coverage 24 hours a day, seven days a week.

Adult Care Homes

Adult care homes are residences for aged and disabled adults who may require 24-hour supervision and assistance with personal care needs. People in adult care homes typically need a place to live, some help with personal care (such as dressing, grooming and keeping up with medications), and some limited supervision. Medical care may be provided on occasion but is not routinely needed. These facilities, which are also sometimes called domiciliary homes, rest homes, or family care homes, vary in capacity from 2 to 100. Adult care homes differ from nursing homes in that the former provide a less sophisticated level of care and require lesser qualifications for staff. The 1,400 adult care homes in NC are licensed by the Division of Facility Services, Group Care Section, and are monitored by Adult Home Specialists within county departments of social services. Facilities that violate licensure rules are subject to sanctions, including fines.

Adult Day Care/Adult Day Health Centers

Adult day care provides an organized program of services during the day in a community group setting for the purpose of supporting the personal independence of older adults and promoting their social, physical and emotional well-being. Also included in the service, when supported by funding from the Division of Aging and Adult Services (NCDAAS), are no-cost medical examinations required for admission to the program. Nutritional meals and snacks, as appropriate, are also expected. Providers of adult day care must meet State Standards for Certification, which are administrative rules set by the state Social Services Commission. These standards are enforced by the office of the Adult Day Care Consultant within the NCDAAS. Routine monitoring of compliance is performed by Adult Day Care Coordinators located at county departments of social services. Costs to consumers vary, and there is limited funding for adult day care from state and federal sources. The NCDAAS did not list any certified adult day care/adult day health centers in Harnett County at the time this report was developed.

Table 70 is the NCDAAS list of all the NC-licensed adult care facilities in Harnett County as of December, 2013. There were 11 licensed adult care facilities in Harnett County at the time of this summary offering a total of 564 beds.

Table 70. NC-Licensed Adult Care Facilities in Harnett County

Facility	Number of Beds	Location	Star-Rating
Alzheimer's Related Care	36	Dunn	3
Green Leaf Care Center	105	Lillington	3
Johnson Better Care Facility	50	Dunn	4
Oak Hill Living Center	122	Angier	4
Pinecrest Gardens	60	Lillington	1
Primrose Villa Retirement Home II	12	Angier	4
Primrose Villa Retirement III	12	Angier	
Senior Citizens Village	65	Dunn	3
Senter's Rest Home	50	Fuquay-Varina	4
Stage Coach Manor	40	Angier	4
Unprecedented Care	12	Dunn	4

Source: NC Department of Health and Human Services, Division of Health Services Regulation, Adult Care Facilities List (Dec 2013); <http://www.ncdhhs.gov/dhsr/data/ahlist.pdf>

Alternatives to Institutional Care

An alternative to institutional care preferred by many disabled and senior citizens is to remain at home and use community in-home health and/or home aide services. As noted previously, there are several home health service providers in the county. In addition, Harnett County DSS facilitates access to in-home aide services for their clients. Aide services typically include help with bathing, dressing, walking, meal preparation, essential errands, housekeeping and home management .

Mental Health Services and Facilities

The unit of NC government responsible for overseeing mental health services is the Division of Mental Health, Developmental Disabilities and Substance Abuse Services (DMH/DD/SAS). Over the past decade, mental health reform has meant that the structure of services has changed rapidly year to year.

As of December 2013, **Table 71** presents the 38 licensed mental health facilities operating in Harnett County, which provide a capacity for 89 clients.

Table 71. NC-Licensed Mental Health Facilities (G.S 122C) in Harnett County

Facility	Location	Capacity
Aspirations and Miracles Community Support, LLC	Dunn	0
Aspirations and Miracles Community Support, LLC	Dunn	0
Aspirations and Miracles Community Support, LLC	Dunn	0
CMI Angier Group Home	Angier	6
Continuum Care Services, Inc.	Angier	0
Daymark Recovery Services Harnett Center	Buies Creek	0
Daymark Recovery Services Harnett Center	Buies Creek	0
Daymark Recovery Services Harnett Center	Buies Creek	0
Elm Street	Erwin	3
Elmore-Blackley Fellowship Home	Dunn	8
Erwin #2 Group Home	Erwin	6
Erwin Avenue Home	Erwin	6
Forest Hills Family Care Facility	Cameron	3
Harmony Home	Dunn	6
Harnett PSR	Buies Creek	0
Johnston County Industries, Inc. / Lillington Location	Lillington	0
Lillington Group Home	Lillington	6
Martin	Lillington	3
Nature's Reflections, LLC	Dunn	0
PRI Counseling Services of Lillington	Lillington	0
PRI Counseling Services of Lillington	Lillington	0
Primary Health Choice, Inc.	Dunn	0
Primary Health Choice, Inc.	Dunn	0
Professional Family Care Home #4	Sanford	3
Professional Family Care Home #5	Cameron	3
RHA Health Services, Inc./Jackson Street Group Home	Coats	6
Rawls Road Group Home	Angier	5
Redemption Alternative Living Center	Dunn	2
Sierra's Day Treatment Academy	Lillington	0

Sierra's Residential Services Group Home III	Cameron	4
Sierra's Residential Services Inc.-Group Home #2	Spring Lake	4
Sierra's Residential Services, Inc.	Spring Lake	4
The Atkins Home	Holly Springs	2
Trust The Process, Inc.	Dunn	0
Trust The Process, Inc.	Dunn	0
United Rehabilitation Services, Inc.	Dunn	6
United Rehabilitation Services, Inc.	Erwin	0
Woodhaven Family Care Facility	Cameron	3

Source - NC Department of Health and Human Services, Division of Health Services Regulation (DHSR), Licensed Facilities, Mental Health Facilities (G.S. 122C) (by County); <http://www.ncdhhs.gov/dhsr/data/mhllist.pdf>

Recreational Facilities

Harnett County offers many opportunities for residents seeking individual outdoor physical recreation as well as for those who prefer organized team and/or indoor activities. Table 72 lists many of the public parks and recreational centers in the county; Table 73 lists some of the private gyms and sports clubs. *Important note: neither Table 74 nor Table 75 is intended to be all-inclusive.*

Table 72. Public Parks and Recreational Centers in Harnett County

County-Owned Parks and Recreational Facilities		
Neill's Creek County Park	Angier	Tennis courts, softball fields, open activity field, restrooms
Barbecue Creek County Park	Lillington	Tennis courts, baseball/softball fields, batting cage, multi-purpose field, walking trails, picnic shelter, classroom, restrooms
South Harnett Park	Lillington	Baseball/softball fields
Cape Fear River Trail Park	Erwin	Walking trails, overlooks, canoe access, picnic shelter, restroom
Town Parks and Recreational Facilities		

Angier Parks & Recreation	Angier	Organized youth sports, art classes Jack Marley Park (Angier Park) Angier Sports fields, children's park, Yesteryear Park, Walking Program Angier Community walking program
Coats Recreation Park	Coats	Children's playground, baseball/softball fields; soccer fields; tennis courts; camping and picnicking
Tyler Park	Dunn	Tennis courts, ball fields, batting cage, playground, picnic shelter Clarence Lee Tart Park Dunn Ball fields, walking track, playground equipment, picnic shelter
Lillington Parks & Recreation	Lillington	Community center with exercise classes and equipment, Organized youth sports programs
Other Public Parks & Recreational Facilities		
Dunn-Erwin Rail Trail	Dunn/Erwin	Nature trail for running/walking/cycling; open daylight hours only
Raven Rock State Park	near Lillington	Features unusual crystalline structure; hiking, horseback riding, canoeing, fishing, camping, picnicking, and nature study

Table 73. Private Gyms/Sports Clubs/Recreational Facilities in Harnett County

Name	Location	Facilities/Programs
Anderson Creek Golf	Spring Lake	Golf Course
Aysgarth Stables	Dunn	Equestrain Stables
Big Ape Gym	Dunn	Classes, personal trainers, treadmills, stairmaster, bicycles; childcare

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Black River Paintball	Coats/Angier	Seven paintball courses; onsite equipment rentals
Blow's Fitness	Erwin	Free weights, strength and cardio equipment, aerobics classes
Buffaloe Lanes Bowling Center	Erwin	Bowling Lanes
Cape Fear Fitness	Lillington	Nautilus and cardiovascular equipment, free weights
Cape Fear Adventure	Lillington	Canoe/kayak rentals; river trips; open year round (daylight hours)
Carolina Skate Land	Dunn	Roller skating rink
Chicora Country Club	Dunn	Golf course; tennis courts; swimming pool; pro shop
CrossFit Fort Brag	Spring Lake	Intense strength and conditioning program
Curves	Spring Lake	Program of fitness and nutrition for women
Dunn-Benson Drag Strip	Dunn	Pro, street, and junior dragster classes and races
Keith Hills Golf Course	Lillington	Golf course
Lillington Recreation Club	Lillington	Large members-only swimming pool
Little River Trails	Bunnlevel	Equestrian trail riding/campground; no horse rentals
Pine Burr Golf	Lillington	Golf Course
Sandy Ridge Golf	Dunn	Golf Course
Starting Point Stables	Angier	Equestrian stables; horse boarding, lessons, horse/pony training
Xcell Fitness	Dunn	Full-service gym; yoga, pilates, power lifting, personal training

Chapter Three

Health Statistics

Chapter Three: Health Statistics

Methodology

Reports of this type routinely collected mortality and morbidity surveillance data and behavior survey data to describe the health status of the target population. These data, which are readily available in the public domain, typically use standardized definitions, thus allowing comparisons among county, state and national figures. There is, however, some error associated with each of these data sources. Surveillance systems for communicable diseases and cancer diagnoses, for instance, rely on reports submitted by health care facilities across the state and are likely to miss a small number of cases, and mortality statistics are dependent on the primary cause of death listed on death certificates without consideration of co-occurring conditions.

Understanding Health Statistics

Age-adjustment

Mortality rates, also known as death rates, are often used to describe the health status of a community. Many factors can affect the risk of death, including race, gender, occupation, education and income. The most significant factor is age, because an individual's risk of death inevitably increases with age. Thus, as a population ages, its collective risk of death increases; therefore, an older population will automatically have a higher overall death rate just because of its age distribution. At any one time some communities have higher proportions of "young" people, and other communities have a higher proportion of "old" people. In order to compare mortality data from one community with the same kind of data from another, it is necessary first to control for differences in the age composition of the communities being compared. This is accomplished by "age-adjusting" the data. Age-adjustment is a statistical manipulation usually performed by the professionals responsible for collecting and cataloging health data, such as the staff of the NC State Center for Health Statistics (NCSCHS). It is not necessary to understand the nuances of age-adjustment to use this report. Suffice it to know that age-adjusted data are preferred for comparing most health data from one population or community to another and have been used in this report whenever available.

Aggregate Data

Another convention typically used in the presentation of health statistics is "aggregate data", which involves combining like data gathered over a multi-year period, usually three or five years. The practice of presenting data that are aggregated avoids the instability typically associated with using highly variable year-by-year data consisting of relatively few cases or deaths. The calculation is performed by dividing the sum number of cases or deaths due to a particular disease over a period of years by the sum of the population size for each of the years in the same period.

Incidence

“Incidence” is the population-based rate at which new cases of a disease occur and are diagnosed. It is calculated by dividing the number of newly diagnosed cases of a disease or condition during a given period by the population size during that period. Typically, the resulting value is multiplied by 100,000 and is expressed as cases per 100,000; sometimes the multiplier is a smaller number, such as 10,000 or 1,000.

Incidence

Incidence is calculated according to the following formula:

$$\text{Incidence} = \frac{\text{number of new cases of disease}}{\text{population size}} \times 100,000 = \text{cases per 100,000 people}$$

The incidence rates for certain diseases, such as cancer, are simple to obtain, since data are routinely collected by the NC Central Cancer Registry. However, other conditions, such as diabetes or heart disease, are not normally reported to central data-collecting agencies. It is therefore difficult to measure the new burden of certain diseases within a community.

Mortality

“Mortality” is calculated by dividing the number of deaths due to a specific disease in a given period by the population size in the same period. Like incidence, mortality is a rate, usually presented as number of deaths per 100,000 residents. Mortality rates are easier to obtain than incidence rates since the underlying (or primary) cause of death is routinely reported on death certificates. However, error can be associated with cause-of-death classification, since it is sometimes difficult to choose a single underlying cause of death from among several co-occurring conditions.

Mortality

Mortality is calculated according to the following formula:

$$\text{Mortality Rate} = \frac{\text{number of deaths from disease}}{\text{population size}} \times 100,000 = \text{deaths per 100,000 people}$$

Morbidity

“Morbidity” as used in this report refers generally to the presence of injury, sickness or disease (and sometimes the symptoms and/or disability resulting from those conditions) in the population. In this report communicable diseases (including sexually-transmitted infections), asthma, overweight/obesity, and mental health conditions are the primary conditions covered under morbidity.

Prevalence

“Prevalence”, which describes the extent of a problem, refers to the number of existing cases of a disease or health condition in a population at a defined point in time or during a period. Prevalence expresses a proportion, not a rate. Prevalence is often estimated by consulting hospital records. Hospital discharge records show the number of residents within a county who use hospital in-patient services for given diseases during a specific period. Typically, these data underestimate the true prevalence of the given disease in the population, since individuals who do not seek medical care or who are diagnosed outside of the hospital in-patient setting are not captured by the measure. Note also that decreasing hospital discharge rates do not necessarily indicate decreasing prevalence; rather they may be a result of a lack of access to hospital care.

Trends

Data for multiple years or multiple aggregate periods is included in this report wherever possible. Since comparing data on a year-by-year basis can yield very unstable trends due to the often small number of cases or deaths per year, the preferred method for reporting incidence and mortality trend data is long-term trends using the age-adjusted, multi-year aggregate format. Most trend data used in this report are of that type, and are standardized (by the statisticians) to the population at the time of the 2010 US Census (or in some cases the 2000 US Census).

Small Numbers

Year-to-year variance in small numbers of events can make dramatic differences in rates that can be misleading. For instance, an increase from two events one year to four the next could be statistically insignificant but result in a calculated rate increase of 100%. Aggregating annual counts over a five year period before calculating a rate is one method used to ameliorate the effect of small numbers. Sometimes even aggregating data is not sufficient, so the NC State Center for Health Statistics recommends that all rates based on fewer than 20 events – whether covering an aggregate period or not – be considered “unstable”. In fact, in some of its data sets the NC Center for Health Statistics no longer calculates rates based on fewer than 20 events. To be sure

that unstable data do not become the basis for local decision-making, this report will highlight and discuss primarily rates based on 20 or more events. Where exceptions occur, the narrative will highlight the potential instability of the rate being discussed.

Behavioral Risk Factor Surveillance System (BRFSS)

Harnett County residents participate in the state’s annual Behavioral Risk Factor Surveillance System (BRFSS) Survey, as part of an aggregate 41 county sample that encompasses the entire eastern third of NC. It is not possible to isolate survey responses from Harnett County BRFSS participants, and since the aggregate regional data covers such a diverse area the results are not especially useful in describing health in Harnett County. As a result, BRFSS data will not be used in this document.

Final Health Data Caveat

Some data that is used in this report may have inherent limitations, due to sample size, or its being out-of-date, for example, but it is used nevertheless because there is no better alternative. Whenever this kind of data is used, it will be accompanied by a warning about its limitations.

America’s Health Rankings

Each year for 20 years, America’s Health Rankings™, a project of United Health Foundation, has tracked the health of the nation and provided a comprehensive perspective on how the nation – and each state – measures up. America’s Health Rankings is the longest running state-by-state analysis of health in the US.

America’s Health Rankings are based on several kinds of measures, including determinants (socioeconomic and behavioral factors and standards of care that underlay health and well-being) and outcomes (measures of morbidity, mortality, and other health conditions). Together the determinates and outcomes help calculate an overall rank.

Table 69 shows where NC stood in the 2012 rankings relative to the “best” and “worst” states.

Table 69. State Rank of North Carolina in America’s Health Rankings (2012)

Location	Overall	Determinants	Outcomes
Vermont	1	1	5
North Carolina	33	31	38
Mississippi	49	49	50
Louisiana	49	50	49

Source: America’s Health Rankings, United States Overview: 2012;
<http://www.americashealthrankings.org/Rankings>

County Health Rankings (MATCH)

Building on the work of County Health Rankings & Roadmaps Project, the Robert Wood Johnson Foundation, collaborating with the University of Wisconsin Population Health Institute, undertook a project to develop health rankings for the counties in all 50 states. The 2012 County Health Rankings are a key component of the partners’ Mobilizing Action Toward Community Health (MATCH) project.

Each state’s counties are ranked according to health outcomes and the multiple health factors that determine a county’s health. Each county receives a summary rank for its health outcomes and health factors and also for four different specific types of health factors: health behaviors, clinical care, social and economic factors, and the physical environment.

Table 70 presents the county rankings for Harnett County and Onslow County in terms of health outcomes and health factors.

- Harnett County ranks 65th best in NC in terms of mortality; Onslow County ranks 27th.
- Harnett County ranks 39th best in NC in terms of morbidity; Onslow County ranks 26th.
- Among health factors ranked, Harnett County ranks higher (i.e., “better”) than Onslow County in physical environment but lower (i.e., “worse”) in clinical care, social and economic factors, and health behaviors. Note that the poor Harnett County ranking for clinical care may be misleading. Based at least partially on the physical presence of clinical services in a county, this measure does not take into account nearby – and even preferred – providers located in adjacent counties. As noted previously, Harnett County residents frequently seek care in nearby counties that house many specialists and major medical centers.

Table 70. County Health Rankings for Harnett County and Onslow County among NC Counties (2012)

Location	County Rank (Out of 100)					
	Health Outcomes		Health Factors			
	Mortality	Morbidity	Health Behaviors	Clinical Care	Social and Economic Factors	Physical Environment
Harnett County	65	39	81	91	52	63
Onslow County	27	26	78	47	10	87

Source: Robert Wood Johnson Foundation and University of Wisconsin, County Health Rankings; <http://www.countyhealthrankings.org/app/home>

Table 71 presents some of detailed information included in the rankings in Table 70. From this table it is clear what contributes to a “higher” or “lower” ranking.

- In terms of health behaviors, smoking, obesity, binge drinking, motor vehicle crash, sexually transmitted infections, and teen birth rates in Harnett County all exceed their respective MATCH targets, and all but binge drinking, teen birth, and sexually transmitted infection rates exceed the NC averages.
- Harnett County’s low ranking for clinical care results from worse-than-target rates for all measures--uninsured adults, primary care providers, preventable hospital stays, diabetic screening, and mammography.
- Low educational attainment and worse-than-target measures for children in poverty, social support and single-parent households are among the factors negatively affecting Harnett County’s social and economic factors ranking.
- The percentage of fast food restaurants negatively affects Harnett County’s physical environment ranking.

Table 71. County Health Rankings Detail (2012)

Health Factor	Harnett County	Onslow County	NC County Average	Target
Mortality				
Premature Death	8,643	7,303	7,480	5,317
Morbidity				
Poor of Fair Health	19%	17%	18%	10%
Poor Physical Health Days	3.9	4	3.6	2.6
Poor Mental Health Days	3.4	3.9	3.4	2.3
Low Birth weight	8.70%	7.80%	9.10%	6.00%
Health Factors				
Health Behaviors				
Adult Smoking	27%	26%	21%	13%
Adult Obesity	32%	30%	29%	25%
Excessive Drinking	13%	18%	13%	7%
Motor Vehicle Crash Death Rate	24	19	17.00	10.00
Sexually Transmitted Infections	392	639	441	0.92
Teen Birth Rate	46	71	46	21
Clinical Care				
Uninsured	20%	16%	19%	11%
Primary Care Provider Rate	3,735:1	2,719:1	1,480:1	1,067:1
Dentists	3,724:1	1,289:1	2,171:1	1,516:1
Preventable Hospital Stays	96	81	63	47
Diabetic Screening	85%	81%	88%	90%
Mammography Screening	64%	63%	69%	73%
Social & Economic Factors				
High School Graduation	74%	87%	80%	
Some College	61%	66%	62%	70%
Unemployment	11.60%	9.10%	10.50%	5.00%
Children in Poverty	26%	22%	25%	14%
Inadequate Social Support	21%	17%	21%	14%
Children in Single-Parent Households	35%	30%	35%	20%
Violent Crime Rate	344	325	411	66
Physical Environment				
Air Pollution-Particulate matter days	12.8	12.7	12.9	8.8
Drinking Water Safety	5%	0%	3%	0%
Limited Access to Healthy Foods	4%	11%	7%	1%
Fast Food Restaurants	56%	57%	49%	27%

Source: Robert Wood Johnson Foundation and University of Wisconsin; <http://www.countyhealthrankings.org/app/home2012>
 2012 Criteria added: Drinking water safety, fast food restaurants, some college, and sexually transmitted infections
 2012 Criteria removed: air pollution-ozone days, and income inequality

Maternal and Infant Health

Pregnancy

The following definitions and statistical conventions will be helpful in understanding the data on pregnancy:

- Reproductive age = 15-44
- Total pregnancies = live births + induced abortions + fetal death at >20 weeks gestation
- Pregnancy rate = number of pregnancies per 1,000 women of reproductive age
- Fertility rate = number of live births per 1,000 women of reproductive age
- Abortion rate = number of induced abortions per 1,000 women of reproductive age
- Birth rate = number of live births per 1,000 population (Note that in the birth rate calculation the denominator includes the entire population, both men and women, not just women of reproductive age. It speaks more to population growth than to reproductive health.)

Pregnancy, Fertility, Abortion and Birth Rates, Women Age 15-44

Table 72 presents annual pregnancy, fertility and abortion rates for women age 15-44, for the period from 2009-2012.

- The pregnancy rates in Harnett County were significantly lower than the comparable rates in Onslow County throughout the period cited, but higher as compared to NC as a whole since 2010.
- The fertility rates Harnett County were significantly below the comparable rates in Onslow County throughout the period cited, but above the comparable rates for NC in all years.
- The abortion rates in Harnett County were slightly lower than Onslow throughout the period and lower than the state as a whole except for 2012.

Table 72. Pregnancy, Fertility and Abortion Rate per 1,000 Women Age 15-44 (2010-2012)

Location	2009			2010			2011			2012		
	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate
Harnett County	78.6	67.9	10.3	84.0	70.9	12.7	80.1	68.4	11.3	79.3	67.6	11.1
Onslow County	129.3	110.8	18.1	126.3	108.6	17.0	124.5	110.5	13.5	123.0	109.8	12.6
State of NC	78.9	65.1	13.4	76.4	62.7	13.2	73.3	61.5	11.4	72.1	61.0	10.7

Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2009-2012). Pregnancy and Live Births. Pregnancy, Fertility, & Abortion Rates per 1,000 Population, by Race, by Age; <http://www.schs.state.nc.us/SCHS/data/databook>

Table 73 presents figures on the annual number of teen (ages 15-19) pregnancies in Harnett County and Onslow County for the years from 2003-2011.

- The number of teen pregnancies in Harnett County fluctuated throughout the period cited, but was has decreased steadily since 2008. The average annual number of teen pregnancies over the entire period cited was 236.
- In Onslow County the number of teen pregnancies also fluctuated throughout the period cited but was higher than Harnett County each year. The average annual number of teen pregnancies over the entire period cited was 474.

Table 73. Number of Teen (Age 15-19) Pregnancies, 2003-2011

Location	Number of Teen (Age 15-19) Pregnancies								
	2003	2004	2005	2006	2007	2008	2009	2010	2011
Harnett County	251	238	212	240	248	267	245	226	197
Onslow County	440	504	485	467	515	477	511	485	383

Source: NC State Center for Health Statistics, North Carolina health Data Query System. Pregnancy Data. North Carolina Reported Pregnancy Data. Year: 2003-2011. Harnett, Onslow Counties (age group as indicated); <http://www.schs.state.nc.us/SCHS/data/databook/>

Pregnancy Risk Factors

High Parity and Short Interval Births

According to the NCSCHS, a birth is high parity if the mother is younger than 18 when she has had one or more births, or aged 18 or 19 and has had two or more births, or is 20-24 and has had four or more births, etc. A short-interval birth is a birth resulting from a conception that occurs six months or less since the last birth. High-parity and short-interval pregnancies can be a physical strain on the mother and sometimes contribute to complicated pregnancies and/or poor birth outcomes.

Table 74 presents aggregate data on high-parity and short interval births for the period from 2008 through 2012.

- In Harnett County the percentage of high parity births among mothers under 30 (17.5%) was higher than the comparable percentage in either Onslow County (7.8%) or the state as a whole (16.6%).
- The percentage of high parity births among Harnett County mothers age 30 and older (22.2%) was higher than the percentage in Onslow County (17.2%) or the state as a whole (21.5%).
- The percentage of short-interval births in Harnett County (12.8%) was similar to percentages in Onslow (12.4%) and the state as a whole (12.9%).

Table 74. High-Parity and Short-Interval Births (Five-Year Aggregate Data, 2008-2012)

Location	High Parity – Mother <30		High Parity – Mother >30		Short-Interval	
	Number of Births	Percentage	Number of Births	Percentage	Number of Births	Percentage
Harnett County	1,043	17.5%	598	22.2%	770	12.8%
Onslow County	1,327	7.8%	665	17.2%	1,449	12.4%
State of NC	66,159	16.6%	47,781	21.5%	52,829	12.9%

Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2011). ; <http://www.schs.state.nc.us/SCHS/data/databook>

Pregnancy Outcomes

Low Birth Weight and Very Low Birth Weight

Low birth weight can result in serious health problems in newborns (e.g., respiratory distress, bleeding in the brain, and heart, intestinal and eye problems), and cause lasting disabilities (mental retardation, cerebral palsy, and vision and hearing loss) or even death.

Table 75 presents five-year aggregate data on low birth weight births: infants weighing 2,500 grams (5.5 pounds) or less.

- The percentages of total low birth weight births were similar and relatively stable in Harnett County and NC as a whole for most of the period cited. Among blacks, within which subpopulation the percentage of low birth weight births is higher than in the overall population, a decrease in the percentage in Harnett County between 2003-2007 and 2004-2008 was followed by a subsequent increase (to a five-period high) in 2005-2009 and 2006-2010.
- No jurisdiction cited in the table demonstrated much improvement in the percentage of low birth weight births over time. In Harnett County the overall percentage of low birth weight births in 2007-2011 (8.7%) was 6.0% higher than it was in 2001-2005 (8.6%).

Table 75. Low (< 2,500 Grams) Birth Weight Births (Five-Year Aggregate Periods, Years as Noted)

Location	2001-2005		2002-2006		2003-2007		2004-2008		2005-2009		2006-2010		2007-2011	
	Total	Black												
Harnett County	8.6	14.4	8.8	14.8	8.7	14.8	8.4	13.9	8.8	15.6	8.9	15.6	8.7	14.9
Onslow County	8.7	12.3	8.1	12.7	8	13	7.9	13.3	7.9	13.2	7.7	13	7.5	12.8
State of NC	9	14.2	9.1	14.3	9.1	14.4	9.1	14.4	9.1	14.4	9.1	14.4	9.1	14.3

Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2011). ; <http://www.schs.state.nc.us/SCHS/data/databook>

Table 76 presents data on very low birth-weight births: infants weighing 1,500 grams (3.3 pounds) or less.

- The total percentage of very low birth weight births in Harnett County slightly exceeded the percentage in the state as a whole in the four most recent aggregate periods; the Harnett County total percentage was higher than the comparable percentage in Onslow County in all of the periods cited, except 2002-2006.
- The percentages of very low birth weight births among black women in Harnett County exceeded comparable percentages for both Onslow County and NC throughout the period cited. At the state level the percentage of very low birth weight births among blacks was consistently about twice the percentage among all women.

Table 76. Very Low (< 1,500 Grams) Birth Weight Births (Five-Year Aggregate Periods, Years as Noted)

Location	Percent of Very Low Birth Weight (< 1,500 Gram) Births													
	2001-2005		2002-2006		2003-2007		2004-2008		2005-2009		2006-2010		2007-2011	
	Total	Black	Total	Black	Total	Black	Total	Black	Total	Black	Total	Black	Total	Black
Harnett County	1.8	3.7	1.9	4.1	1.9	4	2	4.2	2	3.9	2	3.9	2	3.7
Onslow County	1.8	3.5	1.6	3.1	1.6	3.3	1.5	3.3	1.5	2.9	1.3	2.5	1.4	2.8
State of NC	1.9	3.6	1.9	3.6	1.9	3.6	1.8	3.5	1.8	3.5	1.8	3.4	1.8	3.3

Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2011). ; <http://www.schs.state.nc.us/SCHS/data/databook>

Caesarian Section Delivery

Table 77 presents data on the percent of births delivered by a primary (first-time) Caesarian section. As elsewhere in the US, the percentage of Caesarian section deliveries in all three jurisdictions have risen drastically over time: by 68% in Harnett County, by 73% in Onslow County and by 76% statewide over the period cited.

Table 77. Caesarian Section Deliveries (Five-Year Aggregate Periods, Years as Noted)

Location	Percent of Resident Births Delivered by Caesarian Section (Primary)						
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011
Harnett County	19.2	19.5	19.5	19.1	18.5	33.5	32.3
Onslow County	17.2	17.7	18.5	19.4	19.5	30.3	29.8

State of NC	17.4	17.8	18.1	18.3	18.4	31.2	31.2
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Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2011). <http://www.schs.state.nc.us/SCHS/data/databook>

Infant Mortality

Infant mortality is the number of infant (under one year of age) deaths per 1,000 live births.

Table 78 presents infant mortality data for Harnett County, Onslow County and the state of NC.

- Statewide the total and white infant death rates were little changed (slight decrease) throughout the period cited.
- The total infant mortality rate in Harnett County has fluctuated over these aggregate periods.
- Across the three jurisdictions, modest decreases have occurred with infant mortality rates for African-Americans (the group most statistically disparate from whites), however the rates in Harnett County for African-Americans still reaches almost four times the rate of whites.

Table 78. Infant (<1year) Mortality Rate per 1,000 Live Births (Years as Noted)

Location	2006-2010		2007-2011		2008-2012	
	No.	Rate	No.	Rate	No.	Rate
Harnett County Total	73	8.8	68	8.0	72	8.3
White	32	6.4	28	5.4	29	5.5
Black/African-American	39	23.3	36	21.1	37	21.0
Onslow County Total	140	7.3	148	7.4	144	6.9
White	80	5.8	87	6.0	88	5.9
Black/African-American	45	17.0	40	15.2	35	13.4
State of NC Total	5,066	7.9	4,899	7.8	4,675	7.5
White	2,074	5.9	2,001	5.7	1,918	5.6
Black/African-American	2,208	14.7	2,129	14.3	2,064	14.0

Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2011). ; <http://www.schs.state.nc.us/SCHS/data/databook>

Leading Causes of Death

Table 79 lists the age-adjusted mortality rates (and raw numbers) for the fifteen leading causes of death for the five-year aggregate period from 2007 through 2011. While the table includes the comparable rates for Onslow County, North Carolina and the United States, the causes are listed in descending order of the Harnett County mortality rates. Figures in *italic* type indicate causes of death for which the Harnett County rate exceeds the comparable rate for the state as a whole. An asterisk (*)

by a rate means that there were fewer than 20 deaths in that particular category and the rate should be interpreted with caution. Each cause of death is discussed in some detail later in this report.

Table 79. Age-Adjusted Mortality Rates¹ for the 15 Leading Causes of Death (Five-Year Aggregate Period 2007-2011)

Cause of Death	Harnett County		Onslow County		State of NC		United States (2010)	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1. Diseases of the Heart	930	208.3	888	187.0	86,099	179.3	597,689	179.1
2. Cancer – All sites	894	185.9	1,000	189.3	88,518	179.7	574,743	172.8
3. Chronic Lower Respiratory Diseases	244	54.5	255	52.9	22,274	46.6	138,080	42.2
4. Cerebrovascular Diseases	216	49.3	181	38.9	21,774	46.0	129,476	39.1
5. Unintentional Non-Motor Vehicle Injury	138	28.1	183	29.3	13,781	29.2	82,898	26.8
6. Alzheimer’s Disease	109	27.3	86	22.5	13,347	29.0	83,494	25.1
7. Diabetes Mellitus	111	24.2	193	38.1	10,733	22.0	69,071	20.8
8. Nephritis, Nephrotic Syndrome, Nephrosis	97	22.2	86	17.7	8,860	18.6	50,476	15.3
9. Motor Vehicle Injury	117	21.5	142	16.0	7,336	15.5	35,332	11.4
10. Septicemia	78	17.1	88	18.0	6,515	13.6	34,812	10.6
11. Pneumonia and Influenza	48	10.7	65	14.7	8,455	17.9	50,097	15.1
12. Chronic Liver Disease and Cirrhosis	54	10.5	67	11.2	4,723	9.3	31,903	9.4
13. Suicide	57	10.0	102	12.2	5,751	12.1	38,364	12.1
14. Homicide	43	7.5	46	5.2	2,949	6.3	16,259	5.3
15. Human Immunodeficiency Virus Disease	20	3.6	12	1.8*	1,687	3.5	8,364	2.7
Total deaths (All Causes – Some causes not listed above)	4,056	879.0	4,321	832.4	388,092	808.4	2,468,435	747.0
Source	a	a	a	a	a	a	b	b

Source: a – NC State Center for Health Statistics, North Carolina Vital Statistics 2011 - Volume 2: Leading Causes of Death;

http://www.schs.state.nc.us/schs/deaths/lcd/2011/pdf/Vol2_2011_PRT.pdf

b – National Vital Statistics System, Death: Final Data for 2010; http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_04.pdf

¹ – Rate = Number of events per 100,000 population, where the Standard = Year 2000 Population

County, State, and National Mortality Comparisons

The following comparisons are based on the data in Table 80.

Compared to Onslow County, Harnett County has higher age-adjusted mortality rates for:

- Homicide – by 44.2%
- Unintentional Motor Vehicle Injury – by 34.3%
- Cerebrovascular Disease – by 26.7%

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- Nephritis, Nephrotic Syndrome, Nephrosis – by 25.4%
- Alzheimers' Disease – by 21.3%
- Diseases of the Heart – by 11.4%
- Chronic Lower Respiratory Disease – by 3%

(* HIV rates were also higher but the number was too small (<20) to use this comparison.)

Compared to North Carolina, Harnett County has higher age-adjusted mortality rates for:

- Unintentional Motor Vehicle Injury – by 38.7%
- Septicemia – by 25.7%
- Nephritis, Nephrotic Syndrome, Nephrosis – by 19.4%
- Homicide – by 19.0%
- Chronic Lower Respiratory Disease – by 17.0%
- Diseases of the Heart – by 16.2%
- Diabetes Mellitus – by 10%
- Cerebrovascular Disease – 7.2%
- Cancer – by 3.5%
- Human Immunodeficiency Virus – 2.85%

Compared to the United States, Harnett County has higher age-adjusted mortality rates for:

- Unintentional Motor Vehicle Injury – by 88.6%
- Septicemia – by 61.3%
- Nephritis, Nephrotic Syndrome, Nephrosis – by 45.1%
- Homicide – by 41.5%
- Human Immunodeficiency Virus – by 33.3%
- Chronic Lower Respiratory Disease – by 29.1%
- Cerebrovascular Diseases – by 26.1%
- Diabetes Mellitus – by 16.3%
- Diseases of the Heart – by 16.3%
- Chronic Liver Disease and Cirrhosis – by 11%
- Alzheimer's Disease – by 8.8%
- Cancer (all sites) – by 7.5%

- Unintentional Non-motor Vehicle Injury – by 4.9%

Table 80 lists the same causes of death (and in the same order) as Table 79, this time indicating the change in rank order of each cause of death compared to the 2002-2006 data.

- With one exception, the top ten leading causes of death are the same in each period, though many shifted position on the list. The exception is the complex of kidney diseases, which joined the top ten, while pneumonia/influenza fell out of the top ten.
- Alzheimer’s disease increased three positions on the list, motor vehicle injury and kidney disease shifted up two positions, and chronic lower respiratory diseases, septicemia, and cirrhosis all moved up one position.

Table 80. Leading Causes of Death in Harnett County for 2007-2011 and Change from 2002-2006

Cause of Death	2007-2011		2002-2006		2002-2006 Rank	2007-2011 Rank Shift from 2002-2006	% Rate Difference from 2002-2006
	Number	Rate	Number	Rate			
1. Diseases of the Heart	930	208.3	976	245.0	1	N/C	-36.7
2. Cancer – All sites	894	185.9	885	213.1	2	N/C	-27.2
3. Chronic Lower Respiratory Diseases	244	54.5	243	61.4	4	↑1	-6.9
4. Cerebrovascular Diseases	216	49.3	259	67.7	3	↓1	-18.4
5. Unintentional Non-Motor Vehicle Injury	138	28.1	116	26.3	6	↑2	+1.8
6. Alzheimer’s Disease	109	27.3	74	20.0	9	↑3	+7.3
7. Diabetes Mellitus	111	24.2	117	28.9	5	↓2	-4.7
8. Nephritis, Nephrotic Syndrome, Nephrosis	97	22.2	75	18.8	10	↑2	+3.4
9. Motor Vehicle Injury	117	21.5	119	23.9	7	↓2	-2.4
10. Septicemia	78	17.1	65	16.2	11	↑1	+0.9
11. Pneumonia and Influenza	48	10.7	79	21.0	8	↓3	-10.3
12. Chronic Liver Disease and Cirrhosis	54	10.5	27	5.9	13	↑1	+4.6
13. Suicide	57	10.0	49	10.1	12	↓1	+0.1
14. Homicide	43	7.5	29	5.6	14	N/C	+1.9
15. Human Immunodeficiency Virus Disease	20	3.6	14	2.9	15	N/C	+0.7

Gender Disparities in Mortality

Table 81 compares numbers of deaths and death rates for males and females in Harnett County, Onslow County and NC for the 15 leading causes of death. The mortality data cited in this section were obtained from the NC State Center for Health Statistics and represent the five-year aggregate period from 2007-2011. The causes of death are listed in the same order as Table 79. The notation of “N/A” indicates no rate was calculated because there were fewer than 20 deaths in that category during the period cited.

Table 81. Sex-Specific Age-Adjusted Death Rates for the 15 Leading Causes of Death (Five-Year Aggregate Data, 2007-2011)

Cause of Death	Harnett County				Onslow County				State of NC			
	Males		Females		Males		Females		Males		Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1. Diseases of the Heart	481	261.1	449	166.6	499	254.8	389	140.9	44,630	229.4	41,469	141.6
2. Cancer – All sites	485	240.5	409	149.3	523	236.3	477	158.6	47,193	227.4	41,325	147.5
3. Chronic Lower Respiratory Diseases	125	71.2	119	44.5	121	63.8	134	46.9	10,447	54.9	11,827	41.7
4. Cerebrovascular Diseases	90	53.0	126	46.9	71	36.4	110	39.6	8,730	46.8	13,044	44.5
5. Unintentional Non-Motor Vehicle Injury	71	32.6	67	24.4	99	32.2	84	25.8	8,140	38.8	5,641	20.9
6. Alzheimer’s Disease	32	23.5	77	29.0	21	15.8	65	25.8	3,627	22.7	9,720	32.2
7. Diabetes Mellitus	55	29.4	56	20.8	104	48.5	89	30.9	5,399	26.0	5,334	18.8
8. Nephritis, Nephrotic Syndrome, Nephrosis	43	24.8	54	20.2	44	20.6	42	15.5	4,269	22.7	4,591	16.0
9. Motor Vehicle Injury	77	29.1	40	14.1	109	23.6	33	8.6	5,222	22.9	2,114	8.6
10. Septicemia	37	19.8	41	15.0	36	15.9	52	18.4	2,943	15.0	3,572	12.6
11. Pneumonia and Influenza	20	12.0	28	10.2	25	14.5	40	14.6	3,711	20.9	4,744	16.1
12. Chronic Liver Disease and Cirrhosis	32	13.3	22	8.1	37	12.9	30	9.6	3,122	13.2	1,601	5.9
13. Suicide	49	17.7	8	N/A	83	19.6	19	N/A	4,446	19.6	1,305	5.3
14. Homicide	38	13.8	5	N/A	30	6.2	16	N/A	2,253	9.8	696	2.9
15. Human Immunodeficiency Virus Disease	17	N/A	3	N/A	8	N/A	4	N/A	1,141	4.8	546	2.3
Total deaths (All Causes – Some causes not listed above)	2,070	1070.1	1,986	731.8	2,236	984.4	2,085	716.1	192,457	969.2	195,635	684.0

Source: North Carolina State Center for Health Statistics, 2007-2011 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21B%20racespecificsexspecific%20rates.rtf>

For all deaths combined, Harnett County males have a **46%** higher mortality rate than Harnett County females.

Compared to the mortality rates for Harnett County females, the mortality rates for Harnett County males are higher for:

- Motor Vehicle Injury—by 106%
- Chronic Liver Disease and Cirrhosis--by 64%
- Cancer (All sites)—by 61%
- Chronic Lower Respiratory Diseases—by 60%
- Diseases of the Heart—by 57%
- Diabetes Mellitus—by 41%
- Unintentional Non-Motor Vehicle Injury—by 34%
- Septicemia—by 32%
- Nephritis, Nephrotic Syndrome, Nephrosis—by 23%
- Pneumonia and Influenza—by 18%
- Cerebrovascular Diseases --by 13%

Compared to the mortality rate for Harnett County males, the mortality rate for Harnett County females is higher for Alzheimer's disease (by 19%).

Racial Disparities in Mortality

Table 82 compares numbers of deaths and death rates for those who self-identify as White (non-Hispanic), African-American (non-Hispanic), Other Races (non-Hispanic), and Hispanic in Harnett County, Onslow County, and NC for the 15 leading causes of death. The mortality data cited in this section were obtained from the NC State Center for Health Statistics and represent the five-year aggregate period from 2007-2011. The causes of death are listed in the same order as in Table 79.

The notation of "N/A" indicates no rate was calculated because there were fewer than 20 deaths in that category during the period cited.

Table 82. Race-Specific Age-Adjusted Death Rates for the 15 Leading Causes of Death (Five-Year Aggregate Data, 2007-2011)

Cause of Death	Harnett County								Onslow County								State of NC							
	White, non-Hispanic		African-American, non-Hispanic		Other Races, non-Hispanic		Hispanic		White, non-Hispanic		African-American, non-Hispanic		Other Races, non-Hispanic		Hispanic		White, non-Hispanic		African-American, non-Hispanic		Other Races, non-Hispanic		Hispanic	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
1. Diseases of the Heart	714	206.8	198	229.4	7	N/A	1	N/A	736	199.8	133	164	9	N/A	10	N/A	67,605	176.2	16,965	209.3	1,070	118.6	459	46.1
2. Cancer – All sites	699	188.4	173	191.4	12	N/A	10	N/A	819	199.4	163	189.7	12	N/A	6	N/A	68,577	176.8	17,982	211.4	1,240	120.7	719	65.1
3. Chronic Lower Respiratory Diseases	217	61.2	23	29.5	3	N/A	1	N/A	231	60.5	23	30.1	0	N/A	1	N/A	19,755	51.3	2,287	28.9	176	20.3	56	7.8
4. Cerebrovascular Diseases	156	46	54	60.7	5	N/A	1	N/A	132	37.4	41	48.5	3	N/A	5	N/A	16,418	43	4,933	62.4	280	32.6	143	15.1
5. Non-Motor Vehicle Injury	104	29.7	26	27.1	2	N/A	6	N/A	160	34.5	16	N/A	5	N/A	2	N/A	11,385	33.1	1,854	20.3	246	19.6	296	11.3
6. Alzheimer's Disease	97	30.2	9	N/A	2	N/A	1	N/A	75	24.4	10	N/A	0	N/A	1	N/A	11,369	29.9	1,789	26.1	136	21.3	53	8.9
7. Diabetes Mellitus	74	20.3	35	44.7	1	N/A	1	N/A	134	34	55	68.9	1	N/A	3	N/A	6,745	17.5	3,681	44.8	217	23.6	90	8.8
8. Nephritis, Nephrotic Syndrome, Nephrosis	59	17.2	35	44.5	3	N/A	0	N/A	59	15.7	26	33.5	1	N/A	0	N/A	5,739	15	2,921	36.8	143	17.3	57	6.1
9. Motor Vehicle Injury	89	24.3	18	N/A	0	N/A	10	N/A	113	17.9	23	14.3	0	N/A	6	N/A	5,011	15.5	1,547	15.3	236	14.9	542	14.3
10. Septicemia	55	15.8	23	24.5	0	N/A	0	N/A	64	17.2	24	27.6	0	N/A	0	N/A	4,700	12.3	1,662	20.5	82	9.3	71	5.9
11. Pneumonia and Influenza	31	8.8	16	N/A	1	N/A	0	N/A	54	15.8	9	N/A	1	N/A	1	N/A	6,930	18.2	1,377	17.8	83	10.2	65	6.2
12. Chronic Liver Disease and Cirrhosis	46	12	8	N/A	0	N/A	0	N/A	54	12	8	N/A	1	N/A	4	N/A	3,829	9.9	737	7.5	82	6.6	75	5
13. Suicide	51	13	3	N/A	0	N/A	3	N/A	91	15	8	N/A	0	N/A	3	N/A	4,986	15	489	4.8	123	7.7	153	4.7
14. Homicide	21	5.4	19	N/A	1	N/A	2	N/A	24	3.7	16	N/A	2	N/A	4	N/A	1,064	3.4	1,458	13.8	135	8	292	7.3
15. HIV Disease	5	N/A	15	N/A	0	N/A	0	N/A	4	N/A	7	N/A	0	N/A	1	N/A	333	1	1,286	12.9	15	N/A	53	2.2
Total deaths (All Causes)	3,065	868.7	890	1000.8	45	713.3	56	273.5	3,458	867.7	730	836.9	54	288.2	79	349	299,176	791.4	79,246	956.1	5,428	553.6	4,242	273.3

Source: North Carolina State Center for Health Statistics, 2007-2011 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21B%20racespecificsexspecific%20rates.rtf>

For all deaths combined, Harnett County African-Americans have a 16% higher mortality rate than Harnett County whites; Hispanics and other races in Harnett County have a combined mortality rate that is below the mortality rate for whites. The patterns of disparities in the leading causes of death are not necessarily the same in all three jurisdictions.

- The African American mortality rate for heart disease in Harnett County exceeds the comparable rate in both Onslow County and NC as a whole, but the African American mortality rate for diabetes is much lower than the rate in Onslow and very slightly lower than the rate in NC as a whole.
- The overall African American mortality rate in Harnett County (1000.8) is 20% higher than the overall African American mortality rate in Onslow County (836.9) and 5% higher than the comparable rate for the state as a whole (956.1).

Age Disparities in Mortality

Each age group tends to have its own leading causes of death. Table 5 lists the three leading causes of death by age group for five-year aggregate data from 2007-2011. Note that for its purpose it is important to use non-age adjusted rates.

The single leading cause of death in each of the age groups in Harnett County is summarized below:

- Age group 0-19: Perinatal conditions
- Age group 20-39: Unintentional motor-vehicle injuries
- Age group 40-64: Cancer – All sites
- Age group 65-84: Cancer – All sites
- Age group 85+: Diseases of the heart

Table 83 also highlights some significant differences between Harnett County and Onslow County in terms of age-based causes of death.

- SIDS (sudden infant death syndrome) is among the three leading causes of death in the 0-19 age group in Onslow County, but not in the other comparison jurisdictions.
- Cancer is among the three leading causes of death in the 20-39 age group in Harnett County, but not in the other two jurisdictions—where suicide is instead a leading cause of death.
- Chronic lower respiratory disease appears as one of the leading causes of death in a relatively young age group in Harnett County (40-64) whereas it first appears on the list in Onslow County and NC in the next older age group (65-84).

Table 83. Three Leading Causes of Death by Age Group, Number of Deaths and Unadjusted Death Rates (Five Year Aggregate Data, 2007-2011)

Age Group	Rank	Cause of Death		
		Harnett County	Onslow County	State of NC
0-19	1	Perinatal conditions	Perinatal conditions	Perinatal conditions
	2	Motor vehicle injuries	Congenital anomalies	Congenital anomalies
	3	Other unintentional injuries	SIDS	Motor vehicle injuries
20-39	1	Motor vehicle injuries	Motor vehicle injuries	Motor vehicle injuries
	2	Other unintentional injuries	Other unintentional injuries	Other unintentional injuries
	3	Cancer – All sites	Suicide	Suicide
40-64	1	Cancer – All sites	Cancer – All sites	Cancer – All sites
	2	Diseases of the heart	Diseases of the heart	Diseases of the heart
	3	Chronic lower respiratory diseases	Diabetes mellitus	Other unintentional injuries
65-84	1	Cancer – All sites	Cancer – All sites	Cancer – All sites
	2	Diseases of the heart	Diseases of the heart	Diseases of the heart
	3	Chronic lower respiratory diseases	Chronic lower respiratory diseases	Chronic lower respiratory diseases
85+	1	Diseases of the heart	Diseases of the heart	Diseases of the heart
	2	Cancer – All sites	Cancer – All sites	Cancer – All sites
	3	Cerebrovascular disease	Alzheimer’s disease	Cerebrovascular disease

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, Death Counts and Crude Death Rates per 100,000 for Leading Causes of Death by Age Groups, NC, 2007-2011, <http://www.schs.state.nc.us/schs/data/databook/CD13%20lead%20causes%20of%20death%20by%20age.rtf>

Diseases of the Heart

Diseases of the heart include any disease that diminishes or interrupts blood supply to the heart. The most common cause of heart disease is a narrowing or blockage of arteries that supply the heart. Heart disease was the leading cause of death in Harnett County for the five-year period from 2007-2011.

Heart Disease Hospital Discharges

Heart disease accounts for more hospitalizations than any other health condition. Consequently, the hospital charges associated with its treatment are greater than for any other disease, accounting for over \$89,153,744 in hospital charges to Harnett County residents in 2011.¹

Hospital discharge data summarized in Table 84 give some indication of heart disease in Harnett County. In Harnett County, hospital discharge rates for heart disease declined 15% between 2005 and 2011. This rate is a positive trend, though slightly below the 19% and 16% declines for Onslow County and NC, respectively.

Table 84. Heart Disease Hospital Discharges per 1,000 Population (2005-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011
Harnett County	14.4	14.1	13.9	13.3	13.2	13.0	12.2
Onslow County	8.8	9.0	8.4	7.9	7.6	7.8	7.1
State of NC	13.1	12.7	12.2	11.8	11.4	11.3	10.9

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

Heart Disease Mortality

Table 85 presents heart disease mortality data for the aggregate period 2007-2011, stratified by race and sex. In Harnett County, 930 people died from heart disease for an overall mortality rate of 208.3, a rate that is 16% higher than the rate for NC as a whole and 11% higher than the rate for Onslow County.

Table 85. Heart Disease Mortality, By Race and Sex (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																		
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total		
	Male		Female		Male		Female		Male		Female		Male		Female				
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	

¹ NC State Center for Health Statistics, County-level Data, County Health Data book (2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

Harnett County	361	258.0	353	166.2	106	291.6	92	182.0	5	N/A	2	N/A	9	N/A	2	N/A	930	208.3
Onslow County	418	266.9	318	150.8	73	218.6	60	130.5	3	N/A	6	N/A	5	N/A	5	N/A	888	187.0
State of NC	35,128	226.4	32,477	137.5	8,636	271.6	8,329	167.5	577	140.0	493	100.8	289	54.8	170	37.4	86,099	179.3

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Figure 1 presents mortality rate trend data for five year aggregate periods between 2000 and 2011.

- The heart disease mortality rates in all three jurisdictions have decreased overall between 2000-2004 and 2005-2009.
- The heart disease mortality rate in Harnett County was higher than the comparable rates in either Onslow County or NC as a whole over the entire period covered by the data.

Cancer

Total Cancer: Cancer is a term for diseases in which abnormal cells divide without control and can invade nearby tissues. Cancer cells can also spread to other parts of the body through the blood and lymph systems. If the disease remains unchecked, it can result in death. Cancers of all kinds are sometimes grouped together statistically in a parameter called *total cancer*.

- Total cancer was the second leading cause of death in Harnett County for the aggregate period from 2007-2011 (Table 79, cited previously). **Table 86** shows that the site-specific cancer with the highest mortality rate in Harnett County over the same aggregate period was lung cancer (64.1 deaths per 100,000 population), followed by prostate cancer (23.9, calculated among males alone), breast cancer (23.6, calculated among females alone) and colon/rectal cancer (17.5). Each of these site-specific cancers will be discussed subsequently, in that order.

Table 86. Mortality for Total Cancer and the Four Major Site-Specific Cancers, Deaths and Rate¹
(Five Year Aggregate Data, 2007-2011)

Location	Total Cancer		Breast Cancer		Prostate Cancer		Lung Cancer		Colon Cancer	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Harnett County	894	186.6	65	23.4	37	23.9	307	64.1	82	17.5
Onslow County	1,00	193.8	66	22.4	43	23.0	336	64.4	74	14.5
State of NC	88,518	179.7	6,358	22.8	4,385	24.4	27,087	54.6	7,523	15.3

¹ Rate = Deaths per 100,000 Population

Source: NC State Center for Health Statistics, Health Data, Cancer, Annual reports, NC Cancer Mortality Rates (2013);

<http://www.schs.state.nc.us/schs/CCR/mort0711cnty.pdf>

Total Cancer Incidence

Table 87 presents the number of new cases (and associated rates) for total cancer and the four major site-specific cancers for Harnett County, Onslow County, and the state of NC for the five-year aggregate period 2006-2010. Cancer incidence rates were obtained from the NC cancer Registry, which collects data on newly diagnosed cases from NC clinics and hospitals as well as on NC residents whose cancers were diagnosed at medical facilities in bordering states.

- There were 2,355 newly diagnosed cases of all cancers combined in Harnett County in the period from 2006 through 2010. While this number is higher than the number of cases in the previously reported period (2,135 in 2003-2007), the incidence rate (474.6) is actually marginally lower than in the 2003-2007 period (474.7). Harnett County continues to have total cancer incidence rates that are lower than both Onslow County (540.5) and NC as a whole (498.1).
- Among the site-specific cancers, breast cancer had the highest incidence, followed by prostate, lung, and colon cancer in that order across all three jurisdictions.

**Table 87. Incidence of Total Cancer and the Four Major Site-Specific Cancers, Cases and Rate¹
(Five Year Aggregate Data, 2006-2010)**

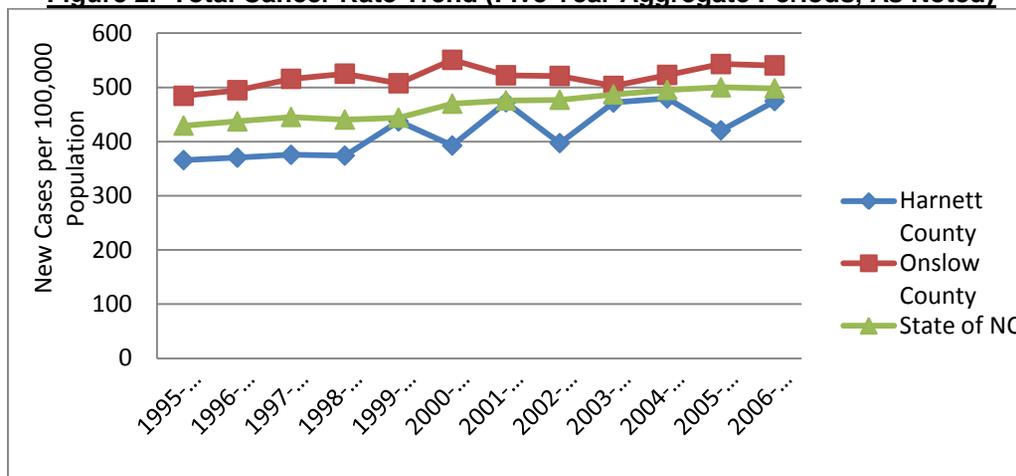
Location	Total Cancer		Breast Cancer		Prostate Cancer		Lung Cancer		Colon Cancer	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Harnett County	2,355	474.6	413	150.7	289	127.2	405	84.8	206	42.6
Onslow County	2,861	540.5	445	158.7	313	134.3	477	93.6	224	43.8
State of NC	242,433	498.1	41,169	155.9	34,733	153.7	36,287	74.8	20,968	43.4

¹ Rate = Deaths per 100,000 Population Source: NC State Center for Health Statistics, Health Data, Cancer, Annual reports, NC Cancer Mortality Rates (2010); <http://www.schs.state.nc.us/schs/CCR/incidence/2010/5yearRates.pdf>

Total Cancer Incidence Rate Trend

As shown in **Figure 2**, the total cancer incidence rate in Harnett County was consistently below the total cancer incidence rates for both Onslow County and the state of NC over the period cited. Note, however, that the total cancer incidence rate in Harnett County gradually tends to increase over the period represented in the figure.

Figure 2. Total Cancer Rate Trend (Five Year Aggregate Periods, As Noted)



Source: NC State Center for Health Statistics, Health Data, Cancer, Annual Reports, <http://www.schs.state.nc.us/schs/CCR/reports.html>

Total Cancer Hospital Discharges

As noted previously, community prevalence of a disease can be approximated for comparison purposes by hospital discharge rates. **Table 88** presents data on the annual rate of hospital discharge for treatment of malignant neoplasms for the period from 2005 to 2011. The rate is expressed as the number of discharges per 1,000 population.

Table 88. Hospital Discharges for Malignant Neoplasms, per 1,000 Population (2005-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011
Harnett County	3.2	3.3	3.3	3.1	2.8	2.7	2.7
Onslow County	2.9	2.9	2.6	2.4	2.2	2.2	2.2
State of NC	3.9	3.9	3.9	3.6	3.4	3.3	3.2

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

The hospital discharge rate for all malignant neoplasms in Harnett County was consistently higher than the comparable rate for Onslow County over the entire period. However, the rate for Harnett County was also consistently lower than the rate for NC as

a whole over the entire period. Also, Harnett County’s hospital discharge rate for all malignant neoplasms decreased from 2005 to 2011.

Total Cancer Mortality

Cancer (all sites) was the second leading cause of death in Harnett County in the five-year aggregate period from 2007-2011, resulting in 894 deaths and a total cancer mortality rate of 196.7 This rate was 3.5% higher than the state rate of 179.7.

As shown in **Table 89**, the total cancer death rate for white males (244.2) was 62% higher than the total cancer rate for white females. Among Harnett County African-Americans, the total cancer mortality rate for males (252.9) was 64% higher than the rate for African-American females (153.5). These gender disparities were much greater than racial disparities, however, the gender disparities in Harnett County were similar to rates in Onslow County and NC as a whole.

Table 89. Total Cancer Mortality, by Race and Sex (Five Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	382	244.2	317	150.4	91	252.9	82	153.5	4	N/A	8	N/A	8	N/A	2	N/A	894	185.9
Onslow County	446	247.9	373	164.3	74	229.2	89	175.7	1	N/A	11	N/A	2	N/A	4	N/A	1,000	189.3
State of NC	36,549	220.7	32,028	146.6	9,608	293.2	8,374	164.0	644	145.7	596	103.1	392	72.2	327	59.4	88,518	179.7

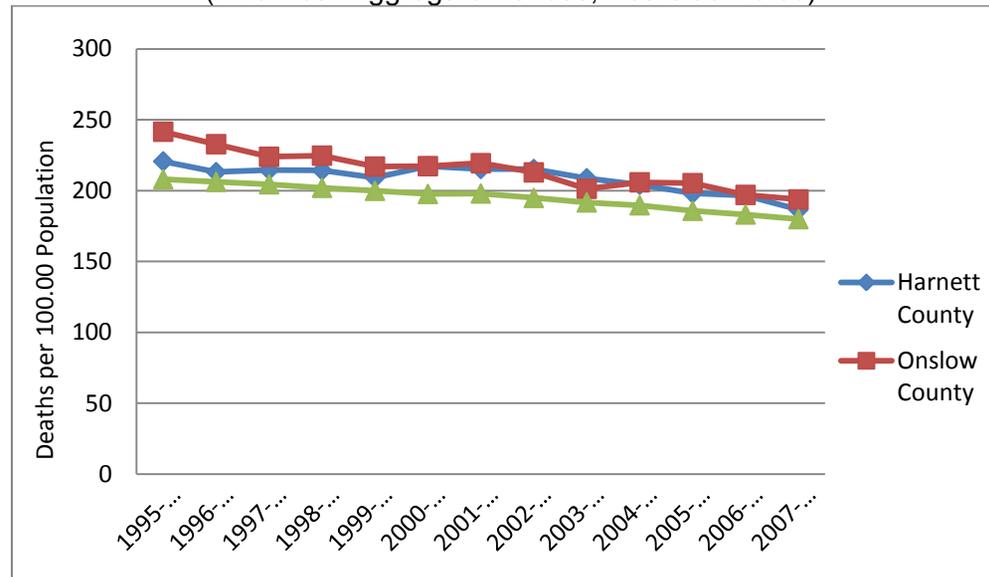
Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Total Cancer Mortality Rate Trend

Figure 3 plots the total cancer mortality rate trend for five-year aggregate periods from 1995-1999 to 2007-2011.

The total cancer mortality rate in Harnett County decreased overall since 1995, though there was a slight increase from 1998-2002 until 2003-2007. The decrease in Harnett County is similar to the trend in NC as a whole and the mortality rate in Harnett County seems to be getting closer to the average rate for the state.

Figure 3. Total Cancer Mortality Rate Trend
(Five-Year Aggregate Periods, Years as Noted)



Source: NC State Center for Health Statistics, Health Data, Cancer, Annual Reports, <http://www.schs.state.nc.us/schs/CCR/reports.html>

Lung Cancer

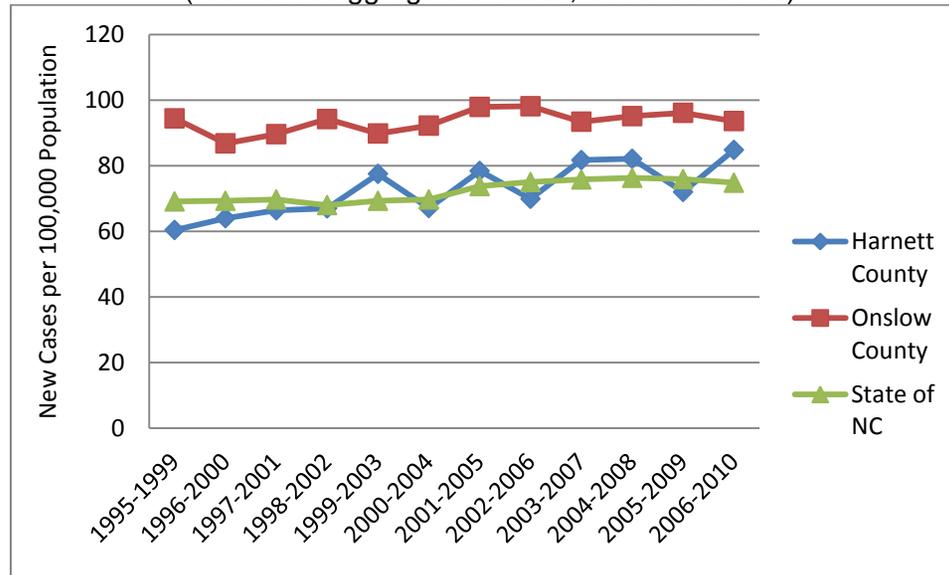
As was shown in **Table 87**, in the aggregate period from 2007-2011, lung cancer was the site-specific cancer in Harnett County with the highest mortality rate (64.1 deaths per 100,000 population). This category of cancers includes cancer of the trachea, bronchus, and lung.

Lung Cancer Incidence

For the aggregate period of 2006-2010, 405 new cases of lung cancer were diagnosed in Harnett County, making it the third most commonly diagnosed site-specific cancer, with an incidence rate of 84.8 new cases per 100,000 population (Table 88).

The incidence rate for lung cancer in Harnett County has risen overall since the 1995-1999 and was at the highest point in the most recent aggregate period (2006-2010). While the lung cancer rate is higher in Onslow County, the rate in Onslow County remained fairly stable since 1995-1999. In NC overall, the rate has risen slightly over the period represented in the figure.

Figure 4. Lung Cancer Incidence Rate Trend
(Five-Year Aggregate Periods, Years as Noted)



Source: NC State Center for Health Statistics, Health Data, Cancer, Annual Reports, <http://www.schs.state.nc.us/schs/CCR/reports.html>

Lung Cancer Hospital Discharges

Table 90 presents data on hospital discharges related to the treatment of lung/bronchus/trachea cancer for the period from 2005 through 2011. Over that period of time, the discharge rate changed minimally in Harnett County, Onslow County, and in NC as a whole.

Table 90. Hospital Discharges for Malignant Neoplasms of the Trachea, Bronchus, and Lung, per 1,000 Population (2005-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011
Harnett County	0.5	0.5	0.3	0.4	0.5	0.5	0.4

Onslow County	0.5	0.6	0.4	0.4	0.4	0.3	0.4
State of NC	0.6	0.6	0.6	0.5	0.5	0.5	0.4

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

Lung Cancer Mortality

In the aggregate period 2007-2011, there were 307 deaths as a result of lung cancer among Harnett County residents, for a mortality rate of 64.1. This rate was marginally lower than Onslow County, but 17% higher than the comparable rate for NC as a whole (see Table 86).

As **Table 91** shows, Harnett County’s lung cancer mortality rate for white males (98.1) is more than twice the comparable rate for white females (47.5). Comparisons for other racial categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

Table 91. Lung Cancer Mortality, by Race and Sex (Five-Year aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	158	98.1	101	47.5	27	75.3	16	N/A	2	N/A	1	N/A	1	N/A	1	N/A	307	63.7
Onslow County	156	84.7	142	61.22	14	N/A	16	N/A	0	N/A	6	N/A	1	N/A	1	N/A	336	62.8
State of NC	12,604	73.9	9,342	42.7	2,993	87.5	1,674	32.9	214	46.8	155	26.7	65	14.3	45	9.6	27,092	54.5

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Prostate Cancer

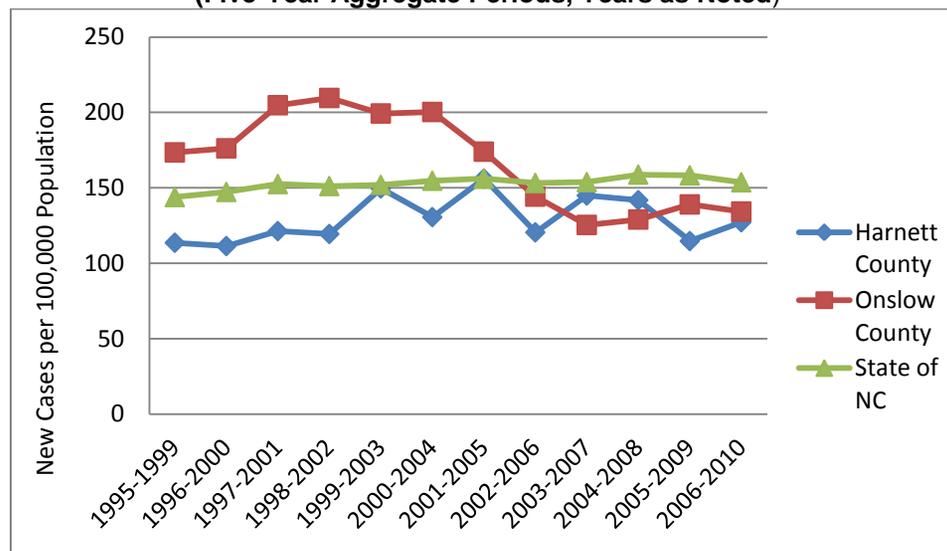
As was shown in Table 8, in the aggregate period from 2007-2011, prostate cancer was the site-specific cancer in Harnett County with the second highest mortality rate (23.9 deaths per 100,000 *male* population).

Prostate Cancer Incidence

For the aggregate period of 2006-2010, 289 new cases of prostate cancer were diagnosed in Harnett County, giving it the second highest rate of incidence, at 127.2 new cases per 100,000 male population (Table 87).

The incidence rate for prostate cancer in Harnett County rose overall from 1995-1999 to 2001-2005. However, in recent aggregate periods, the rate has decreased and over the entire period shown in **Figure 5** the rate in Harnett County has tended to be lower than comparable rates in NC as a whole and (with two exceptions) lower than the rate in Onslow County.

**Figure 5. Prostate Cancer Incidence Rate Trend
(Five-Year Aggregate Periods, Years as Noted)**



Source: NC State Center for Health Statistics, Health Data, Cancer, Annual Reports, <http://www.schs.state.nc.us/schs/CCR/reports.html>

Prostate Cancer Hospital Discharges

Table 92 presents data on hospital discharges related to the treatment of prostate cancer for the period from 2005 through 2011. Over that period of time, the discharge rate changed minimally in Harnett County, Onslow County, and in NC as a whole.

Table 92. Hospital Discharges for Malignant Neoplasms of the Prostate, per 1,000 Population (2007-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011
Harnett County	0.2	0.3	0.4	0.3	0.3	0.2	0.2
Onslow County	0.2	0.1	0.2	0.1	0.1	0.1	0.1
State of NC	0.3	0.3	0.4	0.3	0.3	0.3	0.3

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

Prostate Cancer Mortality

In the aggregate period 2007-2011, 37 men died from prostate cancer in Harnett County, for a mortality rate of 23.9. This rate was slightly lower than rates in Onslow County or NC as a whole (Table 86).

As **Table 93** shows, comparisons across racial categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

Table 93. Prostate Cancer Mortality, by Race (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Male Population)									
	White, non-Hispanic		African American, non-Hispanic		Other, non-Hispanic		Hispanic		Total	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	20	15.8	16	N/A	0	N/A	1	N/A	37	23.9
Onslow County	33	20.3	10	N/A	0	N/A	0	N/A	43	23.0
State of NC	2,882	19.6	1,416	55.6	51	17.3	36	12.0	4,385	24.3

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Breast Cancer

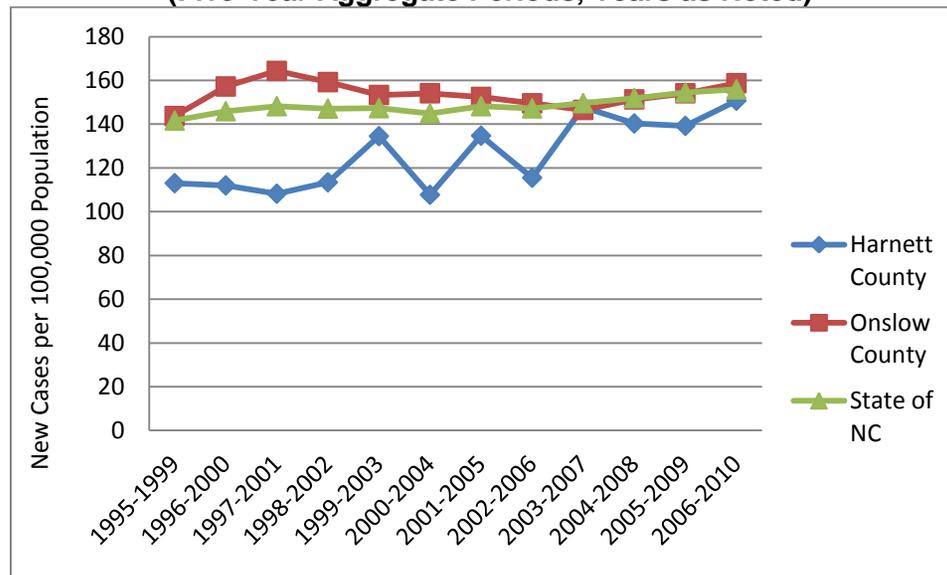
As was shown in Table 86, in the aggregate period from 2007-2011, breast cancer was the site-specific cancer in Harnett County with the third highest mortality rate (23.4 deaths per 100,000 *female* population). It should be noted that, although not reflected on the tables in this section, breast cancer can affect males and a number of men die of breast cancer each year in NC.

Breast Cancer Incidence

For the aggregate period of 2006-2010, breast cancer was the most commonly diagnosed site-specific cancer in Harnett County with 413 new cases diagnosed during that period for an incidence rate of 150.7 (Table 87).

The incidence rate for breast cancer in Harnett County has risen significantly since 1995-1999 and was at the highest point in the most recent aggregate period (2006-2010). While a decade ago the figure shows that the breast cancer rate in Harnett County was substantially lower than comparable rates in Onslow County or NC as a whole, the rising rate in Harnett County and relatively stable rate in comparison jurisdictions has resulted in Harnett County's rate now essentially matching the rates in Onslow County and the state overall.

**Figure 6. Female Breast Cancer Incidence Rate Trend
(Five-Year Aggregate Periods, Years as Noted)**



Source: NC State Center for Health Statistics, Health Data, Cancer, Annual Reports, <http://www.schs.state.nc.us/schs/CCR/reports.html>

Breast Cancer Hospital Discharges

Table 93 presents data on hospital discharges related to the treatment of prostate cancer for the period from 2005 through 2011. Over that period of time, the discharge rate changed minimally in Harnett County, Onslow County, and in NC as a whole.

Table 93. Hospital Discharges for Malignant Neoplasms of the Female Breast, per 1,000 (2007-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011
Harnett County	0.1	0.2	0.2	0.1	0.2	0.1	0.1
Onslow County	0.2	0.2	0.2	0.1	0.1	0.1	0.1
State of NC	0.2	0.2	0.2	0.2	0.2	0.2	0.1

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

Breast Cancer Mortality

In the aggregate period 2007-2011, 65 women died from breast cancer in Harnett County, for a mortality rate of 23.4. This rate was very similar to rates in Onslow County and NC as a whole (Table 86).

As **Table 94** shows, comparisons across racial categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

Table 94. Female Breast Cancer, by Race (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Female Population)									
	White, non-Hispanic		African American, non-Hispanic		Other, non-Hispanic		Hispanic		Total	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	48	22.7	15	N/A	2	N/A	0	N/A	65	23.4
Onslow County	43	18.9	20	35.2	3	N/A	0	N/A	66	22.4
State of NC	4,634	21.5	1,586	30.1	78	11.9	60	8.5	6,358	22.8

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rf>

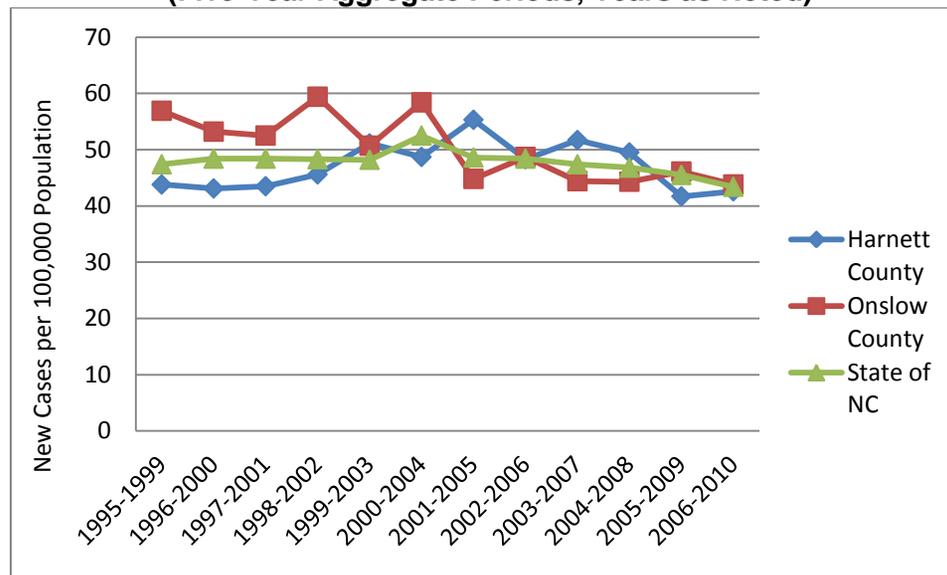
Colon, Rectum, and Anus Cancer (Colorectal) Cancer

As was shown in Table 86, in the aggregate period from 2007-2011, colorectal cancer was the site-specific cancer in Harnett County with the fourth-highest mortality rate (17.9 deaths per 100,000 population). This category of cancers includes cancer of the colon, rectum, and anus.

Colorectal Cancer Incidence

For the aggregate period of 2006-2010, 206 new cases of colorectal cancer were diagnosed in Harnett County, making it the fourth most commonly diagnosed site-specific cancer, with an incidence rate of 42.6 new cases per 100,000 population (Table 87). The incidence rate for colorectal cancer in Harnett County has fluctuated overall since the 1995-1999 but recent rates (2006-2010) are substantially similar to comparison jurisdictions, Onslow County and NC as a whole.

**Figure 7. Colorectal Cancer Incidence Rate Trend
(Five-Year Aggregate Periods, Years as Noted)**



Source: NC State Center for Health Statistics, Health Data, Cancer, Annual Reports, <http://www.schs.state.nc.us/schs/CCR/reports.html>

Colorectal Cancer Hospital Discharges

Table 95 presents data on hospital discharges related to the treatment of colorectal cancer for the period from 2005 through 2011. Over that period of time, the discharge rate decreased in Harnett County, but remained relatively stable in Onslow County and in NC as a whole.

Table 95. Colon, Rectum, Anus Malignant Neoplasm Discharges per 1,000 Population (2005-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011
Harnett County	0.5	0.4	0.3	0.4	0.3	0.2	0.3
Onslow County	0.4	0.3	0.3	0.3	0.2	0.3	0.3
State of NC	0.5	0.5	0.5	0.4	0.4	0.4	0.4

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

Colorectal Cancer Mortality

In the aggregate period 2007-2011, 82 people died from breast cancer in Harnett County, for a mortality rate of 17.5. This rate was higher than rates in Onslow County (14.5) and NC as a whole (15.3; see Table 86).

As **Table 96** shows, comparisons across racial categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

Table 96. Colon, Rectum, Anus cancer Mortality, by Race and Sex (five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	32	20.4	30	14.2	11	N/A	9	N/A	0	N/A	0	N/A	0	N/A	0	N/A	82	17.4
Onslow County	42	23.5	19	N/A	10	N/A	6	N/A	0	N/A	0	N/A	0	N/A	0	N/A	77	14.7
State of NC	2,936	17.7	2,668	12.1	943	28.6	908	17.8	46	10.3	50	9.0	39	7.5	24	5.2	7,614	15.5

Chronic Lower Respiratory Disease

Chronic lower respiratory disease (CLRD) and **chronic obstructive pulmonary disease (COPD)** refer to lung diseases involving limited airflow, airway inflammation, and the destruction of lung tissue. CLRD/COPD was the third leading cause of death in Harnett County for the period 2007-2011 (Table 1).

COPD Hospital Discharges

COPD accounted for \$9,449,518 in hospital costs to Harnett County residents in 2011. Table 97 summarizes hospital discharges data.

Table 97. Chronic Obstructive Pulmonary Disease Discharges per 1,000 Population (2007-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011
Harnett County	4.8	4.1	4.2	3.7	4.4	4.0	4.5
Onslow County	3.4	3.5	2.4	2.5	2.5	2.7	2.6
State of NC	3.5	3.2	3.1	3.4	3.4	3.2	3.2

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

CLRD Mortality

In Harnett County, 244 people died from CLRD/COPD over the period 2007-2011, for an overall mortality rate of 54.5, 16% higher than the rate for NC as a whole, and 3% higher than the rate in Onslow County (Table 21).

As Table 98 shows, comparisons across racial/sex categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

Table 98. Chronic Obstructive Respiratory Disease Mortality, by Race and Sex (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	107	77.0	110	52.3	15	N/A	8	N/A	2	N/A	1	N/A	1	N/A	0	N/A	244	54.5

Onslow County	106	66.4	125	57.1	15	N/A	8	N/A	0	N/A	0	N/A	0	N/A	1	N/A	255	52.9
State of NC	9,080	58.2	10,675	47.3	1,246	43.9	1,041	21.1	100	27.2	76	15.6	21	7.0	35	8.6	22,274	46.6

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Cerebrovascular Disease

Cerebrovascular disease, (“stroke”) includes any disease that diminishes or interrupts blood supply to the brain. Stroke also includes the condition when a blood vessel in the brain bursts, spilling blood into the spaces surrounding brain cells. Cerebrovascular disease was the fourth leading cause of death in Harnett County for the five year aggregate period from 2007-2011 (Table 79, cited previously).

Cerebrovascular Disease Hospital Discharges

Cerebrovascular disease accounted for \$11,767,610 in hospital charges to Harnett County residents in 2011. Hospital discharge data summarized in **Table 99** give some indication of the prevalence of stroke in Harnett County, where discharge rates were consistently higher than in Onslow County or NC as a whole throughout the period cited.

Table 99. Cerebrovascular Disease Hospital Discharges per 1,000 Population (2005-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011
Harnett	3.7	3.2	3.7	3.2	3.2	3.6	3.4
Onslow	2.1	2.2	1.9	2.0	1.8	1.9	1.9
State of NC	3.2	3.1	3.1	3.0	3.1	3.1	3.0

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

Cerebrovascular Disease Mortality

Table 100 presents stroke mortality data for the aggregate period 2007-2011, categorized by race and sex.

- In Harnett County, 216 people died from cerebrovascular disease over the period 2007-2011, for an overall mortality rate of 49.3, 7% higher than the rate for NC as a whole and 27% higher than the rate in Onslow County.

In comparing rates in Harnett County by race and sex, African-American (non-Hispanic) males had a mortality rate of 70.3, 41% higher than the comparable rate for white (non-Hispanic) males and 31% higher than the comparable rate for African-American (non-Hispanic) females. The rate for African-American females in Harnett County is also 21% higher than the rate for white female counterparts in the jurisdiction. It should be noted that these disparities are similar to (though larger than) comparison data for NC as a whole. Comparisons with other race/sex groups is inadvisable due to low numbers in each category.

Table 100. Cerebrovascular Disease Mortality, by Race and Sex (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	63	49.7	93	44.2	26	70.3	28	53.7	1	N/A	4	N/A	0	N/A	1	N/A	216	49.3
Onslow County	55	34.8	77	37.4	14	N/A	27	53.0	1	N/A	2	N/A	1	N/A	4	N/A	181	38.9
State of NC	6,431	43.3	9,987	42.0	2,091	67.9	2,842	57.7	139	37.4	141	28.5	69	14.0	74	15.5	21,774	46.0

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Unintentional Non-Motor Vehicle Injury

The NC State Center for Health Statistics distinguishes unintentional non-motor vehicle injuries from motor vehicle injuries when calculating accident mortality rates and ranking causes of death. Unintentional non-motor vehicle injuries are those without purposeful intent including poisoning, falls, burns, choking, animal bites, drowning, and occupational or recreational injuries. For the period 2007-2011, unintentional motor vehicles injuries were the fifth leading cause of death in Harnett County (Table 79, cited previously).

Unintentional Non-Motor Vehicle Injury Hospital Discharges

No specific measure of hospital utilization for this cause of death exists in the public domain; however as an approximate measure, injuries (of all kinds) and poisonings accounted for \$39,480,692 in hospital charges in Harnett County residents in 2011. Hospital discharge data for injuries and poisoning summarizing **Table 101** give some indication of the prevalence of these problems in Harnett County, Onslow County, and NC as a whole. Of the three jurisdictions, Onslow County consistently had the lowest injury and poisoning discharge rate.

Table 101. Injuries and Poisoning Hospital Discharges per 1,000 Population (2005-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011

Harnett County	8.3	8.6	8.0	7.8	8.0	8.2	8.0
Onslow County	5.6	6.4	6.0	5.8	5.7	5.9	5.9
State of NC	8.5	8.6	8.6	8.5	8.3	8.2	8.2

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

Unintentional Non-Motor Vehicle Injury Mortality

In Harnett County, 138 people died from unintentional non-motor vehicle injuries in Harnett County over the period 2007-2011, for an overall mortality rate of 28.1, which is marginally lower than the comparable rates for Onslow County and for NC as a whole (Table 102).

As **Table 102** shows, comparisons across racial/sex categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

Table 102. Unintentional Non-Motor Vehicle Injury Mortality, by Race and Sex (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	46	30.1	58	29.4	17	N/A	9	N/A	2	N/A	0	N/A	6	N/A	0	N/A	138	28.1
Onslow County	82	35.1	78	32.6	13	N/A	3	N/A	3	N/A	2	N/A	1	N/A	1	N/A	183	29.3
State of NC	6,568	43.3	4,817	24.1	1,172	30.1	682	13.3	158	28.2	88	13.1	242	15.7	54	5.9	13,781	29.2

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Alzheimer’s Disease

Alzheimer’s disease is a progressive neurodegenerative disease affecting mental abilities including memory, cognition, and language. Alzheimer’s disease is characterized by memory loss and dementia. The risk of developing Alzheimer’s disease increases with age (e.g., almost half of those 85 years and older suffer from Alzheimer’s disease). Early-onset Alzheimer’s has been shown to be genetic in origin, but a relationship between genetics and the late-onset form of the disease has not been demonstrated. No other definitive causes have been identified. Alzheimer’s disease was the sixth leading cause of death in Harnett County for the aggregate period 2007-2011 (Table 79, cited previously).

Alzheimer’s Disease Hospital Discharges

The NC State Center for Health Statistics does not record hospital discharges separately for Alzheimer’s disease

Alzheimer’s Disease Mortality

Table 103 presents Alzheimer’s disease mortality data for the aggregate period 2007-2011, categorized by race and sex. In Harnett County, 109 people died from unintentional non-motor vehicle injuries in Harnett County over the period 2007-2011, for an overall mortality rate of 27.3, which is marginally lower than the comparable rate for NC as a whole, but 20% higher than the rate in Onslow County (Table 103).

As Table 103 shows, comparisons across racial/sex categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

Table 103. Alzheimer’s disease Mortality, by Race and Sex (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	27	24.7	70	32.7	4	N/A	5	N/A	0	N/A	2	N/A	1	N/A	0	N/A	109	27.3
Onslow County	18	N/A	57	28.9	3	N/A	7	N/A	0	N/A	0	N/A	0	N/A	1	N/A	86	22.5
State of NC	3,132	23.4	8,237	33.4	441	21.2	1,348	28.1	36	15.2	100	24.9	18	N/A	35	10.3	13,347	29.0

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rf>

Diabetes Mellitus

Diabetes mellitus (hereafter referred to as “diabetes”) is a disorder of the metabolic system resulting from a shortage of insulin, a hormone that allows sugar to enter body cells and convert into energy. If diabetes is uncontrolled, sugar and fats remain in the blood, over time damaging vital organs. Diabetes was the seventh leading cause of death in Harnett County for the aggregate period 2007-2011 (Table 79, cited previously).

Diabetes Hospital Discharges

Diabetes accounted for \$7,204,502 in hospital charges to Harnett County residents in 2011. As shown in **Table 104**, hospital discharge rates for diabetes fluctuated in Harnett County and Onslow County while remaining fairly stable at the state level.

Table 104. Diabetes Discharges per 1,000 Population (2005-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011
Harnett County	2.0	2.0	1.8	1.7	2.0	2.2	2.2
Onslow County	1.1	1.6	1.4	1.3	1.1	1.5	1.2
State of NC	1.8	1.8	1.9	1.8	1.8	1.9	2.0

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

Diabetes Mortality

- **Table 105** presents diabetes data for the aggregate period 2007-2011, categorized by race and sex.
- In Harnett County, 111 people died from unintentional non-motor vehicle injuries over the period 2007-2011, for an overall mortality rate of 24.2, which is marginally 10% higher than the comparable rate for NC as a whole, but 36% lower than the rate in Onslow County (Table 105).
- As Table 105 shows, comparisons across racial/sex categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

**Table 105. Diabetes Mortality, by Race and Sex
(Five-Year Aggregate Data, 2007-2011)**

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	40	26.9	34	15.9	13	N/A	22	45.5	1	N/A	0	N/A	1	N/A	0	N/A	111	24.2
Onslow County	77	44.8	57	26.1	24	75.2	31	65.3	1	N/A	0	N/A	2	N/A	1	N/A	193	38.1
State of NC	3,571	21.7	3,174	14.2	1,676	50.9	2,005	40.4	101	25.7	116	22.2	51	11.4	39	7.0	10,733	22.0

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Nephritis, Nephrotic Syndrome, and Nephrosis (Kidney Disease)

Nephritis, nephrotic syndrome, and nephrosis are renal (kidney) disease. Nephritis is any inflammation of the kidneys, while nephrotic syndrome (also called nephrosis) is a kidney disease resulting from damage to the blood vessels that filter waste the blood. These conditions can result from infections, drug exposure, malignancy, hereditary disorders, immune disorders, or diseases that affect multiple body systems (e.g., diabetes and lupus). This complex of kidney disorders represented the eighth leading cause of death in Harnett County for the aggregate period 2007-2011.

Kidney Disease Hospital Discharges

Hospital discharges associated with the treatment of kidney diseases totaled \$5,198,826 for Harnett County residents in 2011. Hospital discharges data on kidney disease is summarized in **Table 106**. Hospital discharge rates for kidney disease have risen in all three jurisdictions since 2005.

Table 106. Nephritis, Nephrosis, Nephrotic Syndrome Discharges per 1,000 Population (2005-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011
Harnett County	1.0	1.6	1.6	1.6	1.5	1.4	1.9
Onslow County	0.5	0.8	0.7	1.0	0.6	0.8	0.9
State of NC	1.2	1.3	1.7	1.6	1.4	1.5	1.8

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

Kidney Disease Mortality

Table 107 presents kidney disease mortality data for the aggregate period 2007-2011, categorized by race and sex. 97 people died from unintentional non-motor vehicle injuries in Harnett County over the period 2007-2011, for an overall mortality rate of 22.2, which is 20% higher than the comparable rate for NC as a whole and 25% higher than the rate in Onslow County (Table 107).

- As Table 107 shows, comparisons across racial/sex categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

Table 107. Nephritis, Nephrosis, Nephrotic Syndrome Mortality, by Race and Sex (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	28	19.9	31	14.6	15	N/A	20	40.9	0	N/A	3	N/A	0	N/A	0	N/A	97	22.2
Onslow County	28	17.0	31	14.9	15	N/A	11	N/A	1	N/A	0	N/A	0	N/A	0	N/A	86	17.7
State of NC	2,919	19.6	2,820	12.2	1,259	41.6	1,662	33.7	60	16.7	83	17.5	31	7.7	26	4.8	8,860	18.6

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Unintentional Motor Vehicle Injury: The NC State Center for Health Statistics distinguishes unintentional motor vehicle injuries from all other injuries when calculating mortality rates and ranking leading causes of death. Injury mortality attributable to motor vehicle crashes is the ninth leading cause of death in Harnett County for the aggregate period 2007-2011 (Table 79, cited previously).

Unintentional Motor Vehicle Injury Hospital Discharges

The NC State Center on Health Statistics does not release hospitalization data for unintentional motor vehicle injuries.

Unintentional Motor Vehicle Injury Mortality

- **Table 108** presents unintentional motor vehicle injury mortality data for the aggregate period 2007-2011, categorized by race and sex.
- 117 people died from unintentional non-motor vehicle injuries in Harnett County over the period 2007-2011, for an overall mortality rate of 21.5, which is 39% higher than the comparable rate for NC as a whole and 34% higher than the rate in Onslow County (Table 108).
- As Table 108 shows, comparisons across racial/sex categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

Table 108. Unintentional Motor Vehicle Injury Mortality, by Race and Sex (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	54	30.7	35	18.1	16	N/A	2	N/A	0	N/A	0	N/A	7	N/A	3	N/A	117	21.5
Onslow County	83	24.5	30	11.2	20	24.8	3	N/A	0	N/A	0	N/A	6	N/A	0	N/A	142	16.0
State of NC	3,469	22.3	1,542	9.2	1,145	24.9	402	7.3	164	21.9	72	8.5	444	20.1	98	6.5	7,336	15.5

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

The unintentional motor vehicle injury death rate has a strong age component. **Table 109** presents *non-age adjusted* unintentional motor vehicle injury mortality data for the five-year aggregate period, 2007-2011, stratified by age. In Harnett

County and in NC as a whole, the highest unintentional motor vehicle injury death rate occurs in the 20-39 age group. In Onslow County, the highest rate was in the 40-64 age group.

Table 109. Motor Vehicle Injury Mortality, Numbers and Rates, by Age (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)							
	All Ages		0-19		20-39		40-64	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	117	20.5	29	16.7	37	22.1	32	18.5
Onslow County	142	16.4	19	7.3	72	20.3	40	21.4
State of NC	7,336	15.6	1,005	7.9	2,694	21.1	2,474	16.0

Source: NC State Center for Health Statistics, County Health Data Book (2013), Death Counts and Crude Death Rates per 100,000 Population for Leading Causes of Death, by Age Groups, NC 2007-2011;
<http://www.schs.state.nc.us/schs/data/databook/CD13%20lead%20causes%20of%20death%20by%20age.rtf>

Table 110 presents detailed data on motor vehicle crashes in 2011.

- In 2011, there were 1,971 motor vehicle crashes in Harnett County, resulting in 1,090 non-fatal injuries and 21 fatalities.
- In 2011, 124 of the motor vehicle crashes in Harnett County were alcohol-related, representing 6.3% of all crashes. This percentage was higher than the comparable percentages for NC as a whole.
- Alcohol was related to 9.1% of all injuries from motor vehicle crashes in Harnett County; however, 47.6% of the fatal injuries were alcohol-related. This percentage is significantly higher than the comparable percentages for Onslow County and NC as a whole.

Table 110. Motor Vehicle Crash Details (2011)

Location	Crashes			Number of Crash Injuries				Alcohol Related Injuries			DWI charges
	Total Number of Crashes	Number Alcohol Related Crashes	Percent Alcohol Related Crashes	Non Fatal Injuries	Fatal Injuries	Alcohol Related Non Fatal Injuries	Alcohol Related Fatal Injuries	As Percent of Total Injuries	As Percent of Non Fatal Injuries	As Percent of Fatal Injuries	Number Impaired Driving Charges
Harnett County	1,971	124	6.3%	1,090	21	91	10	9.1%	8.4%	47.6%	843
Onslow County	3,904	273	7.0%	1,797	19	186	2	10.4%	10.4%	10.5%	1,312
State of NC	208,509	10,708	5.1%	106,963	1,208	8,169	392	7.9%	7.6%	32.5%	68,255
Source	a	a	a	b	b	b	b	b	b	b	c

Sources: a- UNC Highway Safety Research Center, Safety Information, Alcohol Studies, NC Alcohol Facts (NCAF), Data by County, Crash Data, Overview (2012); <http://www.hsrc.unc.edu/ncaf> b- UNC Highway Safety Research Center, Safety Information, Alcohol Studies, NC Alcohol Facts (NCAF), Data by County, Crash

Data, Crash Injuries (2012); <http://www.hsrrc.unc.edu/ncaf> c- UNC Highway Safety Research Center, Safety Information, Alcohol Studies, NC Alcohol Facts (NCAF), Impaired Driving Court Cases, Court Cases, County Data (2012); <http://www.hsrrc.unc.edu/ncaf>
 † Percentage is calculated

Table 111 presents data on the incidences and severity of motor vehicle crashes with bicycles in Harnett County. Over the six-year period (2005-2010), the total number of crashes was 51 crashes and the number of crashes in a year fluctuated without a clear trend.

Table 111. Harnett County Bicycle Crashes and Crash Severity (2005-2010)

Crash Severity	Crash Year						Total
	2005	2006	2007	2008	2009	2010	
K: Killed	0	0	1	0	1	0	2
A: Disabling Injury	1	0	1	0	1	0	3
B: Evident Injury	3	7	2	1	2	3	18
C: Possible Injury	3	6	2	5	2	2	20
O: No Injury	1	1	2	0	1	0	5
Unknown Injury	0	0	1	0	1	1	3
Total	8	14	9	6	8	6	51

Source: NC Department of Transportation, Division of Bicycle and Pedestrian Transportation, North Carolina Pedestrian and Bicycle Crash Data Tool; <http://www.pedbikeinfo.org/pbcat/bikequery.cfm>

Table 112 presents data on the incidences and severity of motor vehicle crashes with pedestrians in North Carolina. Over the six-year period (2005-2010), the total number of crashes was 14,965 and the number of crashes in a year fluctuated without a clear trend. In NC, approximately 172 people were killed in pedestrians crashes each year over the period, 2005-2010.

Table 112. North Carolina Pedestrian Crashes (2005-2010)

Crash Severity	Crash Year						Total
	2005	2006	2007	2008	2009	2010	
Unknown Injury	26	22	32	30	32	26	168
K: Killed	173	184	173	172	157	174	1,033
A: Disabling Injury	244	214	216	192	170	159	1,195
B: Evident Injury	880	888	960	944	850	933	5,455
C: Possible Injury	924	944	992	991	1,027	1,020	5,898
O: No Injury	174	238	187	190	193	234	1,216
Total	2,421	2,490	2,560	2,519	2,429	2,546	14,965

Source: NC Department of Transportation, Division of Bicycle and Pedestrian Transportation, North Carolina Pedestrian and Bicycle Crash Data Tool; <http://www.pedbikeinfo.org/pbcat/pedquery.cfm>

Table 113 presents data on the incidences and county ranking of motor vehicle crashes with animals (mostly deer) in Harnett County. Over the period (2004-2010), the total number of animal-motor vehicle crashes and the rank fluctuated without a clear

trend. Harnett County’s incidences of motor vehicle crashes with animals is much higher than most counties, with rankings as high as 22nd (out of 100) in 2002 & 2009.

Table 113. Animal-Motor Vehicle Crash Data (2004-2012)

Location	2004		2005		2006		2007		2008		2009		2010		2011	
	Count	Rank														
Harnett County	224	22	236	25	250	28	253	29	254	30	296	22	301	25	327	23
Onslow County	212	25	217	28	252	27	251	30	264	28	251	30	306	24	313	25
State of NC	15,321	N/A	15,630	N/A	17,730	N/A	19,325	N/A	19,725	N/A	19,549	N/A	20,808	N/A	20,689	N/A

Source: NC Department of Transportation, North Carolina Animal Related Crashes, 2009-2011 Data and County Rankings; <https://apps.ncdot.gov/newsreleases/Image.ashx?id=1905>

Septicemia

Septicemia is a rapidly progressing infection resulting from the presence of bacteria in the blood. The disease often arises from other infections throughout the body, such as meningitis, burns, and wound infections. Septicemia can lead to septic shock in which case low blood pressure and low blood flow cause organ failure. While septicemia can be community-acquired, ironically many cases are acquired by patients hospitalized initially for other conditions; these are referred to as nosocomial infections. *Sepsis* is now a more common term for septicemia, but the NC State Center for Health Statistics continues to use the older term. Septicemia was the tenth leading cause of death in Harnett County for the aggregate period 2007-2011 (Table 79, cited previously).

Septicemia Hospital Discharges

Hospital charges associated with the treatment of septicemia totaled \$17,249,247 for Harnett County residents in 2011. Septicemia is not as well known a health conditions as many other leading causes of death; however it can cost as much or even more to treat. In 2011, the per-case hospital charge associated with heart disease was \$46,034, yet the comparable cost for a case of septicemia was only slightly lower at \$43,016. Hospital discharge data on septicemia is summarized in Table 114. Hospital discharge rates for septicemia rose overall in all three jurisdictions since 2005.

Table 114. Septicemia Discharges per 1,000 Population (2005-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011
Harnett County	1.2	1.2	1.5	2.0	1.8	2.6	3.4
Onslow County	0.9	2.0	1.4	1.9	1.5	1.8	2.2
State of NC	1.6	1.8	2.0	2.3	2.5	2.9	3.4

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

Septicemia Mortality

Table 115 presents septicemia mortality data for the aggregate period 2007-2011, categorized by race and sex. In Harnett County, 78 people died from unintentional non-motor vehicle injuries over the period 2007-2011, for an overall mortality rate of 17.1, which is 26 higher than the comparable rate for NC as a whole, but slightly lower than the rate in Onslow County (Table 38).

As Table 115 shows, comparisons across racial/sex categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

**Table 115. Septicemia Mortality, by Race and Sex
(Five-Year Aggregate Data, 2007-2011)**

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	24	16.8	31	14.7	13	N/A	10	N/A	0	N/A	0	N/A	0	N/A	0	N/A	78	17.1
Onslow County	31	17.3	33	15.8	5	N/A	19	N/A	0	N/A	0	N/A	0	N/A	0	N/A	88	18.0
State of NC	2,116	13.5	2,584	11.4	750	24.0	912	18.4	41	10.7	41	8.2	36	4.9	35	6.5	6,515	13.6

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Pneumonia and Influenza

Pneumonia and influenza are diseases of the lungs. **Pneumonia** is an inflammation of the lungs caused by either bacteria or viruses. Bacterial pneumonia is the most common and serious form of pneumonia, and among individuals with suppressed immune systems it may follow influenza or the common cold. **Influenza** is a contagious infection of the throat, mouth, and lungs caused by an airborne virus. Pneumonia/influenza was the eleventh leading cause of death in Harnett County for the five-year aggregate period 2007-2011 (Table 79, cited previously).

Pneumonia/Influenza Hospital Discharges

Treatment of pneumonia and influenza accounted for \$8,813,099 in hospital charges to Harnett County residents in 2011. Hospital discharge data summarized in Table 116 give some indication of the prevalence of pneumonia and influenza in Harnett County. Hospital discharge rates for pneumonia and influenza declined overall since 2005 in all three jurisdictions.

Table 116. Pneumonia/Influenza Hospital Discharges per 1,000 Population (2005-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011
Harnett County	4.7	4.6	3.5	3.5	3.4	3.3	3.4
Onslow County	2.8	2.9	2.2	2.1	2.3	2.1	2.2
State of NC	4.1	3.7	3.4	3.3	3.5	3.1	3.2

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

Pneumonia/Influenza Mortality

Table 117 presents pneumonia and influenza mortality data for the aggregate period 2007-2011, categorized by race and sex. In Harnett County, 48 people died from pneumonia and influenza over the period 2007-2011, for an overall mortality rate of 10.7, which is 42% lower than the comparable rate for NC as a whole and 27% lower than the rate in Onslow County (Table 117). As Table 117 shows, comparisons across racial/sex categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

Table 117. Pneumonia/Influenza Mortality, by Race and Sex (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	13	N/A	18	N/A	7	N/A	9	N/A	0	N/A	1	N/A	0	N/A	0	N/A	48	10.7
Onslow County	21	15.0	33	15.8	4	N/A	5	N/A	0	N/A	1	N/A	0	N/A	1	N/A	65	14.7
State of NC	3,012	20.9	2,918	16.6	627	22.9	750	15.1	37	10.5	46	9.9	35	6.2	30	6.2	8,455	17.9

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Chronic Liver Disease and Cirrhosis

Chronic liver disease is marked by the gradual destruction of the liver tissue over time. **Cirrhosis** is a group of chronic liver disease in which normal liver cells are damaged and replaced by scar tissue, progressively diminishing blood flow through the liver. Risk factors for chronic liver disease include: exposure to hepatitis and other viruses; use of certain drugs; alcohol abuse; chemical exposure; autoimmune diseases; diabetes; malnutrition; and hereditary diseases. Chronic liver disease and cirrhosis together were the twelfth leading cause of death in Harnett County for the aggregate period 2007-2011 (Table 79, cited previously).

Chronic Liver Disease Hospital Discharges

Treatment of pneumonia and influenza accounted for \$495,475 in hospital charges to Harnett County residents in 2011. Hospital discharge data summarized in Table 118 give some indication of the prevalence of pneumonia and influenza in Harnett County. Hospital discharge rates for pneumonia and influenza declined overall since 2005 in Harnett County and NC as a whole, but have fluctuated in Onslow County.

Table 118. Chronic Liver Disease/Cirrhosis Discharges per 1,000 Population (2005-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011
Harnett County	0.4	0.3	0.3	0.2	0.2	0.2	0.2
Onslow County	0.1	0.3	0.2	0.2	0.1	0.2	0.2
State of NC	0.3	0.3	0.3	0.3	0.3	0.2	0.2

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

Chronic Liver Disease Mortality

Table 119 presents chronic liver disease mortality data for the aggregate period 2007-2011, categorized by race and sex. 54 people died from chronic liver disease in Harnett County over the period 2007-2011, for an overall mortality rate of 10.5, which is slightly higher than the comparable rate for NC as a whole and slightly lower than the rate in Onslow County (Table 119).

As Table 119 shows, comparisons across racial/sex categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

Table 119. Chronic Liver Disease/Cirrhosis Mortality, by Race and Sex (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	28	15.5	18	N/A	4	N/A	4	N/A	0	N/A	0	N/A	0	N/A	0	N/A	54	10.5
Onslow County	29	13.0	25	10.8	4	N/A	4	N/A	0	N/A	1	N/A	4	N/A	0	N/A	67	11.2

State of NC	2,545	14.1	1,284	6.2	474	11.0	263	4.8	45	7.8	37	5.6	58	6.3	17	N/A	4,723	9.3
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Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Suicide

Suicide was the thirteenth leading cause of death in Harnett County for the aggregate period 2007-2011 (Table 79, cited previously).

Suicide Hospital Discharges

The NC State Center on Health Statistics does not release hospitalization data for attempted suicide.

Suicide Mortality

Table 120 presents suicide mortality data for the aggregate period 2007-2011, categorized by race and sex. In Harnett County, 57 people died from suicide over the period 2007-2011, for an overall mortality rate of 10.0, which is approximately 17% lower than the comparable rates for NC as a whole and Onslow County (Table 120). As Table 120 shows, comparisons across racial/sex categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

Table 120. Suicide Mortality, by Race and Sex (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	44	23.0	7	N/A	2	N/A	1	N/A	0	N/A	0	N/A	3	N/A	0	N/A	57	10.0
Onslow County	72	22.9	19	N/A	8	N/A	0	N/A	0	N/A	0	N/A	3	N/A	0	N/A	102	12.2
State of NC	3,818	23.9	1,168	6.8	414	8.9	75	1.4	85	11.0	38	4.7	129	7.0	24	1.7	5,751	12.1

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Homicide

Homicide was the fourteenth leading cause of death in Harnett County for the aggregate period 2007-2011 (Table 1, cited previously).

Homicide Hospital Discharges

The NC State Center on Health Statistics does not release hospitalization data for attempted homicide.

Homicide Mortality

Table 121 presents homicide mortality data for the aggregate period 2007-2011, categorized by race and sex. In Harnett County, 43 people died from homicide over the period 2007-2011, for an overall mortality rate of 7.5, which is 19% higher than the comparable rate for NC as a whole and 44% higher than the rate in Onslow County (Table 121). As Table 121 shows, comparisons across racial/sex categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

Table 121. Homicide Mortality, by Race and Sex (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	17	N/A	4	N/A	18	N/A	1	N/A	1	N/A	0	N/A	2	N/A	0	N/A	43	7.5
Onslow County	13	N/A	11	N/A	11	N/A	5	N/A	2	N/A	0	N/A	4	N/A	0	N/A	46	5.2
State of NC	698	4.5	366	2.3	1,198	23.9	260	4.7	105	13.0	30	3.4	252	11.6	40	2.0	2,949	6.3

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Acquired Immune Deficiency Syndrome (AIDS)

The human immunodeficiency virus (HIV) is the virus that causes AIDS. HIV attacks the immune system by destroying CD4 positive (CD4+) T cells, a type of white blood cell that is vital to fighting off infection. The destruction of these cells leaves people infected with HIV vulnerable to other infections, diseases, and other complications. The acquired immunodeficiency syndrome (AIDS) is the final stage of HIV infection. A person infected with HIV is diagnosed with AIDS when he or she has one or more opportunistic infections, such as pneumonia or tuberculosis, and has a dangerously low number of CD4+ T cells (less than 200 cells per cubic milliliter of blood). AIDS was the fifteenth leading cause of death in Harnett County for the aggregate period 2007-2011 (Table 79, cited previously).

AIDS Hospital Discharges

Treatment of AIDS accounted for \$516,569 in hospital charges to Harnett County residents in 2011. Hospital discharge data summarized in **Table 122** give some indication of the prevalence of pneumonia and influenza in Harnett County. Hospital discharge rates for AIDS declined very slightly since 2005 in Harnett County and NC as a whole.

Table 122. AIDS Discharges per 1,000 Population (2007-2011)

Location	Discharges per 1,000 Population						
	2005	2006	2007	2008	2009	2010	2011
Harnett County	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Onslow County	0.1	0.1	<0.1	0.1	0.1	0.1	0.1
State of NC	0.2	0.2	0.2	0.2	0.2	0.2	0.1

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/schs/data/databook/CD19%20allhosps.rtf>

AIDS Mortality

Table 123 presents AIDS mortality data for the aggregate period 2007-2011, categorized by race and sex.

In Harnett County, 20 people died AIDS in Harnett County over the period 2007-2011, for an overall mortality rate of 22.2, which is 20% higher than the comparable rate for NC as a whole and 25% higher than the rate in Onslow County (Table 123).

As Table 123 shows, comparisons across racial/sex categories would be inappropriate because of the low numbers in the comparison categories (rates should not be used in instances in which the total number of deaths falls below 20).

Table 123. AIDS Mortality, by Race and Sex (Five-Year Aggregate Data, 2007-2011)

Location	Deaths, Number and Rate (per 100,000 Population)																	
	White, non-Hispanic				African-American, non-Hispanic				Other, non-Hispanic				Hispanic				Total	
	Male		Female		Male		Female		Male		Female		Male		Female			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Harnett County	5	N/A	0	N/A	12	N/A	3	N/A	0	N/A	0	N/A	0	N/A	0	N/A	20	3.6
Onslow County	3	N/A	1	N/A	4	N/A	3	N/A	0	N/A	0	N/A	1	N/A	0	N/A	12	N/A
State of NC	270	1.6	63	0.4	817	18.2	469	8.7	9	N/A	6	N/A	45	3.4	8	N/A	1,687	3.5

Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2013 2007-2011 Race-Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/schs/data/databook/CD21A%20racesexspecificrates.rtf>

Morbidity

Communicable Disease: A *communicable disease* is a disease transmitted through direct contact with an infected individual or indirectly through a vector. The topic of communicable diseases includes sexually transmitted infections (STIs).

Reportable Communicable Diseases

Health professionals are required to report cases of certain communicable diseases to the NC Department of Health and Human Services through their local health department.

Sexually Transmitted Infections

Tables 124 and 125 present data for the most prevalent sexually transmitted infections (STIs) for which data are routinely reported:

Chlamydia is the most frequently reported bacterial STI in the United States. It is estimated that there are approximately 2.8 million new cases of chlamydia in the United States each year. Chlamydia cases frequently go undiagnosed and can cause serious problems in men and women, such as penile discharge and infertility respectively, as well as infections in newborn babies of infected mothers (58).

Gonorrhea is the second most commonly reported bacterial STI in the United States following chlamydia. The highest rates of gonorrhea have been found in African Americans, 20 to 24 years of age, and women, respectively. Gonorrhea can spread into the uterus and fallopian tubes, resulting in pelvic inflammatory disease (PID). PID affects more than 1 million women in this country every year and can cause tubal (ectopic) pregnancy and infertility in as many as 10 percent of infected women. In addition to gonorrhea playing a major role in PID, some health researchers think it adds to the risk of getting HIV infection (58).

Syphilis is a sexually transmitted, bacterial infection that initially causes genital ulcers (sores). If untreated, the disease will progress to more serious stages of infection, including blindness and nerve damage. Primary and secondary syphilis are the communicable stages of the disease and as such are the cases reported. An ancient disease, syphilis is still of major importance today. Although syphilis rates in the United States declined by almost 90 percent from 1990 to 2000, the number of cases rose from 5,979 in 2000 to 9,756 in 2006. In a single year, from 2005 to 2006, the rate of syphilis jumped 12 percent. HIV infection and syphilis are linked. Syphilis increases the risk of transmitting as well as getting infected with HIV (58).

Table 125 shows the incidence of chlamydia and gonorrhea for the years 2007-2011.

- The incidence of chlamydia infections in Harnett County increased in 2010 and 2011.
- The incidence of gonorrhea in Harnett County decreased in 2009 and 2010 and remains stable.

Table 125. Chlamydia and Gonorrhea Incidence (2007-2011)

Location	Chlamydia					Gonorrhea				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Harnett County	204	366	334	450	468	153	160	85	117	203
Onslow County	972	1072	1081	1134	1184	202	296	273	297	294
State of NC	30,612	37,885	43,734	42,167	53,854	16,666	15,012	14,811	14,153	17,158

Table 126. Primary, Secondary, Early, Latent Syphilis Cases by County of Report (2007-2011)

Location	Syphilis				
	2007	2008	2009	2010	2011
Harnett County	2	0	3	3	0
Onslow County	3	2	3	4	2
State of NC	569	516	938	724	768

Source: NC State Center for Health Statistics, County-Level Data, County Health Data Book (2011), Morbidity, Gonorrhea Cases and Rates per 100,000 Population, 2005-2009, and Primary and Secondary Syphilis Cases and Rates per 100,000 Population

- The Total number of cases of Syphilis in Harnett and Onslow Counties remain low overall.

Chapter Four

Community Health Survey

Chapter Four: Community Health Survey

Survey Methodology

The Harnett County Department of Public Health (HCDPH) and its partners developed and implemented the 2013 Community Health Survey. Implementation partners included: Campbell University (CU) College of Pharmacy and Health Sciences Department of Public Health (DPH), First Choice and Harnett Health. The survey was conducted via the internet and distribution of paper copies. The CU DPH compared the results of the 2013 survey to the 2010 survey and prepared this chapter.

The 2013 survey included demographic questions, opinion questions about health concerns, unhealthy behaviors, and social issues, and information questions about personal health status, health behaviors, health care access and emergency preparedness. (The survey instrument and the CU DPH's analysis of the survey data appear in the Appendix to this report.) Survey participants were randomly selected Harnett County residents, at least 18 years of age.

The 2010 survey sample sites were chosen using a two stage, cluster sampling technique developed by the World Health Organization for assessing vaccine prevalence in children. Specialized software randomly selected 30 population weighted census blocks from throughout the county. From those census blocks, ten random samples were then selected for a total of 300 randomly chosen, sample sites. Survey teams then went into the field and administered the surveys at those sites. Ultimately, the surveyors completed only seven interviews in each census block for a total of 210 respondents; the three extra sites in each census block were chosen to allow for refusals, no one at home, vacant house, etc.

The methodology of the 2006 and 2013 Community Health Survey was quite different, relying on a pen and paper and convenience sampling techniques, and resulting in a larger sample size. In 2013, HCDPH, Harnett Health and CUDPH volunteers distributed pen and paper surveys primarily to clients of the health and human services agencies and Harnett Health hospitals, parishioners at Churches, and employees at workplaces specifically the HCDPH, Harnett Health hospitals and CU. In addition, an electronic version of the survey was offered on the Harnett County website.

A total of **874** people responded to the 2013 survey. Since the 2010 and 2013 survey instruments were not identical, this chapter compares only the questions common to both instruments. (For results of the 2010 Survey, see the 2010 Harnett County Community Health Assessment, Volume I.) As noted above, the results of the 2013 Surveys are presented in the Appendix to this report.)

Comparison of 2010 and 2013 Community Health Surveys

Demographic Profiles of Survey Participants: Both surveys sought demographics in order to assess how well the survey participants represented the general population of Harnett County. **Table 124** compares the demographic profile of the 2013 survey respondents to that of the county population.

Table 124. Demographic Comparison of 2013 Survey Respondents with the Overall Harnett County Population

Population Category	Survey Participants		County ¹
	No.	%	%
Gender (n=846)			
Males	168	19.9	49.5
Females	660	78.0	50.5
Race/Ethnicity (Race n=834)			
White	593	73.2	68.9
African-American	176	21.7	21.3
Asian	6	0.01	1.0
Native American	5	0.01	1.3
Other	14	1.7	7.5
Hispanic/Latino ²	30	3.7	11.3
Age (n=846)			
Under 18	2	0.2	19.6
18-24	52	6.1	10.2
25-34	134	15.8	14.6
35-44	145	17.1	14.1
45-54	201	23.8	12.8
55-64	158	18.7	10.4
65-75	82	9.7	6.4
Over 75 ³	72	8.5	4.3
Other (n=various)			
Unemployed	39	4.7	10.4*
Retired	144	17.2	33.6
Household income <\$20,000	166	21.6	18.9**
Less than HS Diploma or GED	197	23.5	10.8 [‡]
Bachelors degree or higher	261	31.1	18.7 [‡]

Harnett County Community Health Assessment

¹ = 2012 Population Estimates (based on 2010 US Census Data) for Race and Ethnicity; <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none>

² = Reported in US Census data as an ethnic category—includes individuals self-reporting race as “White,” “Black,” etc.

³ = US Census data

* = Population 16 years and older

** = Data not available for <\$20,000; percentage represents <\$25,000

† = Population 25 years and older

From the data in **Table 124** it is apparent that, compared to counts or estimates for the county as a whole, females were significantly overrepresented in the survey sample, while males were significantly under-represented.

- In terms of its racial/ethnic composition, the survey sample was not balanced. Minorities such as Asians, Native Americans and Hispanics were under-represented. Moreover, we again over-represented the elderly similar to 2010 but, to a lesser amount.
- Unemployed and retired respondents were under-represented however, both less than HS diploma or GED and Bachelors degree or higher were over-represented in sample that was mostly employed.

Table 125 presents a comparison of major demographics parameters for the 2010 and 2013 Community Health Surveys. The 2010 Survey sample had higher proportions of elderly, retired, disabled, unemployed and stay-at-home respondents than the 2013 Survey sample. A large part of this difference is due to the fact that the 2010 survey was delivered to people at their homes, and during daytime hours especially, the people most likely to be at home are those in the oversampled groups. In the 2013 survey due to survey collection methodology and community partners our sample over-represented college educated and employed respondents.

Table 125. Demographic Comparison of 2013 and 2010 Survey Respondents

Demographic Parameter	% 2013 Survey (n=874)	% 2010 Survey (n=210)
Age		
Under 25	6.4	10.4
25-64	75.4	60.4
65 and Older	18.2	29.0
Education		
High School or Less	23.5	48.6
College or Graduate Degree	31.1	14.2
Employment Status		
Employed part-time or full-time	72.4	31.6
Unemployed	4.7	14.2
Retired	17.2	28.8
Disabled	2.4	10.4
Homemaker	4.3	11.8

It is important to recall the demographic attributes of the survey respondents when interpreting results. For example, the concerns and opinions of those who are employed and educated may be significantly different from those who are trying to find a job and are not educated.

Survey Results

Personal Opinions: Several of the questions common to both the 2010 and 2013 surveys sought the participants' opinions about the dominant community issues, social issues, and unhealthy behaviors in Harnett County.

Community Issues: *"In your opinion, how large a problem do you think each community issue listed below is in Harnett County? Please check in the box whether you think it is a major problem, a problem, a minor problem, or not a problem."* Community Issues that were identified as a major problem (by percentage of respondents, listed highest percentage to lowest; in the event of a tie, the percentage identifying an issue as a problem was considered next):

2010:

1. Underemployment/unemployment- 36% (an additional 31.8% said it was a "problem")
2. Lack of public transportation- 24.6% (an additional 23.7% said it was a "problem")
3. Crime- 21.7% (an additional 30.9% said it was a "problem")
4. Shortage of recreational programs and facilities- 18.5 % (an additional 24.2% said it was a "problem")
5. Shortage of cultural programs- 17.1 % (an additional 28% said it was a "problem")
6. Lack of after-school and summer youth activities- 16.6% (another 29.4% said it was a "problem")
7. Animal control- 15.3% (an additional 18.2% said it was a "problem")
8. Lack of affordable housing- 15.2% (an additional 21.3% said it was a "problem")
9. Shortage of job training and other educational opportunities for adults- 13.3% (an additional 21.3% said it was a "problem")
10. High quality schools (K-12)- 13.3% (an additional 13.7% said it was a "problem")
11. Safe roads and bridges- 5.3% (an additional 15.8% said it was a "problem")
12. Racial and ethnic discrimination- 3.3% (an additional 18.6% said it was a "problem")
13. Inadequate water supply or quality- 3.3% (an additional 7.6% said it was a problem")
14. Poor air quality- 1.4% (an additional 6.8% said it was a "problem")

2013:

1. Unemployment/underemployment- 36.8% (an additional 37.2% said it was a "problem")

2. Lack of transportation- 26.4% (an additional 29.5% said it was a “problem”)
3. Lack of after school and summer youth activities-24.6% (an additional 26.8% said it was a “problem”)
4. Shortage of cultural programs- 24.0% (an additional 28.3% said it was a “problem”)
5. Shortage of recreational programs and facilities- 23.0% (an additional 28.0% said it was a “problem”)

6. Crime- 21.6% (an additional 37.2% said it was a “problem”)
7. Shortage of job training and other educational opportunities for adults- 19.6% (an additional 28.7% said it was a “problem”)
8. High quality schools (K-12)- 18.4% (an additional 22.9% said it was a “problem”)
9. Lack of affordable housing- 14.6% (an additional 15.1% said it was a “problem”)
10. Racial and ethnic discrimination- 13.7% (an additional 16.4% said it was a “problem”)
11. Animal control- 13.0% (an additional 20.7% said it was a “problem”)
12. Safe roads and bridges- 7.3% (an additional 15.9% said it was a “problem”)
13. Inadequate water supply or quality-3.1% (an additional 7.3% said it was a “problem”)
14. Poor air quality-2.6% (an additional 6.5% said it was a “problem”)

The “**top five**” community issues overall were the same in 2013 as in 2010; their relative order is similar for the top two, unemployment/underemployment and lack of transportation.

However, number three has changed from *crime* in 2010 to *lack of after school and summer youth activities*. The *shortage of cultural programs* changed from 5 in 2010 to 4 in 2013 and *the shortage of recreational programs and facilities* changed from 4 in 2010 to 5 in 2013. Environmental issues (*inadequate water supply or quality and poor air quality*) were at the bottom of the ranking in both 2010 and 2013.

Social Issues: “In your opinion, how large a problem do you think each social issue listed below is in Harnett County? Please check in the box whether you think it is a major problem, a problem, a minor problem or not a problem.” Social Issues that were identified as a major problem (by percentage of respondents, listed highest percentage to lowest; in the event of a tie, the percentage identifying an issues as a problem was considered next):

2010:

1. Difficulty earning a living/making ends meet/poverty- 30.5% (an additional 31.4% said it was a “problem”)
2. Lack of appropriate parenting skills- 25.5% (an additional 28.4% said it was a “problem”)

3. Juvenile delinquency- 23.6% (an additional 24.5% said it was a “problem”)
4. Lack of money management skills/other life management skills- 20% (an additional 32.9% said it was a “problem”)
5. Isolation and loneliness among the elderly- 19.5% (an additional 26.2% said it was a “problem”)
6. Domestic violence and abuse- 18.3% (an additional 27.4% said it was a “problem”)
7. Gangs and gang violence- 18.1% (an additional 20.5% said it was a “problem”)
8. Child abuse and neglect- 16.7% (an additional 29.7% said it was a “problem”)
9. Illiteracy- 14.4% (an additional 24.9% said it was a “problem”)
10. Unsafe school environment/bullying- 10.5% (an additional 20.6% said it was a “problem”)
11. Abuse and neglect of the elderly- 10.2% (an additional 21.8% said it was a “problem”)
12. Homelessness- 7.6% (an additional 14.3 % said it was a “problem”)

2013:

1. Difficulty earning a living/poverty- 30.2% (an additional 38.1% said it was a “problem”)
2. Lack of appropriate parenting skills- 27.8% (an additional 34.9% said it was a “problem”)
3. Juvenile delinquency- 25.4% (an additional 34.6% said it was a “problem”)
4. Lack of money/ life management skills- 23.4% (an additional 37.0% said it was a “problem”)
5. Isolation and loneliness among elderly-19.6% (an additional 36.6% said it was a “problem”)
6. Gangs and gang violence- 19.4% (an additional 32.9% said it was a “problem”)
7. Domestic violence and abuse- 19.0% (an additional 22.2% said it was a “problem”)
8. Child abuse and neglect- 16.5% (an additional 34.6% said it was a “problem”)
9. Abuse and neglect of the elderly- 14.3% (an additional 29.5% said it was a “problem”)
10. Unsafe school environment/bullying- 15.8% (an additional 33.5% said it was a “problem”)
11. Illiteracy- 13.6% (an additional 31.3% said it was a “problem”)
12. Homelessness- 8.5% (an additional 23.8% said it was a “problem”)

The “top five” social issues were the same in 2013 as in 2010. *Domestic violence and abuse* changed from 6 in 2010 to 7 in 2013 and *gangs and gang violence* changed from 7 in 2010 to 6 in 2013. *Illiteracy* dropped from 9 in 2010 to 11 in 2013, crime-related social issues seem to be more of a concern. Homelessness, ranked at the bottom of the list in both 2010 and 2013, remains largely an un-recognized problem.

Unhealthy Behaviors: “In your opinion, how large a problem do you think each unhealthy behavior listed below is in Harnett County? Please check in the box whether you think it is a major problem, a problem, a minor problem, or not a problem.” Unhealthy Behaviors that were identified as a major problem (by percentage of respondents, listed highest percentage to lowest; in the event of a tie, the percentage identifying an issues as a problem was considered next):

2010:

1. Use of illegal drugs/substance abuse- 41.0% (an additional 22.9% said it was a “problem”)
2. Tobacco use- 36.5% (an additional 26.0% said it was a “problem”)
3. Overweight/obesity- 33.8% (an additional 33.3% said it was a “problem”)
4. Drinking and driving- 31.9% (an additional 31.4% said it was a “problem”)
5. Reckless/careless driving- 29.8% (an additional 33.2% said it was a “problem”)
6. Teen pregnancy- 27.3% (an additional 30.6% said it was a “problem”)
7. Alcohol abuse- 24.8% (an additional 28.6% said it was a “problem”)
8. Lack of physical activity or exercise- 26.7% (an additional 34.3% said it was a “problem”)
9. Unsafe sexual practices- 20.6% (an additional 26.8% said it was a “problem”)
10. Driving and riding without using seatbelts or proper infant/child seats- 18.1% (an additional 31.9% said it was a “problem”)
11. Not washing hands- 18.1% (an additional 29.0% said it was a “problem”)
12. Poor eating habits/lack of good nutrition- 15.4 % (an additional 35.6% said it was a “problem”)
13. Food safety in your home- 1.9% (an additional 9.1% said it was a “problem”)

2013:

1. Overweight/obesity- 43.9% (an additional 35.4% said it was a “problem”)
2. Use of illegal drugs/substance abuse- 42.7% (an additional 35.2% said it was a “problem”)
3. Tobacco use- 38.4% (an additional 36.4% said it was a “problem”)
4. Drinking and driving- 34.4% (an additional 37.3% said it was a “problem”)
5. Lack of physical activity or exercise- 30.7% (an additional 38.5% said it was a “problem”)
6. Alcohol abuse- 29.0% (an additional 38.3% said it was a “problem”)
7. Teen pregnancy- 29.0% (an additional 36.7% said it was a “problem”)
8. Reckless/careless driving- 27.9% (an additional 39.0% said it was a “problem”)
9. Unsafe sexual practices- 26.2% (an additional 29.9% said it was a “problem”)
10. Poor eating habits/lack of good nutrition-22.9% (an additional 33.3% said it was a “problem”)
11. Driving or riding without using seatbelts or proper infant/child seats- 17.8% (an additional 33.9% said it was a “problem”)
12. Food safety in your home- 6.3% (an additional 12.2% said it was a “problem”)

There was one basic difference in this section of the survey in 2013, so the full lists cannot be compared. The option not washing hands had been offered in 2010 and deleted in 2013.

The “top five” unhealthy behavior issues overall were similar in 2013 as in 2010; their relative order in the list however, was different. *Overweight/obesity* was rated as a major problem in 2013 and rated 3 in 2010. The *lack of physical activity or exercise*

is ranked in 3rd place in 2013 and 8th place in 2010. Both *use of illegal drugs/substance abuse* and *tobacco use* fell from 1 and 2 in 2010 to 2 and 3 in 2013. Only *drinking and driving* remained in the same position in both 2010 and 2013. *Food safety in your home* ranked at the bottom of the list in both 2010 and 2013.

Sources of Health Information: “Where do you get most of your health-related information?” (More than one answer was allowed.)

Source	2013 Survey		2010 Survey		2006 Survey	
	Rank	%	Rank	%	Rank	%
Doctor/Nurse/Pharmacist	1	73.9	1	57.1	1	61.9
Newspaper/Magazine/TV	5	42.8	2	25.5	4	29.8
Internet	2	53.4	3	18.4	3	20.4
Friends/Family	3	52.8	4	10.8	2	19.5
Hospital	4	43.6	5	6.1	5	8.0
School	8	9.7	6	3.3	6	4.7
Health Department	6	26.5	7	2.8	8	3.7
Church	7	13.2	8	0.9	7	2.6

Although physicians, nurses and pharmacists were the most frequently cited sources of health information among survey respondents in both 2010 and 2013, the percentage of respondents choosing these sources was lower in 2010 than in 2013. In 2013 the internet was the second most frequently cited source of health information however this may be due to the method of distribution of the survey. Other sources of information also increased in percentage from 2010 to 2013 including friend/family, newspaper/magazine/TV, hospital, and health department.

Sources of Health Care: “Where do you usually go when you are sick?”

Source	2013 Survey		2010 Survey		2006 Survey	
	Rank	%	Rank	%	Rank	%
Doctor’s office	1	77.8	1	67.5	1	80.3
Health Department	5	2.7	2	9.4	5	2.6
Hospital ER	2	7.0	3	9.0	2	8.3

VA	7	1.5	4	4.7	6	2.0
Urgent Care Center	3	5.9	5	3.8	3	3.1
Rural/Community Health Center	6	2.2	6	2.8	7	0.9
Drug Store/Pharmacy	4	2.8	7	1.9	4	2.7

Although a large majority of survey respondents in both surveys reported going to the doctor’s office when sick, the percentage in that category was higher in 2013 compared to 2010. Moreover, the usage of the health department and hospital ER were lower in 2013 than 2010. In 2010, 58% of the respondents reported seeking health care in Harnett County; in 2013, 62.8% of the respondents remained within the county of health care services.

Health Information and Health Access Questions

Health Insurance: “What kind of health care coverage or insurance, if any, do you have?” (More than one answer was allowed.)

Health Care Coverage	2010	2013
Private Insurance	39.6%	68.2%
Medicare	29.7%	20.4%
Medicaid	17.0%	8.5%
VA Benefits	9.4%	4.8%
Uninsured	15.6%	11.8%

The percentage of respondents with private health insurance was far higher in 2013 than in 2010, and the percentages covered by Medicare and Medicaid were lower in 2013 than 2010. The figures probably relate directly to the different composition of the 2010 and 2013 survey samples; as noted previously, the 2010 sample had much higher percentages of the elderly and unemployed than the 2006 sample. Complete results for the 2013 Survey, as analyzed by the staff of CU DPH, appear in the Appendix. (For results of the 2010 Survey, see the 2010 Harnett County Community Health Assessment, Volume I.) Also in common on both the 2006 and 2010 surveys were several questions about how the respondents accessed health information and health care.

Complete results for the 2013 Survey, as analyzed by the staff of CU DPH, appear in the Appendix. (For results of the 2010 Survey, see the 2010 Harnett County Community Health Assessment, Volume I.)

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Appendices

Appendix A: 2013 Community Health Survey Instrument

Appendix B: Harnett County Questionnaire Summary



Healthy Harnett

The purpose of this survey is to learn more about health and quality of life in Harnett County. Healthy Harnett will use the results of this survey and other information to identify and address our county’s most pressing health problems. Your answers on this survey will not be linked to you in any way.

Please do not write your name on this survey.

1. **If you moved to Harnett County in the last 4 years, why did you do so?** *Circle your answer*
 - a. There is a good health care system in Harnett County
 - b. Harnett County is a good place to raise children
 - c. Harnett County is a good place to grow old
 - d. There is plenty of economic opportunity in Harnett County
 - e. Harnett County is a safe place to live
 - f. I moved here for a job
 - g. Other, please specify _____

2. **In your opinion,** how large a problem do you think each **community issue** listed below is in Harnett County? *Please check in the box whether you think it is a major problem, a problem, a minor problem or not a problem.*

Community Issues	Major Problem	Problem	Minor Problem	Not a Problem	Don't know
Lack of affordable housing					
Unemployment and under-employment					
Shortage of recreational programs and facilities (parks, trails, etc.)					
Shortage of cultural programs (music, art, theater, etc.)					
Shortage of job training and other educational opportunities for adults					
Lack of after school and summer youth activities					
High quality schools (K-12)					
Racial and ethnic discrimination					
Lack of public transportation					
Crime					
Animal Control					
Inadequate water supply or quality					
Poor air quality					
Safe roads and bridges					

4. In your opinion, how large a problem do you think each **social issue** listed below is in Harnett County?

Social Issues	Major Problem	Problem	Minor Problem	Not a Problem	Don't know
Difficulty earning a living and making ends meet / poverty					
Isolation and loneliness among the elderly					
Homelessness					
Illiteracy					
Lack of money management skills and other life management skills					
Lack of appropriate parenting skills					
Child abuse and neglect					
Abuse and neglect of the elderly					
Domestic violence and abuse					
Juvenile delinquency					
Gangs and gang violence					
Unsafe school environment/bullying					

5. In your opinion, how large a problem do you think each **unhealthy behavior** listed below is in Harnett County?

Unhealthy Behaviors	Major Problem	Problem	Minor Problem	Not a Problem	Don't know
Alcohol abuse					
Use of illegal drugs / substance abuse					
Overweight / obesity					
Not washing hands					
Tobacco use (all types)					
Drinking and driving					
Reckless / careless driving					
Driving or riding without using seatbelts or proper infant / child seats					
Lack of physical activity or exercise					
Food Safety/ in your home					
Poor eating habits / lack of good nutrition					
Unsafe sexual practices					
Teen pregnancy					

6. In your opinion, how large a problem do you think each health problem listed below is in Harnett County?

Health Problem	Major Problem	Problem	Minor Problem	Not a Problem	Don't know
Heart Disease					
Cancer					
Asthma					
Stroke					
Diabetes					
Suicide					

7. Where do you get most of your health related information?

- Friends and family
- Newspaper/Magazine/TV
- Health Department
- School
- Hospital
- Doctor/Nurse/Pharmacist
- Help Lines
- Church
- Internet
- Other _____

8. About how long has it been since you last visited a doctor for a routine check up? This does not include a visit because you were sick or pregnant?

- Within the last year
- 1-2 years ago
- 3-5 years ago
- 5+ years ago
- I have never had a routine check up

9. About how long has it been since you last visited a dentist for a routine check up? Do not include times you visited the dentist because of an emergency.

- Within the last year
- 1-2 years ago
- 3-5 years ago
- 5+ years ago
- I have never been to the dentist for a routine check up

10. During the past 30 days, other than your regular job, did you engage in any exercise activity that lasts at least a half an hour?

- a. Yes
- b. No (if no, skip to question 10c)

A. Since you said “yes”, how many times would you say you engaged in this activity during the past 30 days? _____

B. Where do you go to exercise or engage in physical activity? *Check all that apply*
 Public Swimming Pool

- Harnett County Parks
- Home
- Private Gym
- Other

A. Since you said "no", what were the reasons? Give as many as needed

- my job is physical or hard labor
- exercise is not important to me
- I don't have access to a facility that has the things I need, like a pool, golf course, or a track
- I don't have enough time to exercise
- I would need childcare and I don't have it
- I don't know how to find exercise partners or teams
- I don't like to exercise
- It costs too much to exercise (equipment, gym shoes)
- There is no safe place to exercise
- I'm too tired to exercise
- I'm physically disabled
- Other

11. In an average day, how many servings do you eat of fruits and vegetables *Not counting juice, lettuce salad, or potato products*, (A serving is equal to one banana, one apple, or 12 baby carrots)

- a. Number of servings of fruit ____
- b. Number of servings of vegetables ____
- c. Never eat fruit
- d. Never eat vegetables

12. Only ask males this question. If you are over the age of 40, do you have an annual prostate exam?

- a. Yes
- b. No
- c. N/A (under age 40 or female)

13. Only ask females this question. If you are over age 40, do you have an annual mammogram?

- a. Yes
- b. No
- c. N/A (under age 40 or male)

14. Only ask females this question. If you are over age 18, do you have a pap smear at least every other year?

- a. Yes
- b. No
- c. N/A (under age 18 or male)

15. If you are over age 50, have you ever had a colon cancer screening?

- a. Yes
- b. No

16. Where do you **usually** go when you are sick? **Please choose only one answer.**

- | | |
|--|--|
| <input type="checkbox"/> Doctor's Office | <input type="checkbox"/> Drug Store/Pharmacy |
| <input type="checkbox"/> Health Department | <input type="checkbox"/> Rural/Community Health Center |
| <input type="checkbox"/> Hospital Emergency Room | <input type="checkbox"/> Veteran's Administration (VA) |
| <input type="checkbox"/> Urgent Care Center | <input type="checkbox"/> Other: _____ |

Is this place in Harnett County?

- Yes No; it is in _____ County.

17. What kind of health care coverage or insurance, if any, do **you** have?

- | | |
|--------------------------------------|---|
| <input type="checkbox"/> Medicare | <input type="checkbox"/> Private insurance (e.g., Blue Cross) |
| <input type="checkbox"/> Medicaid | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> VA Benefits | <input type="checkbox"/> I do not have any health care coverage |

If you have private insurance, who pays the monthly cost or premium?

- | | |
|--|--|
| <input type="checkbox"/> I (or my family) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> My employer | <input type="checkbox"/> I do not have private insurance |
| <input type="checkbox"/> My employer and I both contribute | |

18. What other people living in your household **do not** have health care coverage or insurance? **Please check all that apply.**

- | | |
|---|---|
| <input type="checkbox"/> My spouse or partner | <input type="checkbox"/> My grandchildren |
| <input type="checkbox"/> My child(ren) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> My grandchildren | <input type="checkbox"/> No one (everyone has coverage) |

EMERGENCY PREPAREDNESS

19. In a disaster, where would you likely look for information?

- a. TV
- b. Internet
- c. Radio
- d. Print Media (newspaper, magazine)
- e. Other

20. Does your family have a basic emergency supply kit set aside for immediate use that could sustain all members of the family for 72 hours?

- a. Yes
- b. No

21. Do you have a plan for how to communicate with family members in the event of an emergency and everyone is away from home?

- a. Yes
- b. No

22. Are you aware of an emergency preparedness plan for Harnett County?

- a. Yes
- b. No

DEMOGRAPHIC INFORMATION

23. What is your zip code? _____
24. How long have you lived in Harnett County?
 ___ Less than a year ___ 6-10 years ___ 16-20 years
 ___ 1-5 years ___ 11-15 years ___ More than 20 years
25. Do you work **outside** of Harnett County? ___ Yes ___ No
26. What is your age?
 ___ Under 18 ___ 25-34 ___ 45-54 ___ 65-75
 ___ 18-24 ___ 35-44 ___ 55-64 ___ Over 75
27. Are you: ___ Male ___ Female
28. What is your race or ethnicity?
 ___ White ___ Native American
 ___ Black ___ Asian/Pacific Islander
 ___ Hispanic/Latino/Latina ___ Other: _____
29. What is your marital status?
 ___ Married ___ Single
30. What is the highest educational level you have completed?
 ___ Less than high school (highest grade completed: _____)
 ___ High school graduate or equivalent (diploma or GED)
 ___ Some college, but no degree (includes community college/vocational training)
 ___ Associate degree in college (e.g., AA)
 ___ Bachelor's degree in college (e.g., BA, BS)
 ___ Advanced degree in college (e.g., Masters or Doctoral degree)
 ___ Other: _____
31. What is your employment status? *Please check all that apply.*
 ___ Employed full-time ___ Homemaker ___ Disabled; unable to work
 ___ Employed part time ___ Retired ___ Seasonal worker
 ___ Unemployed ___ Student ___ Self-employed
32. Approximately what was your adult household income last year? (Household income is the total before-tax income of the adults living in your household.)
 ___ Less than \$20,000 ___ \$50,000 to \$74,999
 ___ \$20,000 to \$29,999 ___ \$75,000 to \$99,000
 ___ \$30,000 to \$49,999 ___ \$100,000 or more
33. How many **children** under the age of 18 does this household income support? _____
34. How many **adults** age 18 and older does this household income support? _____

35. Are you the **primary caregiver** for any of the following?

- Physically or mentally disabled or special needs child (under age 18)
- Physically or mentally disabled or special needs adult age 18-64
- Senior adult (age 65 or older)
- Foster child (under age 18)
- Grandchild (under age 18)

36. Do you have access to the internet?

- a. Yes
- b. No

Thank you very much for completing the Community Health Survey!

HARNETT COUNTY QUESTIONNAIRE SUMMARY RESULTS

Race/Ethnicity:	2006		2010		2013	
	Number	Percent	Number	Percent	Number	Percent
White	412	59.1%	139	66.2%	593	73.2%
Black	203	29.1%	50	23.8%	176	21.7%
Hispanic/Latino/Latina	34	4.9%	15	7.1%	30	3.7%
Native American	38	5.5%	2	1.0%	5	0.01%
Asian/Pacific Islander	2	0.3%	3	1.4%	6	0.01%
Other: Mixed Race	8	1.1%	1	0.5%	14	1.7%

There seems to be increase in whites however, this could be due to our survey methodology and potential sampling bias. It might be worthwhile to do an additional survey targeting the minority population.

HARNETT COUNTY CHA QUESTIONNAIRE RESULTS

In the previous CHA there was consideration of removing question 2 because of the lack of people moving to Harnett County, however now just a few years later we have increased from 23.8% of people moving into Harnett County in the last four years (2010 CHA) to 41.1%, almost double. This is an example of the population growth that is occurring due to the expansion of the health system and Campbell University’s health science program expansion. I think we keep this question however, we should better analyze the reasons people are moving to Harnett because similar to before it does not seem to be capture in the choices we provided.

1. If you moved to Harnett County in the last 4 years, why did you do so?		
Answer Options	Response Percent	Response Count
There is a good health care system in Harnett County	4.7%	17
Harnett County is a good place to raise children	7.5%	27
Harnett County is a good place to grow old	6.7%	24
There is plenty of economic opportunity in Harnett County	1.7%	6
Harnett County is a safe place to live	5.6%	20
I moved here for a job	20.6%	74
Other (please specify)	53.5%	192
<i>answered question</i>		359
<i>skipped question</i>		515

2. In your opinion, how large a problem do you think each community issue listed below is in Harnett County? Please check in the box whether you think it is a major problem, a problem, a minor problem or not a problem.							
Answer Options	Major Problem	Problem	Minor Problem	Not a Problem	Don't Know	Major Problem	Response Count

						Percent	
Lack of affordable housing	124	128	188	175	134	14.6%	849
Unemployment and under-employment	313	317	107	40	74	36.8%	851
Shortage of recreational programs and facilities (parks, trails, etc.)	197	239	179	185	53	23.0%	853
Shortage of cultural programs (music, art, theater, etc.)	205	242	215	123	69	24.0%	854
Shortage of job training and other educational opportunities for adults	167	244	192	149	98	19.6%	850
Lack of after school and summer youth activities	211	230	147	128	142	24.6%	858
High quality schools (K-12)	156	195	161	222	116	18.4%	850
Racial and ethnic discrimination	117	140	233	266	96	13.7%	852
Lack of public transportation	227	253	159	133	86	26.4%	857
Crime	185	319	232	64	57	21.6%	857
Animal Control	110	176	239	209	114	13.0%	848
Inadequate water supply or quality	27	62	157	501	102	3.1%	848
Poor air quality	22	55	159	513	101	2.6%	851
Safe roads and bridges	63	136	257	343	58	7.3%	857
<i>answered question</i>							869
<i>skipped question</i>							5

*Problem percent represents the sum of those who thought the issue is a major problem, problem and minor problem as a proportion of those who participated in the question.

3. In your opinion, how large a problem do you think each social issue listed below is in Harnett County? Please check in the box whether you think it is a major problem, a problem, a minor problem or not a problem.							
Answer Options	Major Problem	Problem	Minor Problem	Not a Problem	Don't Know	Major Problem Percent	Response Count

Difficulty earning a living and making ends meet / poverty	258	325	154	70	46	30.2%	853
Isolation and loneliness among the elderly	167	312	162	74	137	19.6%	852
Homelessness	72	203	293	112	171	8.5%	851
Illiteracy	115	264	221	78	169	13.6%	844
Lack of money management skills and other life management skills	199	314	166	61	109	23.4%	849
Lack of appropriate parenting skills	237	297	139	71	107	27.8%	851
Child abuse and neglect	141	295	178	67	171	16.5%	852
Abuse and neglect of the elderly	122	252	198	85	196	14.3%	853
Domestic violence and abuse	162	189	179	59	162	19.0%	851
Juvenile delinquency	217	295	154	54	133	25.4%	853
Gangs and gang violence	165	279	191	72	142	19.4%	849
Unsafe school environment/bullying	134	284	201	74	154	15.8%	847
<i>answered question</i>							847
<i>skipped question</i>							14

4. In your opinion, how large a problem do you think each unhealthy behavior listed below is in Harnett County?							
Answer Options	Major Problem	Problem	Minor Problem	Not a Problem	Don't Know	Major Problem Percent	Response Count
Alcohol abuse	246	326	151	40	88	29.0%	851
Use of illegal drugs / substance abuse	365	300	93	27	69	42.7%	854
Overweight / obesity	375	302	99	22	56	43.9%	854
Tobacco use (all types)	329	312	111	45	59	38.4%	856
Drinking and driving	294	318	120	33	87	34.4%	853
Reckless / careless driving	237	331	154	41	86	27.9%	849
Driving or riding	151	287	201	70	138	17.8%	847

without using seatbelts or proper infant / child seats							
Lack of physical activity or exercise	263	330	130	62	71	30.7%	856
Food Safety/ in your home	53	104	190	405	95	6.3%	847
Poor eating habits / lack of good nutrition	196	285	182	127	65	22.9%	855
Unsafe sexual practices	222	254	114	73	185	26.2%	848
Teen pregnancy	246	312	119	32	140	29.0%	849
answered question							861
skipped question							13

5. In your opinion, how large a problem do you think each health problem listed below is in Harnett County? Please check in the box whether you think it is a major problem, a problem, a minor problem or not a problem.

Answer Options	Major Problem	Problem	Minor Problem	Not a Problem	Don't Know	Major Problem Percent	Response Count
Heart Disease	289	315	74	27	145	34.0%	850
Cancer	312	314	78	21	125	36.7%	850
Asthma	173	328	148	37	159	20.5%	845
Stroke	212	317	110	30	172	25.0%	841
Diabetes	385	268	51	24	122	45.3%	850
Suicide	80	218	215	82	251	9.5%	846
Oral/Dental Health	195	291	156	47	157	23.0%	846
Mental Illness	248	277	118	46	153	29.4%	842
Locating a Health Provider	144	212	184	190	104	17.3%	834
answered question							856
skipped question							18

6. In the last year, have you gotten health-related information from any of the following? Check all that apply

Answer Options	Response Percent	Response Count
Friends and family	52.8%	428
Newspaper/Magazine/TV	42.8%	347
Health Department	26.5%	215

School	9.7%	79
Hospital	43.6%	354
Doctor/Nurse/Pharmacist	73.9%	599
Help Lines/2-1-1	2.2%	18
Church	13.2%	107
Internet	53.4%	433
Other (please specify)	3.8%	31
<i>answered question</i>		811
<i>skipped question</i>		63

73.9% of respondents receive their health related information from their doctor/nurse or pharmacist. The next highest percentage was from the internet with 53.4% however, again this might be due to a survey sample bias.

7. About how long has it been since you last visited a health care provider for a routine check up? This does not include a visit because you were sick or pregnant.		
Answer Options	Response Percent	Response Count
Within the last year	74.7%	641
1-2 years ago	14.7%	126
3-5 years ago	4.2%	36
5+ years ago	2.6%	22
I have never had a routine checkup	0.9%	8
I do not have a doctor or other provider	2.9%	25
<i>answered question</i>		858
<i>skipped question</i>		16

The percentage of respondents receiving routine healthcare visits seems high maybe there should be some consideration of clarifying the definition of routine within the question.

8. When you are sick, do you feel that you are able to see your primary care provider in a timely way?		
Answer Options	Response Percent	Response Count
Yes	83.8%	703
No	16.2%	136
If No, What do you do?		100
<i>answered question</i>		839
<i>skipped question</i>		35

Again, the response percent high indicating respondents are able to access healthcare.

9. About how long has it been since you last visited a dentist for a routine check up? Do not include times you visited the dentist because of an emergency.

Answer Options	Response Percent	Response Count
Within the last year	58.1%	500
1-2 years ago	17.5%	151
3-5 years ago	10.5%	90
5+ years ago	7.5%	65
I have never been to the dentist for a routine checkup	0.7%	6
I do not have a dentist	5.7%	49
<i>answered question</i>		861
<i>skipped question</i>		13

The percentage of respondents receiving routine dental visits seems high maybe there should be some consideration of clarifying the definition of routine within the question.

10. When you have a toothache do you feel that you are able to see your dentist in a timely way?		
Answer Options	Response Percent	Response Count
Yes	76.3%	639
No	7.4%	62
No, I do not have a dentist	8.4%	70
If No, what do you do	8.2%	69
<i>answered question</i>		838
<i>skipped question</i>		36

Again, the response percent high indicating respondents are able to access dental care.

11. During the past week, other than your regular job, did you engage in any exercise activity that lasts at least thirty minutes?		
Answer Options	Response Percent	Response Count
Yes (if yes, go to the next question)	62.9%	531
No (if no, skip to question 14)	37.1%	313
<i>answered question</i>		844
<i>skipped question</i>		30

12. Since you said "yes", how many times would you say you engaged in this activity during the past week?			
Answer Options	Response Average	Response Total	Response Count
Number of times	3.69	1,884	519
<i>answered question</i>			519
<i>skipped question</i>			355

From questions 11 and 12 most respondents seems to exercise for at least 30 minutes for 3 times a week.

13. Since you said "yes" in question 11, where do you go to exercise of engage in physical activity? Select all that apply

Answer Options	Response Percent	Response Count
Public Swimming Pool	4.1%	21
Private Gym	19.3%	99
Harnett County Parks	13.6%	71
Home	69.8%	358
Other (please specify)	24.6%	126
<i>answered question</i>		522
<i>skipped question</i>		352

69.8% of the respondents who engage in physical activity at least 30 minutes did so at home. This is an increase from 44.8% in the 2010 CHA.

14. Since you said no, what were the reasons? Check all that apply.		
Answer Options	Response Percent	Response Count
my job is physical or hard labor	10.5%	32
exercise is not important to me	2.3%	7
I don't have access to a facility that has the things I need, like a pool, golf course, or a track	17.7%	54
I don't have enough time to exercise	41.3%	126
I would need childcare and I don't have it	10.5%	32
I don't know how to find exercise partners or teams	7.5%	23
I don't like to exercise	19.7%	60
It costs too much to exercise (equipment, gym shoes)	19.3%	59
There is no safe place to exercise	7.5%	23
I'm too tired to exercise	33.4%	102
I'm physically disabled	13.8%	42
Other		29
<i>answered question</i>		305
<i>skipped question</i>		569

The answers to this questions differ significantly from the 2010 CHA questionnaire. In 2010, 71.2% of the respondents "did not see a need to exercise" whereas in our 2013 CHA questionnaire the highest response (41.3%) was "I don't have enough time to exercise" and second highest response (33.4%) was "I'm too tired to exercise" implying that there is at least a desire to exercise. It would be interesting to further investigate this issues with physical exercise since being obese and overweight are considered a health problem.

15. In an average week, how many servings do you eat of fruits?		
Answer Options	Response Percent	Response Count
1-2	24.0%	199

3-4	32.1%	266
5 or more	40.7%	337
I never eat fruit	3.3%	27
answered question		829
skipped question		45

40.7% of the respondents are getting more than 5 fruits a day that is close to the recommended 9 servings of fruit a day.

16. In an average week, how many servings do you eat of vegetables?		
Answer Options	Response Percent	Response Count
1-2	9.5%	78
3-4	24.1%	199
5 or more	65.3%	539
I never eat vegetables.	1.1%	9
answered question		825
skipped question		49

65.3 of the respondents are getting more than 5 vegetables a day.

17. Do you use any type of tobacco products?		
Answer Options	Response Percent	Response Count
Yes	16.9%	142
No	83.1%	698
answered question		840
skipped question		34

18. This question is for males only. If you are over the age of 40, do you have an annual prostate exam?		
Answer Options	Response Percent	Response Count
Yes	26.2%	75
No	19.2%	55
N/A (Under age 40 or female)	54.5%	156
answered question		286
skipped question		588

In 2010 only 17.3% of males received an annual prostate exam as compared to 2013 with 26.2%.

19. This question is for females only. If you are over 40, do you have an annual mammogram?		
Answer Options	Response Percent	Response Count
Yes	55.5%	381
No	12.5%	86
N/A (Under age 40 or male)	31.9%	219
answered question		686

<i>skipped question</i>	188
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In 2010 only 26.1% of females received an annual mammogram as compared to 2013 with 55.5%.

20. This question is for females only. If you are over age 18, do you have a pap smear at least every other year?
--

Answer Options	Response Percent	Response Count
Yes	73.0%	512
No	19.9%	140
N/A (Under age 18 or male)	7.0%	49
<i>answered question</i>		701
<i>skipped question</i>		173

In 2010 only 46.3% of females received an annual pap smear as compared to 2013 with 73%.

21. If you are over age 50, have you ever had a colon cancer screening?
--

Answer Options	Response Percent	Response Count
Yes	40.2%	297
No	18.3%	135
N/A (Under age 50)	41.5%	306
<i>answered question</i>		738
<i>skipped question</i>		136

In 2010 only 38.0% of respondents ever had a colon cancer screening as compared to 2013 with 40.2%. This is disappointing considering almost all the other cancer-related screening increased at least 10% if not, doubled. I agree with the previous comments. Colon cancer is one of the most common and yet preventable cancers. Attention should be given to educating the community on how to prevent colon cancer.

22. If yes, did you ever have a colonoscopy?

Answer Options	Response Percent	Response Count
Yes	73.1%	299
No	26.9%	110
<i>answered question</i>		409
<i>skipped question</i>		465

23. Where do you usually go for health care when you are sick? Please choose only one answer.
--

Answer Options	Response Percent	Response Count
Doctor's Office	77.8%	832
Health Department	2.7%	33
Hospital Emergency Room	7.0%	59
Urgent Care Center	5.9%	48

Drug Store/Pharmacy	2.8%	24
Rural Health Center (First Choice/CommWell)	2.2%	20
Veteran's Administration (VA)	1.5%	12
Other (please specify)		32
<i>answered question</i>		827
<i>skipped question</i>		47

In the 2010 CHA questionnaire 67.5% and now it has increased to 77.8% that depend on their doctor when they are sick.

24. Is this place in Harnett County?		
Answer Options	Response Percent	Response Count
Yes	62.8%	493
No	37.1%	291
<i>answered question</i>		784
<i>skipped question</i>		90

There is an increase in respondents who go to Harnett County to see their doctor from 58% in 2010 to now 62.8%.

25. If no, what county is it located.	
Answer Options	Response Count
	269
<i>answered question</i>	269
<i>skipped question</i>	605

26. If you or a family member needed care at a hospital, and it could be provided locally, where would you likely seek it?		
Answer Options	Response Percent	Response Count
Wherever my doctor tells me to go	21.9%	176
Betsy Johnson Hospital-Dunn	22.2%	178
Central Harnett Hospital-Lillington	24.2%	194
I would not go to a local hospital	28.0%	255
Other/ or comments		95
<i>answered question</i>		803
<i>skipped question</i>		71

46.4 % of the respondents either go to the Betsy Johnson or Central Hartnett Hospital.

27. If you stated you would not go to a local hospital please indicate reason(s): Check all that apply		
Answer Options	Response Percent	Response Count
All of my physicians are outside the county.	35.8%	113
I have experience with other hospitals and would prefer to go back there.	42.1%	133

I do not have confidence in local physicians for hospital care.	23.4%	74
I do not have confidence in any of the local hospital(s).	43.4%	137
I have not been able to find a local physician to meet my needs	8.6%	27
If this is the case, please indicate the type of physician you feel you need.		50
<i>answered question</i>		316
<i>skipped question</i>		558

43.3 % of the respondents did not have confidence in any of the local hospital and that could be a focus area.

28. If you have not been able to find a local physician to meet your needs, please indicate the type of physician you feel you need.	
Answer Options	Response Count
	52
<i>answered question</i>	52
<i>skipped question</i>	822

29. What kind of health care coverage or insurance, do you have? Check all that apply		
Answer Options	Response Percent	Response Count
Medicare	20.4%	163
Medicaid	8.5%	68
VA Benefits	4.8%	38
Private Insurance (e.g., Blue Cross)	68.2%	544
I do not have any health care coverage.	11.8%	112
Other (please specify)		94
<i>answered question</i>		816
<i>skipped question</i>		58

The most common healthcare coverage is private insurance.

30. If you have private insurance, who pays the monthly cost or premium?		
Answer Options	Response Percent	Response Count
I (or my family)	22.1%	151
My employer	20.2%	138
My employer and I both contribute	40.0%	273
I do not have private insurance	17.6%	120
Other (please specify)		24
<i>answered question</i>		682
<i>skipped question</i>		192

The most common response was “my employer and I both contribute”.

31. What other people living in your household do not have health care coverage or insurance?		
Answer Options	Response Percent	Response Count
My spouse or partner	17.2%	110
My grandchildren	1.9%	12
My child(ren)	15.2%	97
No one (everyone has coverage)	71.7%	459
Other (please specify)		37
<i>answered question</i>		640
<i>skipped question</i>		234

The number of children not covered by health insurance increased from 6.1% in 2010 to 15.2% now.

32. In a disaster, where would you likely look for information?		
Answer Options	Response Percent	Response Count
TV	62.3%	518
Computer/Internet	20.6%	171
Radio	15.1%	128
Print Media (Newspaper, Magazine)	1.8%	15
Other (please specify)		26
<i>answered question</i>		832
<i>skipped question</i>		42

Similar to before a high percentage of respondents will dependent on TV/computer/internet for disaster information.

33. Does your family have a basic emergency supply kit set aside for immediate use that could sustain all members of the family for 72 hours?		
Answer Options	Response Percent	Response Count
Yes	36.2%	305
No	63.8%	538
<i>answered question</i>		843
<i>skipped question</i>		31

The response rate of this question is similar to 2010. Knowledge of the basic emergency supply kit seems to still be an issue.

34. Do you have a plan for how to communicate with family members in the event of an emergency and everyone is away from home?		
Answer Options	Response Percent	Response Count
Yes	57.7%	488
No	42.3%	361

<i>answered question</i>	849
<i>skipped question</i>	25

The percentage of respondents (57.7%) who have a plan to communicate with family member in the event of an emergency actually decreased compared to the 2010 CHA questionnaire which was 72.7%.

35. Are you aware of an emergency preparedness plan for Harnett County?		
Answer Options	Response Percent	Response Count
Yes	37.0%	305
No	63.0%	534
<i>answered question</i>		839
<i>skipped question</i>		35

The percent of respondents that are aware of the emergency preparedness plan for Harnett County has increased from 19.5% in 2010 to 37.0% in 2013.

36. What is the zip code for your home?	
Answer Options	Response Count
	833
<i>answered question</i>	833
<i>skipped question</i>	41

37. How long have you lived in Harnett County?		
Answer Options	Response Percent	Response Count
Less than a year	5.7%	46
1-5 years	13.7%	111
6-10 years	11.4%	92
11-15 years	8.4%	68
16-20 years	7.3%	59
More than 20 years	53.5%	433
<i>answered question</i>		809
<i>skipped question</i>		65

In comparing to the 2010 results the percent seems similar however, this question implies the opposite of the first questions since 359 respondents said they moved here in the last four years whereas in this question only 157 respondents moved within the last 5 years. It is difficult to explain the discrepancy.

38. Do you work outside of Harnett County?		
Answer Options	Response Percent	Response Count
Yes	13.2%	108

No	87.9%	709
<i>answered question</i>		817
<i>skipped question</i>		57

The percent of respondents working outside Harnett has decreased to from 21.0% in 2010 to 13.2% now.

39. What is your age?		
Answer Options	Response Percent	Response Count
Under 18	0.2%	2
18-24	6.1%	52
25-34	15.8%	134
35-44	17.1%	145
45-54	23.8%	201
55-64	18.7%	158
65-75	9.7%	82
Over 75	8.5%	72
<i>answered question</i>		846
<i>skipped question</i>		28

In the 2010 CHA questionnaire 17.6% of the respondents were between the ages of 65-75 whereas, now with this questionnaire only 9.7% are between those ages.

40. Are you:		
Answer Options	Response Percent	Response Count
Male	19.9%	168
Female	78.0%	660
Prefer not to respond	2.1%	18
<i>answered question</i>		846
<i>skipped question</i>		28

We have even more of a disparity among gender in the 2013 CHA questionnaire with 78% female as compared to 63.6% in the last CHA questionnaire in 2010.

41. How would you identify your race or ethnicity?		
Answer Options	Response Percent	Response Count
White	73.2%	593
Black	21.7%	176
Hispanic/Latino/Latina	3.7%	30
Native American	0.01%	5
Asian/Pacific Islander	0.01%	6
Other (please specify)	1.7%	14
Prefer not to respond		24

<i>answered question</i>	834
<i>skipped question</i>	40

I compared races/ethnicity over the 2006, 2010 and 2013 CHAs at the beginning of the summary.

42. What is your relationship status?		
Answer Options	Response Percent	Response Count
Married	58.0%	484
Single	16.3%	137
Partnered	3.4%	29
Divorced	9.8%	83
Widowed	9.4%	79
Prefer not to respond	3.7%	31
<i>answered question</i>		843
<i>skipped question</i>		31

The percent of respondents that are single reduced from 34.9% in 2010 to 16.3% in 2013 probably due to the options possible in this survey compared to the previous survey.

43. What is the highest educational level you have completed?		
Answer Options	Response Percent	Response Count
Less than high school	5.7%	48
High school graduate or equivalent (diploma or GED)	17.8%	149
Some college, but no degree (includes community college/vocational training)	27.9%	234
Associate degree in college (e.g., AA)	17.5%	147
Bachelor's degree in college (e.g., BA, BS)	19.4%	163
Advanced degree in college (e.g., Masters or Doctoral degree)	11.7%	98
Other (please specify)		7
<i>answered question</i>		839
<i>skipped question</i>		35

There has been an increase in education level from the last CHA in the categories of associate, bachelor and advanced degrees. The differences between 2010 and 2013 are in a summary table above.

44. What is your employment status? Please check all that apply.		
Answer Options	Response Percent	Response Count
Employed full-time	63.4%	529
Employed part-time	9.0%	75

Unemployed	4.7%	39
Homemaker	4.3%	36
Retired	17.2%	144
Student	3.5%	29
Disabled; unable to work	2.4%	20
Seasonal worker	0.4%	3
Self-employed	2.8%	23
<i>answered question</i>		835
<i>skipped question</i>		39

There is an increase in the number of respondents who are employed full-time from 22.2% in 2010 to 63.4% in 2013.

45. Approximately what was your adult household income last year? (Household income is the total before-tax income of the adults living in your household.)		
Answer Options	Response Percent	Response Count
Less than \$20,000	21.6%	166
\$20,000 to \$29,999	13.2%	101
\$30,000 to \$49,999	19.3%	148
\$50,000 to \$74,999	19.9%	153
\$75,000 to \$99,000	11.9%	91
\$100,000 or more	14.1%	108
<i>answered question</i>		767
<i>skipped question</i>		107

All the household income levels above \$50,000 doubled compared to the last CHA questionnaire. Please see the summary tables above.

46. How many children under the age of 18 does this household income support?		
Answer Options	Response Count	Response Percent
0	328	50.5%
1	143	22.0%
2	114	17.6%
3	43	6.6%
4	12	1.8
5	5	.8%
6	1	.1%
7	1	.1%
8	1	.1%
12	1	.1%
<i>answered question</i>	649	
<i>skipped question</i>	225	

The percentage of respondents without children decrease with the 2013 CHA, it was 62.5% in the 2010 CHA.

47. How many adults age 18 and older does this household income support?		
Answer Options	Response Count	Response Percent
0	83	11.7%
1	192	27.0%
2	338	47.6%
3	74	10.4%
4	21	3.0%
5	1	.1%
6	1	.1%
<i>answered question</i>		710
<i>skipped question</i>		164

Similar to the 2010 (55.2%), most household incomes supported 2 adults age 18 and older (47.6%) in 2013.

48. Are you the primary caregiver for any of the following?		
Answer Options	Response Percent	Response Count
Physically or mentally disabled or special needs child (under age 18)	13.8%	17
Physically or mentally disabled or special needs adult age 18-64	27.6%	34
Senior adult (age 65 or older)	48.0%	59
Foster child (under age 18)	3.3%	4
Grandchild (under age 18)	17.1%	21
<i>answered question</i>		123
<i>skipped question</i>		751

Most (86.9%) of the responses were no.

49. Do you have access to the internet?		
Answer Options	Response Percent	Response Count
Yes	86.2%	728
No	13.8%	117
<i>answered question</i>		845
<i>skipped question</i>		29

Most of the response to this question is yes however, this may be due to the survey sampling bias since the survey was available via the internet.