

2015



Wayne County Community Health Assessment

Final Revision 5/2017



WAYNE MEMORIAL HOSPITAL
an affiliate of Wayne Health Corporation



Acknowledgements

The 2015 Wayne County Community Health Assessment was developed through a collaborative effort of community partners to assist with enhancing the health of our community. Thank you to the following individuals and their organizations who participated in the development of the Community Health Assessment (CHA).

Davin Madden, MHSA, REHS	Wayne County Health Department
Shamika Howell, MPA	Wayne County Health Department
Evelyn Coley, RN, BSN, MSA	Wayne County Health Department
Ta-Kisha Darden, BS, CHES	Wayne County Health Department
Celita Graham, BS	Wayne County Health Department
Ashley Whitaker, Intern	Wayne County Health Department
Kim Larson, RN, PhD	Wayne County Board of Health
Joseph Hackett, RN	Wayne County Board of Health
Rebecca Craig, MBA	Wayne Memorial Hospital
Tammie Brown	Wayne Memorial Hospital
Sissy-Lee-Elmore, MBA, MPA	Wayne Action Teams for Community Health (WATCH)
Karen Webb, MEd	Wayne Action Teams for Community Health (WATCH)
Naisha Coley, MPH	Wayne Action Teams for Community Health (WATCH)
Justin Raines, PhD	East Carolina Center for Survey Research
Randy Knebel, M.A.	East Carolina Center for Survey Research
Tiffany Pires, B.A.	East Carolina Center for Survey Research

In addition to these individuals we appreciate the residents of Wayne County who took the time to respond to the 2015 Community Survey as well as those who participated in the focus groups. An overarching goal was to give our citizens a voice in this process and the survey results and focus group views are included to give texture to statistical data.

Appreciation is also expressed to the following agencies that were able to distribute and collect surveys in the local community:

Wayne County Health Department
Wayne Memorial Hospital
Goldsboro Family YMCA
Wayne County Public Libraries (Goldsboro, Pikeville, Fremont, Mount Olive)
Goshen Medical Center, Inc.

Table of Contents

Acknowledgments	2
Purpose	4
Team Composition	4
Process Overview	4
Outcomes	5
County Overview	6
Demographics	6
Age and Sex Distribution	6
Race/Ethnicity	7
Economic Factors	8
Income and Poverty	8
Employment	8
Education	9
Crime and Violence	10
Maternal Health Indicators	10
Birth Outcomes	11
Infant Mortality	12
Mental Health	13
Suicide	13
Smoking/Tobacco	13
Leading Causes of Death	14
Age-Specific Death Rates	14
Race/Sex- Specific Death Rates	15
Health Conditions/Status	15
Cancer	16
Heart Disease	16
Diabetes	16
Asthma	16
Obesity and Physical Activity	17
Communicable Diseases	17
HIV/AIDS	17
Syphilis	18
Gonorrhea	18
Chlamydia	18
State and Peer County Comparisons	18
Review of Primary Data	21
Focus Groups	21
Key Findings from focus Groups	22
Survey Characteristics	25
Survey Results	26
Appendix A Supplemental Graphs/Tables	34
Appendix B Community Survey	41
Appendix C— References	49
Appendix D— Health Care Resources	51

Purpose

To conduct this community health assessment, Wayne County Health Department and Wayne Memorial Hospital partnered to identify the community health needs in Wayne County.

The purpose of this community health assessment is to examine the health status of the community to determine priority areas of focus. These priorities areas came from the opinions of residents and leaders in the community; therefore this process is considered broad and fair. Action plans for addressing these priorities will be developed beginning spring 2016.

Team Composition

Representatives from the Wayne County Health Department, Wayne Memorial Hospital, Wayne County Board of Health, and WATCH cooperatively conducted the community health assessment. The collaboration identified the types and sources of data to be collected and determined the methods for collecting input from the community concerning health related issues.

Process Overview

The community health assessment has several requirements. One requirement was the collection of primary data from a health opinion survey and community focus group discussions. The health opinion survey was adapted from the NC Division of Public Health, Community Health Assessment Guidebook. The second requirement was compiling secondary data. Primary data is collected locally from the community residents and secondary data is collected by outside sources (state and national).

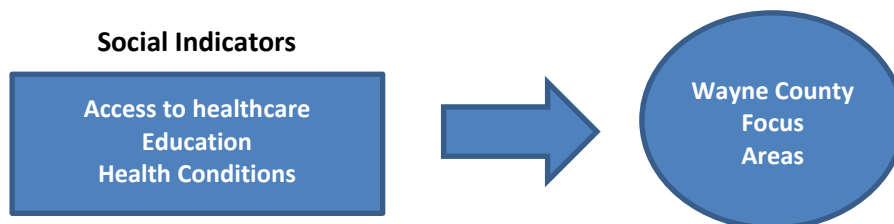
These three sources of data have been combined to provide a comprehensive look at the health status of Wayne County for this 2015 report, using the process illustrated below. This process of collective action is how the Healthy Wayne Task Force determines which priorities to focus on. The surveys collected, statistical review, and focus groups results will be studied in depth to evaluate and make recommendations to funders on where resources should be allocated to make the most improvement for better health in Wayne County.

A review of secondary data was conducted by examining county level health data primarily compiled by the NC State Center for Health Statistics. Examples of such data included leading causes of death, health care resources and availability, and prevalence data from the Behavioral Risk Factor Surveillance Survey (BRFSS). Factors such as demographics, educational attainment, economic vitality and environmental issues within a community also influence health. This data was reviewed to determine the potential for impact on health status within the county. Moreover, a review of data across several years was conducted to determine trends in health status for Wayne County.

Focus areas were selected based on the convergence of stakeholder input, focus group and survey results as well as secondary data sources. Representatives of the Wayne County Board of Health received and reviewed the data that was conducted by the community health needs assessment team. Presentations were conducted to the Board of Health Members to determine the focus areas including the recommendations from the leadership team.

Outcomes

The community health assessment identified the following findings for the priority areas for 2016 – 2019. The key health indicators below both directly and indirectly influence community health.



A range of factors contribute to individual and population health and can be a factor in health disparities among varied populations. Therefore, our data suggested that our objectives were significant for the community and population health of Wayne County. In collaboration with other agencies, Wayne County is working together to bridge the gap of access to care, reduce crime and violence, accelerate educational opportunities, provide mental health services to our community and to maintain and develop resources that will be beneficial for the County's overall health and wellness. We have chosen three priorities that are aligned with the Healthy NC 2020 objectives. Our focus areas consist of access to health care, education and health conditions.

Access to health care

We chose to focus on access to health care due to the effects that it has on individuals within our community. Access to affordable, quality health care is important to an individual's physical, social, and mental health. It is also necessary for providers to offer affordable care, be available to treat patients, and be in relatively close proximity to patients. Health insurance helps individuals and families access needed primary care, specialists, and emergency care. Having access to care allows individuals to enter the health care system, find care easily and locally, and get their health needs met. Recent data indicate that 16% of Wayne County residents under age 65 were uninsured. Those with no or limited insurance are less likely to have a primary care provider and they also receive less preventive care, dental care, chronic disease management, and behavioral health counseling. Those that are uninsured or underinsured are often diagnosed later, with worse health outcomes, lower quality of life, and higher mortality rates.

Education

Education is important to the enhancement of health because it reduces an individual's need of health care services, the associated costs and lost of earnings. According to the determinates of health, education has a strong connection with an individuals ability to achieve a healthy lifestyle. Those with more years of education favor better health outcomes and healthier lifestyle behaviors and better education helps to promote and sustain healthy lifestyles and positive choices. Research not only indicates how education has a tendency to lead to better jobs and higher incomes, it also proves that better-educated individuals typically live longer, healthier lives than those with less education. The 2014 graduation rate for Wayne County Public Schools is 79.5 percent which falls below the State average of 83.9 percent. Although we do have at least one high school with a 100%

graduation rate it is important that we work with our local schools and community groups to increase the county's high school graduation rate to closely resemble the State as well as advocate for more continuing education post high school.

Health Conditions

According the 2015 North Carolina County Health Data Book, Cancer, heart disease, chronic lower respiratory diseases, and stroke are the leading causes of death in North Carolina. The Center for Disease Control and Prevention reveal that chronic diseases and conditions—such as the ones listed above along with type 2 diabetes, obesity, and arthritis—are among the most common, costly, and preventable of all health problems. Half of all American adults have at least one chronic condition, and almost one of three have multiple chronic conditions. Just as chronic diseases share many of the same causes, many of the same strategies and interventions can prevent them or lessen their severity. Because the county health rates compared higher than the state average in several categories, there is a need for continued efforts to increase prevention and disease self-management across the board.

County Overview

Wayne County was established in 1779 and has a total area of 557 square miles. Wayne County is located in the rural eastern portion of North Carolina, approximately 50 miles east of Raleigh and 90 miles west of Wilmington. Out of 100 North Carolina counties, Wayne County is the fourth highest-producing county, in term of farm cash receipts, from \$353 million in 2011 to almost \$500 million in 2014.¹ Agriculture has been a way of life here for many years, but the mechanization of farming has had a profound impact on the lifestyles of county residents, here and across the United States. Less active lifestyles at every age, and the convenience of technology has impacted health statistics, diet, exercise and health habits, while communicable disease have been brought under control. The surface of the county is level to gently rolling uplands with two primary waterways including the Neuse River and the Little River. The elevations are predominantly 120 to 145 feet above sea level. The climate is mild, with an average temperature of about 62 degrees and annual precipitation of about 50 inches of rainfall per year.²

Goldsboro is the county seat and is situated geographically in the center of the county. The municipalities located in Wayne County include the city of Goldsboro and the towns of Eureka, Fremont, Mount Olive, Pikeville, Seven Springs, and the Village of Walnut Creek. Wayne County has been named a metropolitan statistical area by the US government. Additionally, Wayne County is home to the Seymour Johnson Air Force Base, consisting of the 4th Fighter Wing and the 916th Air Refueling Wing.³

Demographics

Population, Sex and Age Distribution

As of July 2014, the estimated population for Wayne County was 124,456 which represents a 1.27% increase since the July 2010 U.S. Census report.⁴ However, from 2013-2014 there was a very slight decrease in the total population of 140 residents. The proportion of males and females residing in Wayne County has remained almost evenly split, with a slightly higher percentage of females at

51%. As of 2014, the median age for the county is 36.7 years, with 40% of the total population falling between the ages of 25 and 54. The school age population (ages 5-19) comprise 20% of the total population while the senior population (ages 65 and older) account for 13.6%. Both the sex and age distributions are similar to that of North Carolina.⁵

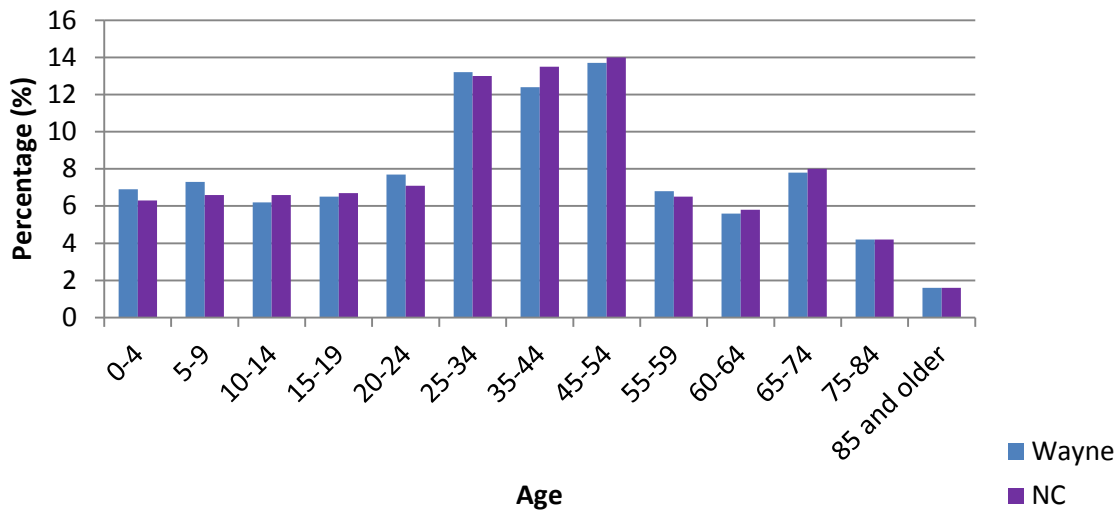


Figure 1: Wayne County and NC Population Distribution by Age (2014)

Race/Ethnicity

The county is composed of 54.9% that identified as white, 31.0% Black or African American and 10.5% Hispanic or Latino of any race. The remaining population is represented by American Indian, Alaska Native, Asian and those of other races or reporting two or more races.⁵ Compared to the state, Wayne County has a higher minority population due to the gradual increase of our Hispanic or Latino residents of any race. At the present time residents of a Mexican origin account for the majority of the Hispanic or Latino population.⁵

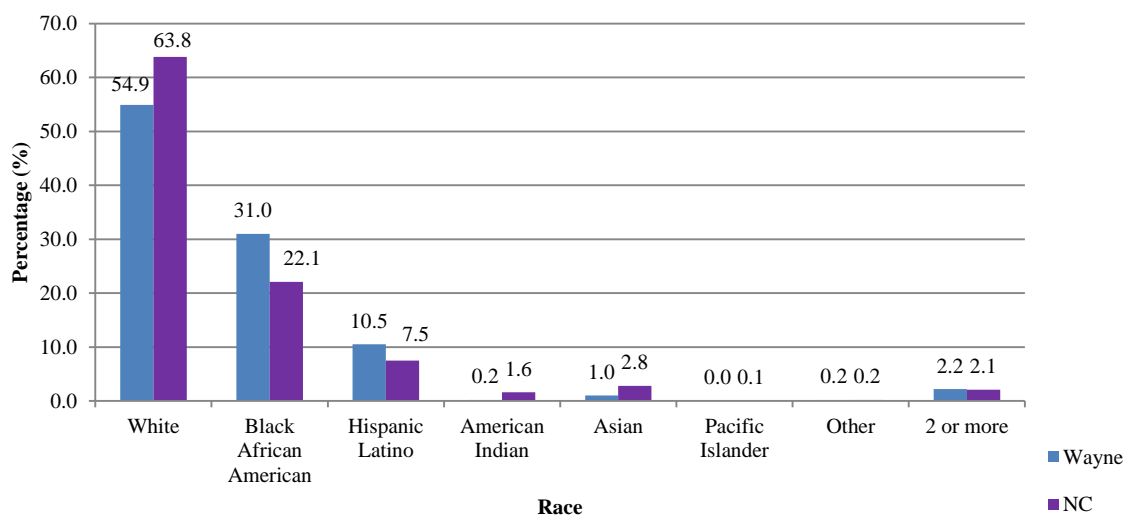


Figure 2: Wayne County and NC Population Distribution by Race (2014)

Economic Factors

Income and Poverty

The average median annual household income for Wayne County has remained stable for the last five years. According to the US Census Bureau from 2010-2014, the average per capita income in Wayne County was \$21,818, compared to \$25,608 in North Carolina and the median household income for Wayne County was \$41,172 compared to \$46,693 in North Carolina. In 2014 approximately one third of Wayne County households earned less than \$25,000 annually in income and benefits while 11.4% earned incomes of \$100,000 or more compared to 17.6 % in North Carolina. The poverty rate has increased over the last five years from 18.6% in 2010 to 22.5% in 2014 with the highest rates occurring in children under 5 years of age.⁶

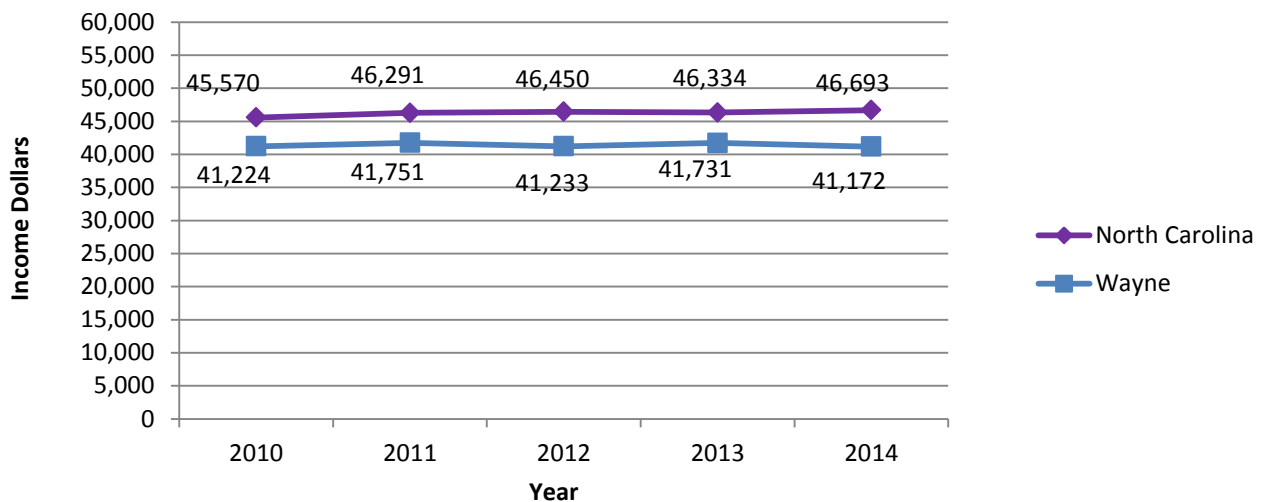


Figure 3: Wayne County and NC Median Annual Household Income

Unemployment

Wayne County's unemployment rate for 2014 was estimated at 6.4 percent, which is similar to the state rate of 6.3 percent. The unemployment rate for Wayne County is decreasing and has dropped nearly 3 percent since 2010. Within the last 10 years, the highest rate was reported in 2010 with 9.2 percent of the population being unemployed.⁷

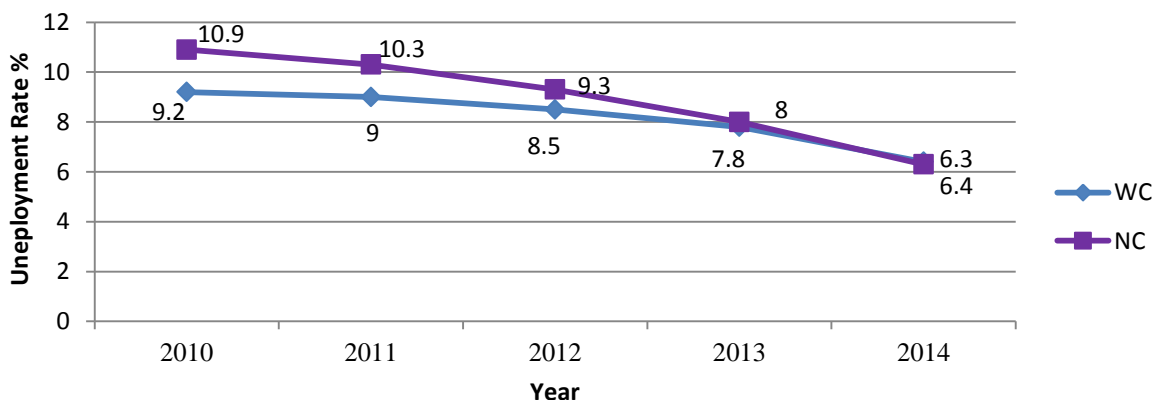


Figure 4: Unemployment Rates for Wayne County and North Carolina 2010-2014

Education

Graduation Rate/Educational Attainment

Among students who started high school in 2010-2011, 79.5 percent graduated with their class in 2014.⁸ For specific details on the 4-year high school graduation for each of the five county high schools in comparison to the overall rate of the county and North Carolina See *Table a-7 Appendix A*). During that same time frame 9.7 percent of the county's population aged 25 and older did not complete high school and 8.1 percent had less than a 9th grade education compared to 9.1 and 5.5 percent of North Carolina adults. Wayne County has a lower percentage of adults 17.2 percent who report having a bachelor's degree or higher compared to North Carolina adults 27.8 percent.⁶

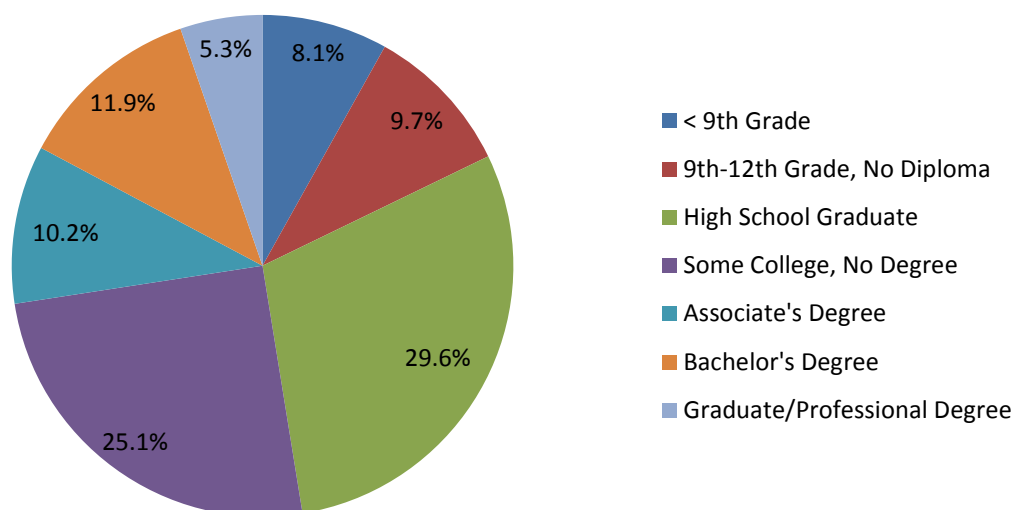


Figure 5: Wayne County Education Levels of Population 25 Years and Older (Five-Year Estimate, 2010-2014)

Dropout Rate

The high school dropout rate for Wayne County is on a downward trend decreasing from 4.84 per 1,000 during the 2009-2010 school year to 2.86 per 1,000 in 2013-2014⁹. A detailed breakdown on how Wayne County compares to the peer counties is located in Appendix A, Figure A-9.

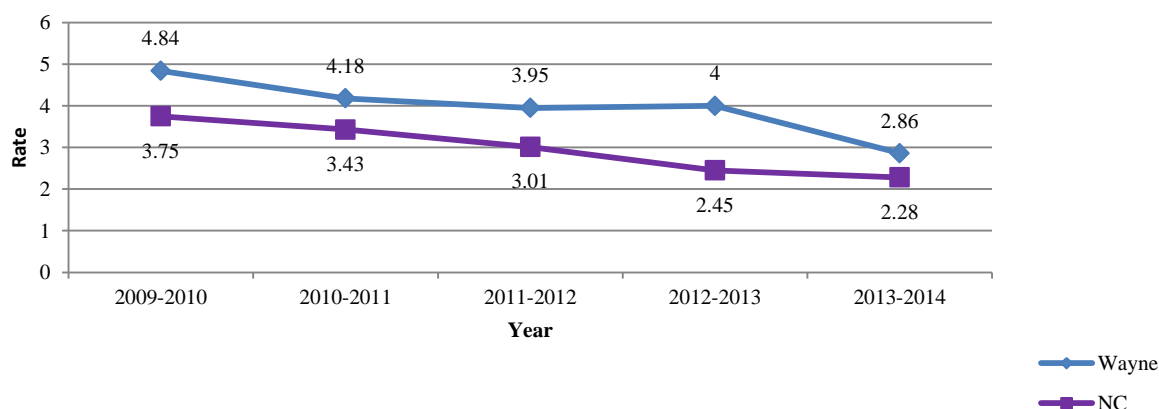


Figure 6: Wayne County and NC Dropout Rates per 1,000 Population

Crime and Violence

Despite the current perceptions about crime, crime rates are actually improving in both Wayne County and across North Carolina. The index crime rates, which include the total number of violent and property crimes, has dropped from 4,960.8 per 100,000 in 2010 to 3,779.6 per 100,000 in 2014, a decrease of about 24 percent over the last 5 years.¹⁰ However, when compared to neighboring counties the index crime rates are higher with the exception of Lenoir County.

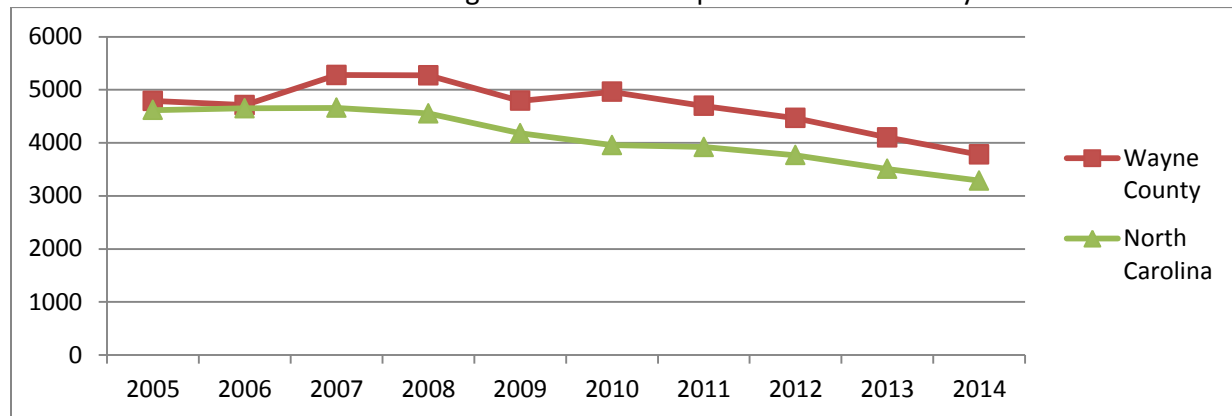


Figure 7: 10 year Index Crime Rates 2005-2014

As indicated below, there was an overall decrease in specific crimes offenses over a 10 year trend. Both the violent crimes (murder, rape, robbery and aggravated assault) and property crimes (burglary, larceny and motor vehicle theft) have steadily decreased since 2012.¹¹

Table 1: 10 Year Crime Statistics Trend for Wayne County 2005-2014

Offense	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Murder (Violent)	13	7	20	11	14	8	10	20	9	7
Rape (Violent)	8	8	10	5	11	6	5	8	5	2
Robbery (Violent)	146	142	131	155	129	151	126	110	104	104
Aggravated Assault (Violent)	356	434	362	372	348	420	402	395	356	342
Burglary (Property)	1,329	1,532	1,653	1,658	1,658	1,878	1,625	1,583	1,413	1,186
Larceny (Property)	3,362	3,010	3,385	3,256	2,922	2,886	3,163	3,000	2,867	2,761
Motor Vehicle Theft (Property)	256	284	347	428	290	250	282	263	212	205
Total	5,470	5,417	5,908	5,885	5,372	5,599	5,613	5,379	4,966	4,607

Maternal Health Indicators

Pregnancy/Abortion Rate

In Wayne County, the pregnancy rates overall for women of childbearing age (15-44) still remain higher than the state. Over the last 10 years the pregnancy rate decreased by 7 percent from a rate of 89.5 per 1,000 women in 2005 to 83.2 per 1,000 in 2014. Statewide, over the same period of time the pregnancy rate fell 12 percent from a rate of 82.2 per 1,000 women to 72.1 per 1,000 women.¹²

The abortions rates in Wayne County have decreased annually since 2010. In 2010, a total of 355 cases were reported at a rate of 14.7 per 1,000 women. In 2013, the total amount of cases dropped to 255 with a rate of 10.6 per 1,000 women.¹³

Teen Pregnancy Rate

In 2014, there was a rate of 38.5 births for every 1,000 adolescent female ages 15-19, or 146 babies born to a teenage mother. These rates have declined drastically (42 percent) from 2010 when the rate was 67.4 per 1,000, or 276 births adolescent births¹⁴. It is important to note that teenage pregnancy affects all races however, this disparity that affects more non-whites in comparison to whites. Please refer to Figure A-1 in Appendix A for detailed description of this health disparity.

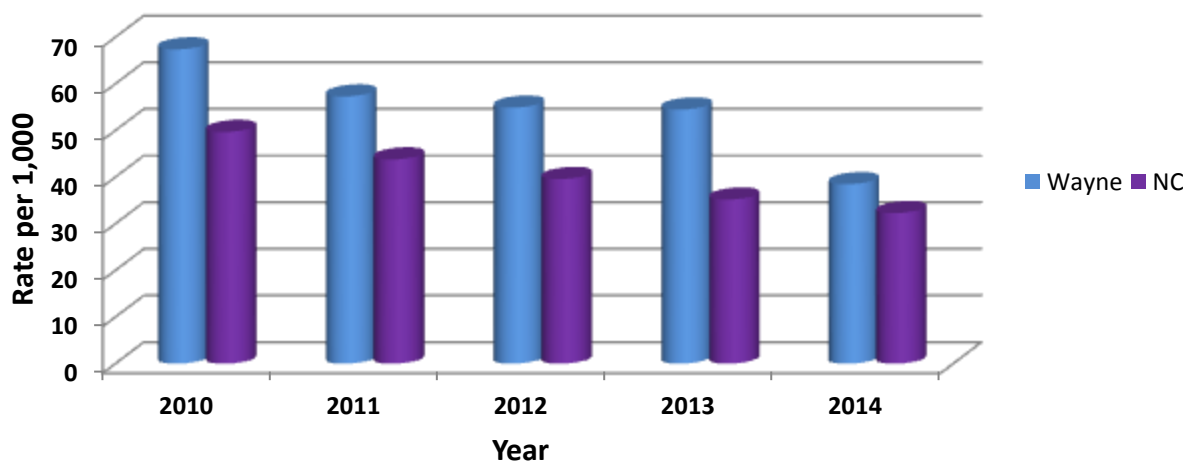


Figure 8: Teen Pregnancy Rates - Ages 15-19 for Wayne County and North Carolina 2010-2014

The efforts of health education, access to care, contraception and birth control (to include abstinence), and the endless public health partnership support between communities and schools have made this all possible. Evidence based programs such as Making Proud Choices, Wise Guys, and Reducing the Risk are supporting curriculums used as tools to engage youth, increase knowledge, and reduce the risk of teen pregnancies. To prevent a spike or reversal of past pregnancy rates, these efforts should not be decreased or eliminated.

Birth Outcomes

The percentage of babies born with a low birth weight (less than 2500 grams or 5.5 pounds) was 8.4 for Wayne County and 9.0 for North Carolina from 2009-2013. This percentage has slightly improved for Wayne County by falling from 9.2 percent in 2004-2008¹⁵. The percentage of mothers who smoked during pregnancy steadily decreased in Wayne County from 12.4 percent during 2005-2009 to 10.6 percent during 2011-2013 which equals the state rate¹⁶.

Adequate prenatal care is vital for both the mother and the baby. In Wayne County the percentage of women receiving prenatal care within the first trimester has decreased from 68.5 percent in 2012 to 66.9 percent in 2013¹⁷. Among racial/ethnicity groups for 2012-2013 there were different trends in each category. A higher proportion of white women received prenatal care in the first trimester however; the percentages have dropped from 78.4 in 2012 to 74.8 in 2013. Likewise the percentage of African American women receiving early prenatal care also declined from 62.2 in 2012 to 57.9 in 2013. The percentage of Hispanic women receiving first trimester care has notably increased from 54.0 in 2012 to 64.4 in 2013.

Infant Mortality

Infant mortality is the death of an infant prior to his or her first birthday. Since our most recent peak in 2011, infant mortality for Wayne County is declining overall at a rate of 4.1 which is lower than the state rate of 7.1¹⁸. The following graph depicts the total Infant Mortality Rates per 1,000 Live Births for Wayne County in comparison to NC from 2010-2014. The totals for North Carolina remained steady over the 5 year timespan whereas the rates in Wayne County did increase initially but fell well below the state rates starting in 2013. However, rates for infant mortality vary significantly by race and ethnicity. In 2014, white babies in Wayne County died at a rate of 2.5 per 1,000 live births. African-American babies died at a rate of 7.4 per 1,000 live births, and babies of Hispanic decent died at a rate of 3.0 per 1,000 live births.¹⁷

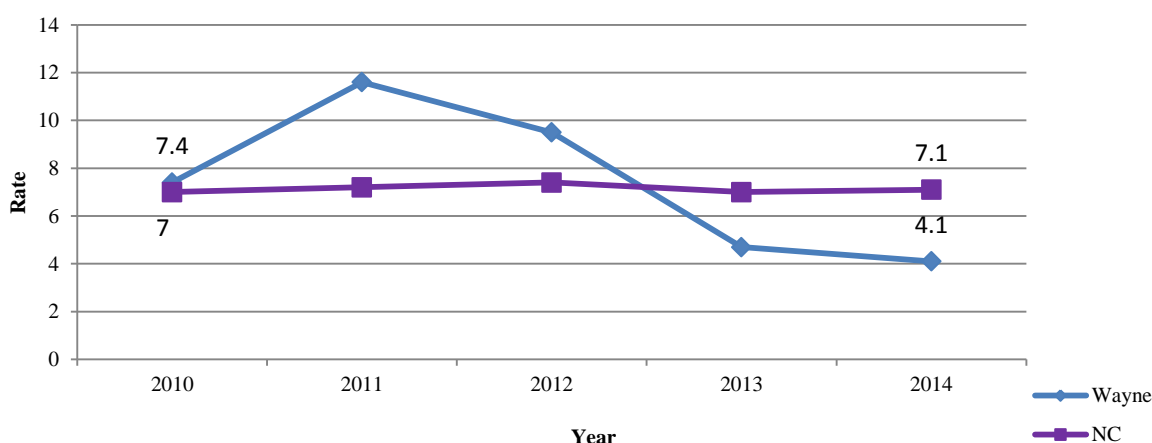


Figure 9: Wayne County and NC Infant Mortality Rates per 1,000 Live Births

Mental Health

Mental health has been identified as a top issue in Wayne County. Mental health issues continue to be a community concern stemming from rates associated with substance abuse, poverty, homelessness and unemployment. The University of North Carolina at Chapel Hill analyzes Emergency Department (ED) visits which are captured by the North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT). In Wayne County the ED admission rates for a person with any Mental Health Disorder of any kind, increased from 2009-2014.

Table2: Counts of ED visits by county of residence for Mental Health diagnosis in any of the 11 diagnosis code positions NC DETECT 2009-2014

Year	Total Mental Health ED Visits Wayne County	% ED Mental Health Visits Wayne County	% ED Mental Health Visits NC
2009	6350	11.73	8.14
2010	6107	11.98	8.66
2011	6625	11.65	8.91
2012	7963	12.95	9.27
2013	9975	16.38	8.88
2014	8824	13.99	9.36

Suicide

The suicide rate in Wayne County has fluctuated from 2009 to 2013 while the rates for the state remained steady.¹⁹ As of 2013, the suicide rate in Wayne County is back above the state rate. (See Appendix A, Figure A-2).

Smoking /Tobacco

Smoking and tobacco use are highly important risk factors related to cancer deaths and other chronic illnesses. The smoking statistics below are indicative of the prevalence in Eastern North Carolina and the state from 2009-2013.²⁰ As of 2013, the percentage of smokers in Eastern North Carolina closely resembles the state.

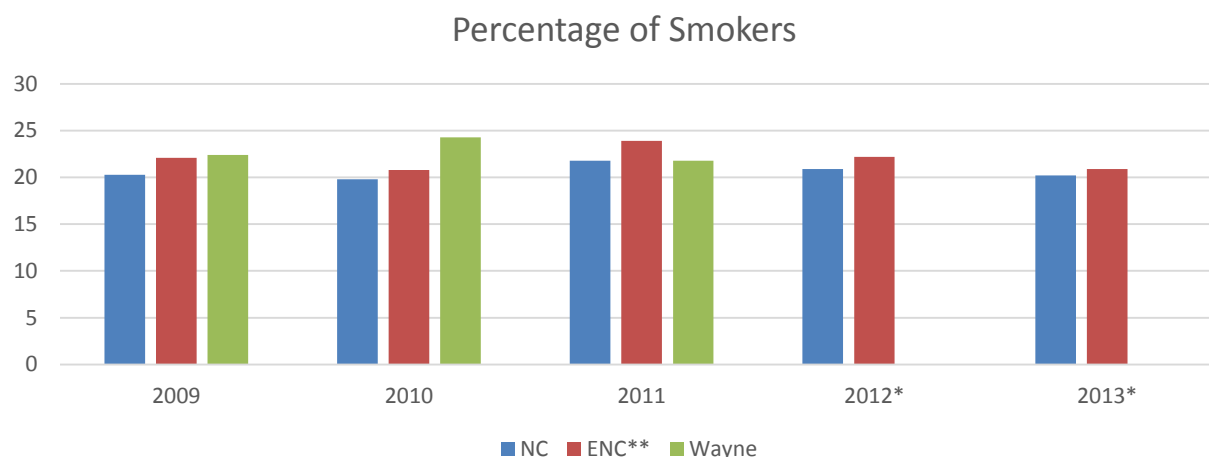


Figure 10: Percentage of Current Smokers, NC BRFSS 2009-2013

*Oversampling of this indicator was discontinued in 2011 for county specific data. **Wayne County along with the following counties represent Eastern NC (ENC): Beaufort, Bertie, Bladen, Brunswick, Camden, Carteret, Chowan, Columbus, Craven, Cumberland, Currituck, Dare, Duplin, Edgecombe, Gates, Greene, Halifax, Harnett, Hertford, Hoke, Hyde, Johnston, Jones, Lenoir, Martin, Nash, New Hanover, Northampton, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Pitt, Robeson, Sampson, Scotland, Tyrrell, Washington, Wayne, and Wilson counties

Leading Causes of Death

Cancer and heart disease are the top two leading causes of death in both Wayne County and North Carolina. The state exceeds Wayne County in deaths caused by respiratory diseases, unintentional injuries, Alzheimer's disease and pneumonia & influenza; whereas Wayne County exceeds the state in deaths caused by cancer, heart disease, cerebrovascular disease, diabetes and nephritis, nephrotic syndrome & nephrosis.²¹ A comparison of the top three leading causes of age specific deaths in 2010-2014 for all ages in Wayne County and North Carolina is depicted in Table A-1 in Appendix A. Death by motor vehicle injuries is a major cause of death for residents 0-39 years of age and cancer is a contributing cause of death of those 40 and older.

Table 3: Leading Causes of Death Wayne County, NC--All Ages-- 2009-2013 (Unadjusted Death rates per 100,000 population)

RANK	CAUSE OF DEATH:	# OF DEATHS	DEATH RATE	COMPARED TO STATE RATE
1	Cancer - All Sites	1,293	209.7	▲
2	Diseases of the heart	1,125	182.4	▲
3	Cerebrovascular disease	309	50.1	▲
4	Chronic lower respiratory diseases	257	41.7	▼
5	Diabetes mellitus	214	34.7	▲
6	Other Unintentional injuries	182	29.5	▼
7	Nephritis, nephrotic syndrome, & nephrosis	174	28.2	▲
8	Alzheimer's disease	152	24.7	▼
9	Motor vehicle injuries	99	16.1	▲
10	Pneumonia & influenza	97	15.7	▼

Age-Specific Death Rates

For the population age 0-19 in Wayne County, the death rate of 54.9 per 100,000 for perinatal deaths is higher than the state rate. For the safety of our youth it is important to note the death rate for motor vehicle injury of 10.1 per 100,000 is higher than the state rate of 6.5 within the same age category. For the county's population age 20-39, the death rate of 21.8 for motor vehicle deaths and 17.5 for homicide are higher than those for North Carolina. For the population age 40-64, the death rates of 213.3 for cancer, 142.9 for heart disease and 35.5 for diabetes are higher than those for North Carolina. For those in the age range of 65-84, the death rates of 942.2 for cancer, 730.1 for heart disease, and 235.2 for cerebrovascular diseases are higher than the state rates. Lastly, for those ages 85 and older in Wayne County, the death rate of 3217.2 for heart disease is lower than the 3718.6 rate for North Carolina.²¹

Race/Sex- Specific Death Rates

Cancer is the leading cause of death for all age and sex categories with the exception of white females where Heart Disease ranks as the leading cause of death. All, with the exception of white males have cerebrovascular disease as one of the top five indicators and the same is true for diabetes with the exception of white females. Overall, the death rates for cancer and heart disease are substantially higher in males for both whites and African-Americans.²²

Table 4: Top Five Leading Causes of Death in Wayne County by Race and Gender 2009-2013 (Age-Adjusted Death Rates per 100,000 per population).

	White Males	African-American Males	White Females	African-American Females
1	Cancer (246.8)	Cancer (262.5)	Heart Disease (133.8)	Cancer (157.6)
2	Heart Disease (228.4)	Heart Disease (229.4)	Cancer (154.8)	Heart Disease (146.1)
3	Unintentional Injuries (43.7)	Cerebrovascular Disease (71.1)	Respiratory Disease (56.8)	Diabetes Mellitus (51.2)
4	Respiratory Diseases (35.8)	Nephritis (61.3)	Cerebrovascular Disease (45.8)	Cerebrovascular Disease (44.9)
5	Diabetes Mellitus (31.2)	Diabetes Mellitus (59.7)	Alzheimers Disease (27.5)	Nephritis (44.1)

Health Conditions/Status

Cancer

The following information reports the comparison of cancer incidence rates, cancer mortality rates, and projected new cancer cases and deaths by type of cancer in North Carolina and Wayne County. From 2009 to 2013, the incidence rates for lung, colon and prostate cancers continue to be higher than state average.²³ From 2009 to 2013, the mortality rates for three of the four major types of cancer (colon, lung, and breast) were higher than the state. The mortality rate for prostate cancer, the fourth major type fell directly in line with the state rate.²⁴ Wayne County is projected to have 710 new cancer cases and 252 cancer deaths in 2015. Breast cancer is projected to have the most new cases in 2015 for Wayne County, whereas lung cancer is projected to have the most deaths in 2015.²⁵

The October 2015 Cancer Profiles fact sheet produced by the North Carolina Central Registry indicates that in 2013, 18,615 persons in North Carolina died from cancer, 239 of those were Wayne County residents. It goes without saying that cancer deaths are taking far too many lives, some even prematurely. For some cancers, such as lung cancer, prevention is more valuable than early detection. As for many other types of cancers early detection is extremely important. For example, breast cancer has a higher chance of being curable with early detection.

The number of new cases of cancer (cancer incident rates) in Wayne County compared to North Carolina from 2009-2013 indicates the following:

Table 5: Cancer Incidence Rates per 100,000 population 2009-2013

Place	Colon	Lung	Breast	Prostate
Wayne	46.7	77.0	145.3	144.9
NC	38.9	71.5	158.9	134.3

On the other hand, from 2010-2014, the cancer mortality rates indicate the following:

Table 6: Cancer Mortality Rates per 100,000 population 2010-2014

Place	Colon	Lung	Breast	Prostate
Wayne	17.3	58.8	26.2	22.6
NC	14.3	51.8	21.7	22.1

Heart Disease

The second leading cause of death in Wayne County is heart disease. Although heart disease rates in Wayne County are high, the rates have decreased dramatically since 2007 from 233.5 per 100,000 to 180.0 per 100,000 in 2014. From 2010 to 2014 the heart disease rate for Wayne County was slightly higher than that of the state.²⁶

Diabetes

Overall, diabetes is the fifth leading cause of death in Wayne County. The following graph shows a comparison of the percentage of the population diagnosed with diabetes among Wayne County and North Carolina. From 2009 to 2013, Wayne County has demonstrated a consistently higher percentage of residents diagnosed with diabetes when compared to the state. Furthermore, the percentage of the population of Wayne County diagnosed with diabetes has increased from 11.6 percent in 2009 to 13.1 percent in 2013.²⁷

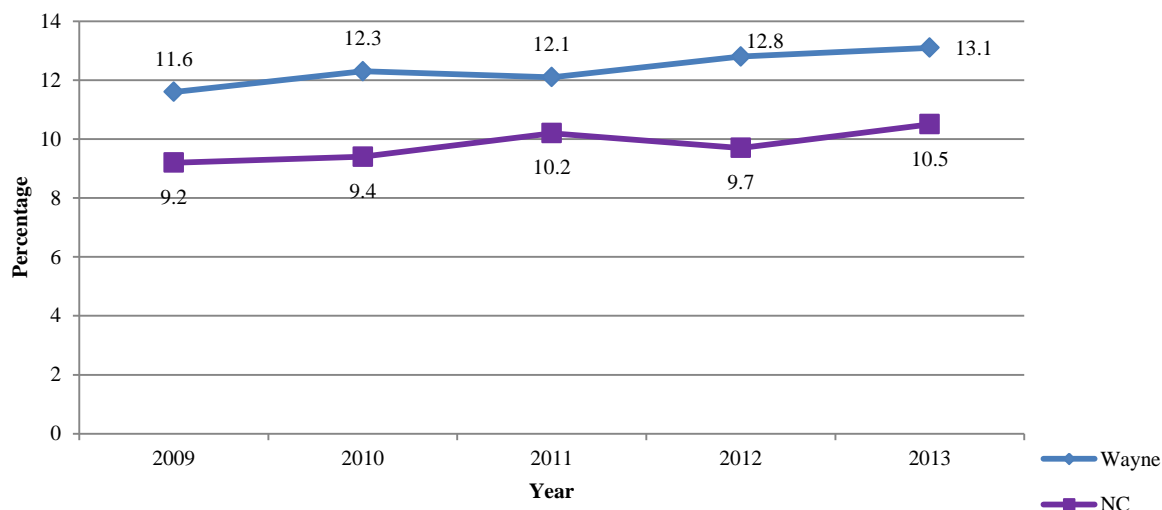


Figure 11: Percentage of Adults Diagnosed with Diabetes in Wayne County & North Carolina, 2009-2013

Asthma

Asthma is a chronic disease that affects the movement of air in and out of the lungs and is more common among children than adults. The table below partially provides the 2014 hospital discharge statistics for asthma in Wayne County and North Carolina. Both the total discharge rate and the age-specific discharge rate (ages 0-14) were higher in Wayne County than the state.²⁸ The asthma

rates have jumped significantly from 2013-2014 for Wayne County youth aged 0-14.

Table 7: Hospital Discharge Rates for Asthma 2013-2014, 2010

	2014		2013		2010	
Residence	Total Rate	Rate Ages 0-14	Total Rate	Rate Ages 0-14	Total Rate	Rate Ages 0-14
Wayne	144.6	222.1	122.8	126.2	154.9	240.2
NC	90.9	144.6	91.6	148.9	109.8	166.0

Obesity and Physical Activity

Due to the increasing prevalence and associated diseases, obesity has become a contributing health problem in Wayne County. The percentage of obese adults in Wayne County for 2015 is 32 percent, which has decreased from 33 percent in 2013. In comparison, the percentage of obese adults in North Carolina has remained constant at 29 percent from 2012 to 2015.²⁹ In addition, physical inactivity is also directly related to the prevalence of obesity, diabetes, and heart disease. The percentage of adults in 2015 aged 20 and over that are physical inactivity in Wayne County is 28percent, whereas the percentage of physical inactivity in North Carolina is 25 percent from 2012 to 2015.²⁹

According to County Health Ratings and Roadmaps (2015), 48 percent of Wayne County residents have access to exercise opportunities.²⁹ Access to exercise opportunities describes the proportion of individuals in Wayne County who live reasonably close to a location of physical activity. These locations are defined as parks, recreational facilities, the local YMCA, community centers, and walking trails. Additionally, the 2014 NC BRFSS reported the percentage of Eastern North Carolina residents, to include Wayne County, who reported exercising in the past month remained at 74 percent.

In summary, healthy eating and regular physical activity reduce the risk of obesity which can lead to a variety of poor health outcomes. Furthermore, we expect that improving nutrition and increasing physical activity in Wayne County will help decrease the morbidity and mortality rates associated with chronic diseases. Efforts of the county include the following; fostering community engagement, enhancing access to places for physical activity, implementing workplace wellness programs, improving walking/biking trails, and increasing awareness/availability of nutritious foods in the Wayne County communities.

Communicable Diseases

HIV/AIDS

While the numbers of HIV and AIDS diagnosis rates are not as large compared to heart disease and cancer, these trends are reported as they have been in the past, when mortality was very high. These are now managed as chronic diseases in the US. Figure A-3, Appendix A depict the HIV rates per 100,000 population for Wayne County and North Carolina from 2009 to 2013. For North Carolina, the HIV rates decreased from 17.5 to 15.6 per 100,000 population. In comparison, the Wayne County HIV rates increased from 14.1 to 16.1 from 2009-2013. As of 2013, Wayne County ranked 15th out of 100 counties for HIV rates falling directly in between Robeson and Wake counties. These rates for HIV exceeded the state during 2009-2013³⁰

The North Carolina AIDS rates in 2009-2013 changed from a rate of 10.2 to 9.2 per 100,000 population while Wayne County's rates from 2009-2013 increased from a rate of 7.9 to 10.5 per 100,000 population. Again, the county's AIDS rate did exceed the state rate with Wayne County having a high rank of 17th overall.³⁰

Sexually Transmitted Diseases (STDs)

Syphilis

The Health Department is working with various agencies in Wayne County to bring sexually transmitted diseases under control. As a result, Wayne County has experienced a **dramatic** decrease in syphilis rates since 2009. The rates decreased from of 51.8 to as low as 2.4 per 100,000 population from 2009-2012. Unfortunately, the rates spiked again from 2012-2013 going from 2.4 to 13.7 per 100,000.³⁰ Despite the significant progress made continuous testing and additional strategies are still needed since the rate for Wayne County is still higher than the state during this interval. These rates are illustrated in *Figure A-4, Appendix A*.

Gonorrhea

The gonorrhea rates in Wayne County also improved significantly since 2009. Gonorrhea rates decreased from a rate of 291.1 in 2009 to 158.6 per 100,000 population. As of 2013, the gonorrhea rate in Wayne County is 18.5 higher than the state.³⁰ *Figure A-5, Appendix A* depicts the chlamydia rates from 2009 to 2013.

Chlamydia

The most prevalent STD in Wayne County is chlamydia. This is most likely due to Chlamydia being known as a silent infection since most infected people are asymptomatic and lack abnormal physical examination findings. *Figure A-6, Appendix A* depicts the chlamydia rates from 2009 to 2013. The chlamydia rate in Wayne County has increased from a rate of 625.6 to 657.6 per 100,000 population. As of 2013, the chlamydia rates in Wayne County were 161.1 higher than the state.³⁰

State and Peer County Comparisons

According to the CHA Guidelines, comparisons must be made between the county of interest and peer counties regarding secondary data. Peer counties are determined by their similarity in population size, density, age/race distributions, and poverty levels. The following counties have been identified as peer counties for Wayne County: (1) Alamance, (2) Gaston, (3) Pitt, (4) Robeson, and (5) Rowan.

In relation to North Carolina and peer counties regarding the age-adjusted death rates, cancer is the overall leading cause of death for the State at a rate of 173.3 per 100,000 as well as the counties of Wayne and Alamance. The cancer death rates for Wayne and all peer counties, except for Pitt, are above the state rate. Lung cancer accounts for the most cancer specific deaths for the state and each peer county. However, unlike the overall statistics for the State, heart disease is the leading indicator of death rates in Gaston, Pitt Robeson and Rowan counties. Each of the peer counties

with the exception of Alamance exceeds the state heart disease mortality rate.³¹ See table A-2, Appendix A for further state/peer county comparisons.

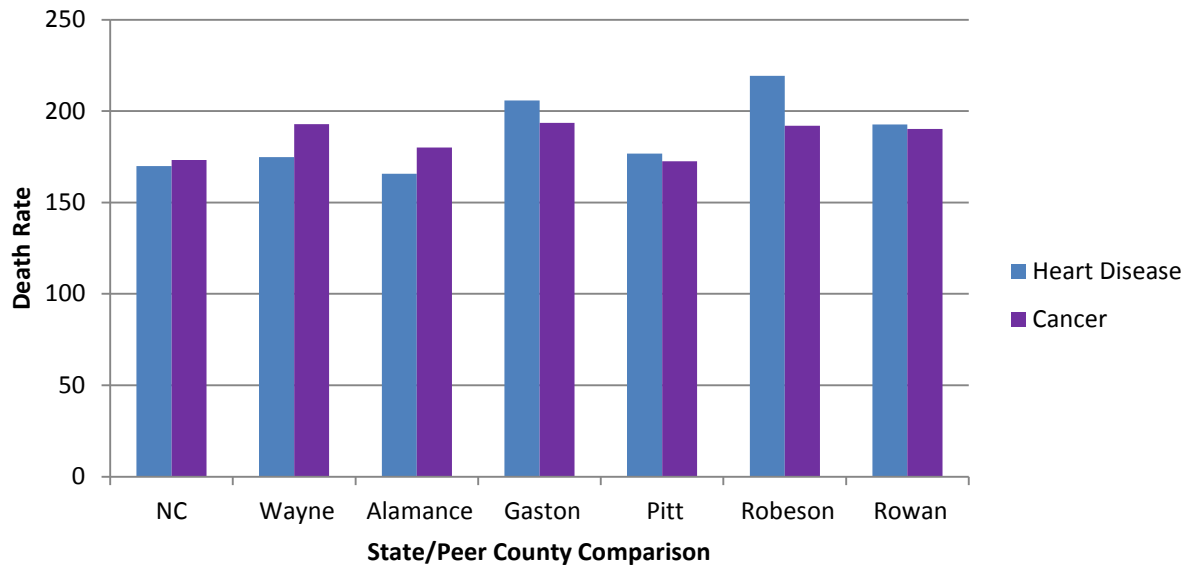


Figure 12: Leading Causes of Death Peer County Comparisons, 2009-2013, Age-adjusted rates per 100,000

According to the data provided in the 2015 County Health Rankings, an annual publication of the Robert Wood Johnson Foundation, Wayne County is unhealthier than the State average for all of the following indicators: adult smoking, adult obesity, physical inactivity, and access to exercise. In comparison to peer counties Pitt County has a significantly lower percentage of adult smokers at 19% vs. 24% for Wayne County. All of the peer counties have a higher percentage of obese adults in comparison with the State percentage of 29%. Thirty-one percent (31%) of adults are obese in Gaston, 32% are obese in Wayne, Alamance has 33%, Pitt has 37% and Robeson had the highest percentage of adult obesity at 40%. Lastly, when analyzing access to exercise opportunities it is important to note that both Wayne and Robeson Counties have extremely low percentages compared to the State and other peer counties.²⁹ See *Table A-3, Appendix A* for the indicators of physical activity, access to exercise opportunities and the 2015 county health rankings.

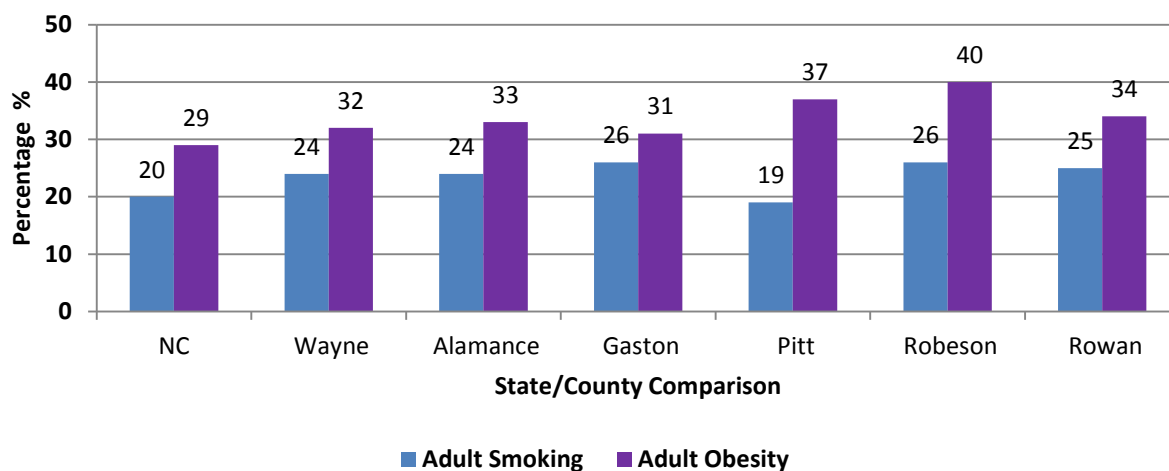


Figure 13: Health Behaviors. Adult Smoking Rates 2006-2012; Adult Obesity Rates for 2011

Sixteen percent (16%) of the residents in Wayne County are uninsured which is fairly equal to the State and Alamance County. Pitt County has a lower percentage of the population that are uninsured at 15%. Gaston and Rowan at 17% and Robeson at 22% exceed the state percentage. In terms of the amount of physicians per 10,000 of the population, Wayne County has a lower rate of 14.6 when compared to the State rate of 22.3. Pitt County, an average 45 minute commute from Wayne County, has a higher rate of 43.6 per 10,000 of their population. (Table A-4, Appendix A) Two major factors are that Pitt County is the home of Vidant Health Care System and East Carolina University which are two of the State's larger health care systems.

Oral health care is an important factor within the quality of life cycle, but in many cases access to dental care can be challenging for many individuals and families. Some of those challenges include difficulty getting to a dental office or prioritizing dental care among other health conditions and basic needs of living. The rate of dentists available per 10,000 is slowly increasing for the State, Wayne and all peer counties with the exception of Gaston who recently experienced a decrease in the number of dentists available.

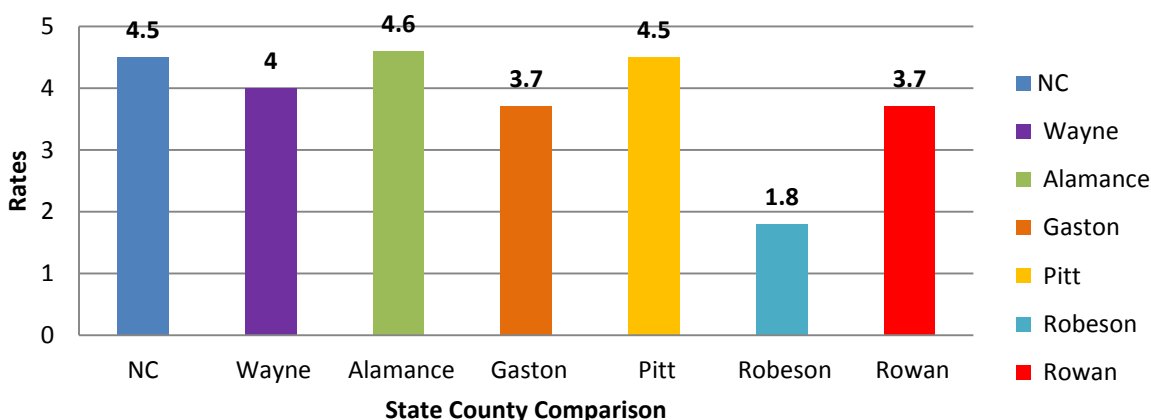


Figure 14: Dental Access to Care - Dentist per 10,000 residents²⁹

The high school graduation rate did not reveal much variance between Wayne County, the State and our peer counties. According to the North Carolina 4-Year cohort graduation rate report for the 2014-2015 school year, the graduation rates ranged from 80.9 %-84.5 % with Alamance having the lower rank and Robeson with the highest ranking. The graduation rates for Wayne County are below the state rates. Refer to Table A-5 Appendix A for the county specific break-down as well as information on county specific dropout rates, Figure A-7.

Review of Primary Data

Findings from the primary data came from the community survey and the focus groups. The focus of this survey was to collect public opinions from community members in Wayne County regarding their health and quality of life. Such input is intended to help improve the major health and community issues in the county.

Specifically, the survey was made available to the community for 5 weeks, from January 4, 2016 until February 8, 2016. Surveys were distributed in both English and Spanish. Paper surveys were distributed to key locations throughout the county and the online survey link was posted on several county websites. Following data collection, all responses from the surveys were combined to create a single, overall sample of responses. In sum, a total of 598 responses were received from both sources.

Focus Groups

Six focus groups were conducted between January and February 2016. A moderator and co-moderator facilitated each focus group. Discussions took place on week days in naturally occurring and invited groups, such as English as second language (ESL) class, Salvation Army, and Community Soup Kitchen, and lasted approximately 45 minutes. We used the same semi-structured interview guide for all focus group discussions (see Appendix). Discussions were recorded and transcribed verbatim. All focus groups were conducted in English. There were a total of 53 focus group participants, 33 were African-American, 13 were White, 2 were Hispanic/Latino, 3 were Haitian, and 2 were Asian. Most participants were young to middle-aged, with very few older than 65. The focus groups had nearly equal representation of men and women, and from the major underserved populations, including African American (AA), Hispanic/Latino (H/L), Haitian, and Asian sub-groups. Although we did not collect the actual age of participants, the moderators believe the groups were mostly young to middle-age, with very few older adults (> 65 years).

Focus Group: Location	Total	Racial/ethnic groups		Gender	
		%	(n)	%	(n)
1 Wayne Action Team for Community Health (free clinic)	7	28.5% AA 71.4% W	(2) (5)	57.1% M 42.8% F	(4) (3)
2 Community Soup Kitchen	10	100% AA	(10)	40% M 60% F	(4) (6)
3 Low-income housing complex	10	80% AA 20% W	(8) (2)	40% M 60% F	(4) (6)

4 Boys & Girls Club	8	75% AA 12.5% W 12.5% H/L	(6) (1) (1)	37.5% M 62.5% F	(3) (5)
5 Literacy Connection (ESL class)	6	50% Haitian 33.3% Asian 16.6% H/L	(3) (2) (1)	66.6% M 33.3% F	(4) (2)
6 Salvation Army	12	58.3% AA 41.6% W	(7) (5)	50% M 50% F	(6) (6)
TOTALS	53				(25) (28)

Key findings from focus groups:

When asked about the best thing about living in their community, all focus groups agreed that the community had “friendly people” and the community was “supportive.”

The majority of focus groups (5 out of 6) replied that the community had good places to eat or that food was accessible for those in need through various churches, farmers market, and the soup kitchen. Several groups (3 out of 6) commented that the cost of living, the parks and the support of churches were community assets. One group remarked that the ESL program was the best thing about living in the community. Interestingly, focus groups expressed differences in the following: safe environment, transportation, and a program called Wayne Uplift. One group saw these items as assets while another group saw them as deficits.

When asked about what **people in the community do to stay healthy** the majority of focus groups (5 out of 6) agreed on walking, biking, eating healthy foods, and going to parks, the gym or the YMCA for physical activity. Two groups remarked that regular sleep and primary care check-ups with physicians were ways to stay healthy. One group mentioned the Senior Citizens Center; while another group member remarked that one way to stay healthy is “visiting with the older generation, you can learn a lot of wisdom from.”

When asked about **how people received information about health**, several focus groups (3 out of 6) mentioned places such as the WATCH free clinic, the YMCA, and the health department. At least one focus group got health information from one of the following locations the soup kitchen, grocery stores, landlord, library, and the pharmacy. Other sources of health information included the internet, TV, newspapers, books, classes, videos, and health fairs/festivals (Annual KidsFest and National Night Out).

The three **serious health problems** mentioned by the majority of focus groups (4 out of 6) were diabetes, drug abuse, and sexually transmitted diseases. Obesity and heart disease were mentioned by three of the focus groups. Two focus groups commented that cancer and smoking were problems. One focus group discussed their concerns about mental illness, domestic violence, and

depression. **Causes** of these problems were discussed as cultural beliefs, (un)affordable health care, poor choices, poor nutrition, and not taking care of yourself. One focus group member remarked that serious health problems can be caused by “apathy, a little bit. We become less and less concerned with taking care of ourselves because we were growing up in a society where it’s acceptable to just sit around and watch TV and stare at the computer all day.”

When asked about what keeps people in the community from being healthy, **common systems-level barriers** were lack of money (unemployment, homelessness), lack of health insurance, transportation, physician shortage, and unequal treatment. **Individual barriers** were seen as lack of knowledge, self-control, time, choice, and fear (safety).

All focus groups provided numerous **solutions to community problems** with the following suggestions: community-based education and health classes and support groups; affordable health insurance; job training and opportunities; more security; increase access to community drinking fountains; use the bus lines to advertise health topics, such as community garden/farmers market; and engage local politicians in a community listening dialogue. An innovative suggestion was to build a homeless shelter that would have many services such as an on-site clinic, food pantry, shower facilities, and medications.

All focus groups knew people who were **not receiving health care**. When asked why people do not receive health care, two to three focus groups responded, “not enough money to afford [health insurance] it, lack of information, and ineligible for health insurance (pre-existing health conditions limiting eligibility of coverage).” At least one focus group discussed people who are homeless and those unemployed as having trouble receiving health care and indicated that out-of-pocket costs were unmanageable and disproportionately affected low income groups. All focus groups were asked if they had other issues not already mentioned they would like us to discuss. Two focus groups asked us to work on affordable housing, and at least one focus group mentioned childcare and another was gun control.

Participants were asked to suggest solutions to the community problems. Answers included more satellite healthcare centers and clinics, more doctors with longer available hours, having the WATCH van run more frequently and more advertising about available transportation services. Additional resources such as farmer’s markets and community gardens were also cited. Participants thought more education and information regarding healthy eating and exercise would be beneficial as well as increased access to healthy foods and exercise programs. Incentivizing healthy eating and exercise was a common idea as was utilizing churches, workplaces, schools and other organizations to disseminate information, offer exercise programs and provide healthy foods to community members. When requested to think about any group not receiving enough healthcare, the elderly, migrant workers, the Hispanic population, and new college graduates and teenagers were discussed. Additionally, both the uninsured and the population that is slightly above the poverty threshold, therefore receive no assistance, but barely makes enough money to pay for health insurance were common responses.

Survey Sample Characteristics

Following data weighting, the survey sample primarily consisted of the following characteristics.

Gender:

- Female (50.7 percent)
- Male (49.3 percent)

Race:

- White (54.8 percent)
- Black/African American (40.5 percent)
- Other (2.8 percent)

Ethnicity:

- Hispanic/Latino/Spanish origin (8.2 percent)
 - Mexican (61.7 percent)
 - Puerto Rican (10.6 percent)
 - Cuban (6.4 percent)
 - Other (21.3 percent)

Marital Status:

- Married (43.4 percent)
- Single (30.1 percent)
- Widowed (5.7 percent)
- Separated (4.7 percent)
- Unmarried partner (2.2 percent)

Age:

- 25-29 (10.2 percent)
- 30-34 (11.0 percent)
- 35-39 (9.5 percent)
- 40-44 (8.7 percent)
- 45-49 (9.4 percent)
- 50-54 (11.4 percent)
- 55-59 (9.9 percent)

Educational Attainment:

- Less than high school (2.4 percent)
- High school, no diploma (9.4 percent)
- High school diploma (18.5 percent)
- Some college, no degree (26.8 percent)
- Associate degree (14.8 percent)
- Bachelor's degree (15.3 percent)
- Graduate or Professional degree (11.6 percent)

Employment:

- Employed full-time (52.3 percent)
- Employed part-time (13.9 percent)
- Retired (9.7 percent)
- Unemployed (< 1 year; 7.4 percent)
- Unemployed (> 1 year; 6.4 percent)
- Student (5.0 percent)
- Self-employed (3.7 percent)
- Disabled (2.8 percent)

Annual Household Income:

- < \$10,000 (18.7 percent)
- \$10,000-14,999 (9.3 percent)
- \$15,000-24,999 (11.3 percent)
- \$25,000-34,999 (13.3 percent)
- \$35,000-49,999 (12.4 percent)
- \$50,000-74,999 (13.3 percent)
- \$75,000-99,999 (12.0 percent)
- > \$100,000 (9.7 percent)

Finally, the majority of participants indicated that they have access to the Internet (91.1 percent) and speak English at home (89.1 percent). The primary language spoken at home by participants who indicated speaking a language other than English was Spanish. Lastly, the majority of participants indicated that they live in one of the following area codes: 27530, 27534, 28333, 28365, or 27863.

Survey Results

Part I: Quality of Life Statements

Participants were asked a series of questions regarding the quality of life in Wayne County.

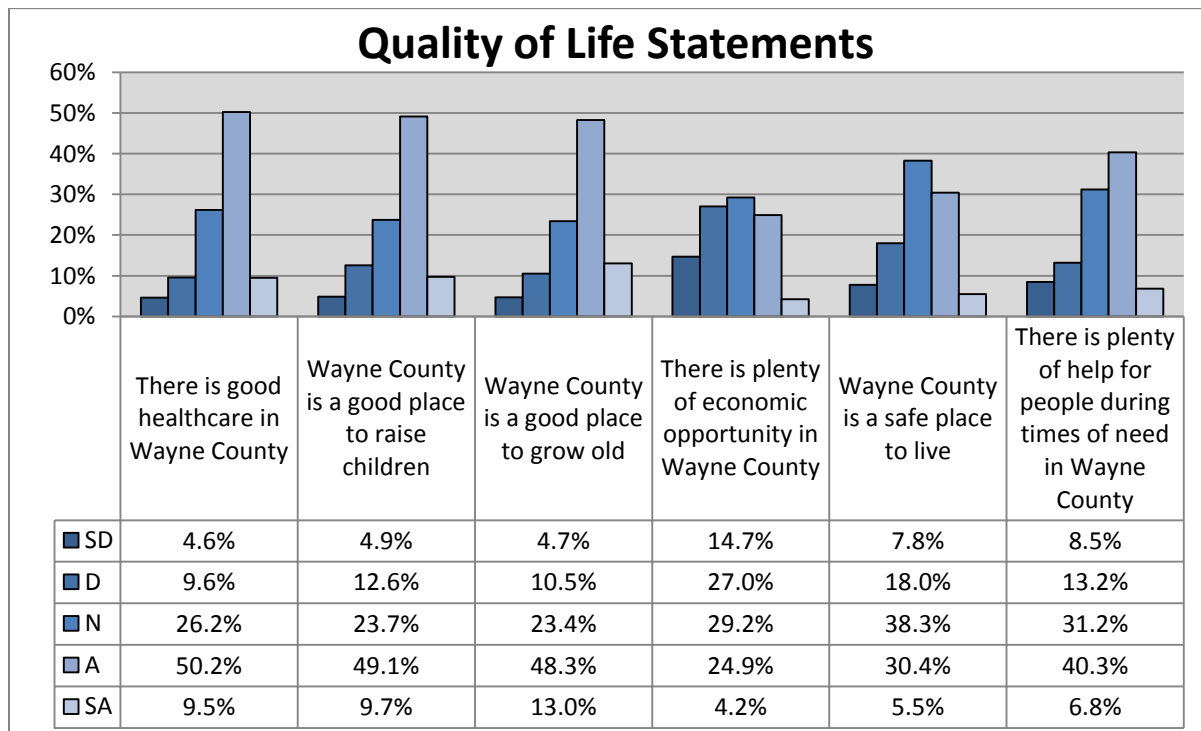
Approximately half of participants *agreed* that Wayne County has **good healthcare** (50.2 percent), is a **good place to raise children** (49.1 percent), and is a **good place to grow old** (48.3 percent).

However, nearly a quarter of participants indicated a *neutral* response to these statements. Furthermore, approximately 10.0 percent of participants *strongly agreed* with the statements, a similar portion *disagreed* and approximately 5 percent strongly disagreed.

A large portion of participants also indicated a *neutral* response to statements suggesting that Wayne County has **plenty of economic opportunity** (29.2 percent) and is a **safe place to live** (38.3 percent).

Finally, although 40.3 percent of participants *agreed* that there is **plenty of help for people during times of need** in Wayne County, a larger portion of participants *strongly disagreed* with the statement (8.5 percent) than *strongly agreed* (6.8 percent).

Overall, participants were more likely to agree or feel neutral about the quality of life statements, potentially indicating contentment but room for improvement in the various areas.



Note: SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree

Part II: Community Improvement

Top five issues that most affect quality of life in Wayne County:

Each participant selected five issues that they believe most affect the quality of life in Wayne County. The most commonly reported issue was low income/poverty, which was selected by 66.5 percent of participants. A complete list of the five most frequently selected issues is listed below. Overall, the list included three “social” issues (i.e., low income/poverty, violent crime, and dropping out of school) and two “health” issues (i.e., substance abuse and overweight/obesity).

1	Low income/poverty	66.5 percent
2	Violent crime (murder, assault, theft, rape)	54.8 percent
3	Substance abuse (alcohol, illegal drugs)	53.1 percent
4	Overweight/obesity	33.8 percent
5	Dropping out of school	28.3 percent

Top three services that need the most improvement in community members’ neighborhoods:

Participants selected one service that they believe needs the most improvement in their community. Among a variety of choices, participants indicated that higher paying employment needs the most improvement (23.0 percent) in Wayne County. A list of the three most frequently selected services is listed below, which also includes the availability of employment and positive teen activities.

1	Higher paying employment	23.0 percent
2	Availability of employment	11.5 percent
3	Positive teen activities	10.0 percent

Part III: Health Information

Top five health behaviors about which people in Wayne County need more information:

Participants selected one health behavior about which they believe their community needs more information. Participants indicated that their community needs more information about topics such as crime prevention (15.3 percent), eating well/nutrition (10.4 percent), and going to the doctor for annual check-ups (9.5 percent). A complete list of the five most frequently selected behaviors is listed below.

1	Crime prevention	15.3 percent
2	Eating well/nutrition	10.4 percent
3	Going to the doctor for annual check-ups	9.5 percent
4	Preventing pregnancy and STDs	8.7 percent
5	Substance abuse prevention	8.4 percent

Top five health topics about which children in Wayne County need more information:

A total of 28.0 percent of participants indicated that they have children between the ages of 9 and 19 for which they are the caretaker. Subsequently, such participants were asked to select all health-related topics about which their child or children need(s) more information. A complete list of the five most frequently selected health topics is listed below, which includes nutrition, sex education, and substance use/abuse.

1	Nutrition	12.4 percent
2	Sex education	10.9 percent
3	STDs	10.1 percent
4	Drug abuse	9.8 percent
5	Alcohol	7.7 percent

Top three sources of health-related information:

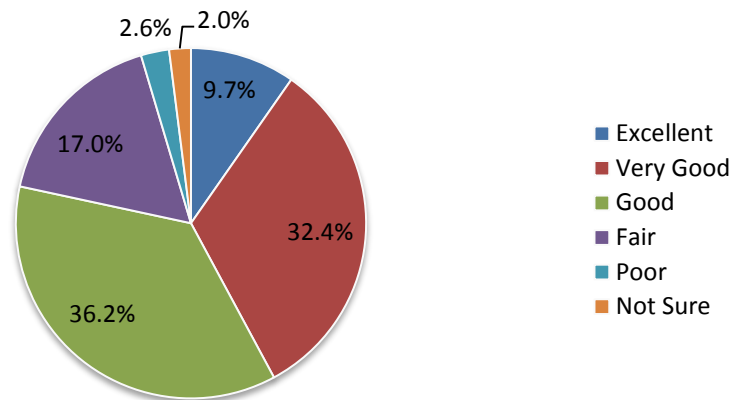
Next, all participants identified the top three sources from which they obtain health-related information. The majority of participants indicated that they obtain such information from doctors and nurses (65.6 percent); however, nearly half of participants indicated that they also obtain information from the Internet and friends and family. A list of the three most frequently selected sources of health-related information is listed below.

1	Doctors and nurses	65.6 percent
2	Internet	50.2 percent
3	Friends and family	48.0 percent

Part IV: Personal Health

When asked to provide an overall rating of their personal health, the majority of participants described their health as either *good* (36.2 percent) or *very good* (32.4 percent). Furthermore, when compared to participants who described their health as *excellent*, nearly twice as many participants described their health as *fair*. Finally, only a small portion of participants described their health as *poor* and a nearly equal portion of participants indicated that they were *not sure* how to rate their overall health. A chart of participants' responses is shown below.

Overall Health Rating



Health Conditions:

Participants were asked to indicate whether they had been told by a health professional that they had any of the health-related conditions listed below. The health condition indicated most frequently by participants was high blood pressure (39.5 percent), followed by overweight/obesity (32.6 percent), and high cholesterol (30.0 percent). A complete list of all ten health-related conditions listed in the survey is shown below, as well as the associated portion of participants who indicated having each condition.

1	High blood pressure	39.5 percent
2	Overweight/obesity	32.6 percent
3	High cholesterol	30.0 percent
4	Depression or anxiety	27.8 percent
5	Diabetes	16.2 percent
6	Asthma	15.8 percent
7	Angina/heart disease	7.0 percent
8	Cancer	5.8 percent
9	Osteoporosis	5.1 percent
10	Substance abuse	4.6 percent

General Health Questions:

Participants were asked to respond to several general health-related questions. For example, approximately half of participants indicated that they have undergone annual preventive screenings in the last three years (51.8 percent). Moreover, when asked whether in the past 30 days feelings of sadness or worry prevented participants from going about their normal business, 21.3 percent of participants indicated experiencing such limitations. Similarly, 28.3 percent of participants indicated experiencing physical pain or health problems that made it difficult to engage in their usual activities.

Question	Yes	No	Not Sure
Preventive screenings	51.8 percent	34.3 percent	13.9 percent
Sad/Worried	21.3 percent	75.7 percent	2.9 percent
Physical pain/health problems	28.2 percent	69.5 percent	2.3 percent

Exercise:

A total of 52.9 percent of participants indicated that they engage in some form of physical activity or exercise for at least half an hour during a normal week. Participants most frequently reported exercising two to three times per week.

Top five exercise locations:

Participants who indicated that they exercise weekly were subsequently asked to indicate where they most often engage in such behavior, by selecting from a predefined set of exercise locations. The overwhelming majority of participants indicated that they exercise at home (35.2 percent). A list of the top five most frequently selected exercise locations is listed below.

1	Home	35.2 percent
2	YMCA	9.2 percent
3	Other (e.g., outdoors, neighborhoods, roads)	8.3 percent
4	Private gym	7.5 percent
5	County, city, and state parks	7.2 percent

Top five reasons why people in Wayne County do not exercise regularly:

When asked why participants choose not to exercise, the most frequently selected reasons included that participants feel that they are too tired and don't have time to exercise (10.8 percent and 9.2 percent, respectively). A list of the top five most frequently selected reasons for not exercising is shown below.

1	Too tired to exercise	10.8 percent
2	Don't have time to exercise	9.2 percent
3	Don't like to exercise	6.8 percent
4	Work a job that is physical or hard labor	6.1 percent
5	Don't have access to exercise facilities	5.9 percent

Alcohol Use:

Participants were then asked to indicate how often they consume three or more alcoholic drinks in one sitting. In general, the portion of participants who indicated engaging in such behavior **decreased** as the frequency of such behavior **increased**. For example, 54.9 percent of participants indicated that they *never* engage in such behavior, following by 28.9 percent of participants who indicated engaging in such behavior *a few times per year* and 12.3 percent of participants who indicated engaging in such behavior *several times per month*. Finally, less than 1.0 percent of participants indicated that they consume three or more alcoholic drinks in one sitting on a *daily* basis.

Never	A few times/year	Several times/month	Multiple times/week	Daily
54.9 percent	28.9 percent	12.3 percent	3.4 percent	0.4 percent

Tobacco Use:

A total of 26.3 percent of participants indicated that they use tobacco products, including cigarettes, chewing tobacco, and electronic cigarettes (i.e., e-cigs). Of such participants, 30.7 percent of participants indicated that they *don't know* where they would go if they wanted to quit; whereas, 14.6 percent of participants indicated that they would go to a doctor.

Top three locations where people in Wayne County are exposed to secondhand smoke:

A total of 54.4 percent of participants indicated that they were exposed to secondhand smoke in the past year. When asked to select where participants believed they are most often exposed to secondhand smoke, the largest portion of participants indicated that they are exposed at home (39.9 percent). A complete list of the top three most frequently selected locations is listed below.

1	Home	39.9 percent
2	Other (e.g., others' homes, public)	30.5 percent
3	Workplace	18.2 percent

Fruit and Vegetable Consumption:

Participants were asked to indicate how often they consume fruits and vegetables on a weekly basis. On average, participants consume 4.0 cups of vegetables, 5.5 cups of fruit, and 2.5 cups of fruit juice.

Vegetable	Fruit	Fruit Juice
4.0 cups per week	5.5 cups per week	2.5 cups per week

Part V: Access to Care/Family Health

Top five locations where people in Wayne County go when they are sick:

Participants were asked to indicate where they seek treatment when sick. The majority of participants indicated that go to the doctor's office (64.6 percent). A complete list of the top five most frequently selected locations is listed below.

1	Doctor's office	64.6 percent
2	Emergency department	25.9 percent
3	Urgent care center	21.3 percent
4	WATCH	10.6 percent
5	Health department	9.5 percent

Note: Some of the above-mentioned locations served as data collection sites. In turn, certain location's percentage rate may be inflated, as reporting behavior could be a function of actual behavior when sick *as well as* the location at which the participant completed the survey.

Top five sources of health insurance for Wayne County residents:

Participants were asked to select their primary health insurance plan. Participants most frequently indicated that they have no health plan of any kind (25.5 percent). A complete list of the top five most frequently selected forms of health insurance is listed below.

1	No health plan of any kind	25.5 percent
2	BCBS of North Carolina	24.5 percent
3	Private insurance provided by employer	13.0 percent
4	State employee health plan	7.9 percent
5	Medicare	7.8 percent

Trouble receiving healthcare:

A total of 22.1 percent of participants indicated that they have had a problem receiving the general health care they needed in the past 12 months and 14.1 percent of participants indicated that they had a problem receiving the proper care from a specialist. Examples of care that participants experienced difficulties in receiving included dental, mental health, ophthalmology, orthopedics, and rheumatology.

Top three locations where people in Wayne County had difficulty receiving care:

Participants who reported difficulties in receiving the health care that they needed in the past 12 months indicated that they experienced such difficulties at locations such as doctors' offices (10.6 percent), the emergency department (4.1 percent), and the health department (4.0 percent).

Top three sources of difficulty in receiving care:

Furthermore, participants who reported difficulties in receiving the health care that they needed in the past 12 months indicated that reasons for such difficulties included not having health insurance (11.6 percent), insurance not covering particular services (3.5 percent), and shared costs being too high (e.g., deductible; 2.8 percent).

Part VI: Emergency Preparedness

Participants were finally asked a series of questions regarding their level of emergency preparedness. Overall, 93.2 percent of participants indicated that their households have working smoke detectors, 45.6 percent of participants indicated that someone in their household is trained in CPR, and 43.9 percent of participants indicated that they have a basic emergency supply kit, with an average of 10 days of supplies. Consequently, although the majority of participants indicated having household smoke detectors, only approximately half of participants indicated having training or other supplies that may result in a more suitable level of emergency preparedness.

Top three sources of emergency information during a disaster:

Participants selected the primary method by which they would obtain information from authorities in a large-scale disaster or emergency. Participants most frequently indicated that television would be their main source of information (41.6 percent). A list of the top three most frequently selected sources of information is listed below. A fourth source of information, which is not shown below, was the radio, selected by 11.8 percent of participants.

1	Television	41.6 percent
2	Text message (emergency alert system)	19.4 percent
3	Internet	13.8 percent

Top three reasons for choosing not to evacuate during a disaster:

A total of 78.6 percent of participants indicated that they *would evacuate* if a mandatory evacuation was announced due to a disaster; however, 2.7 percent of participants indicated that they *would not evacuate* and 18.7 percent of participants indicated that they are *not sure* if they would evacuate.

Of those who indicated that they would not evacuate or were unsure, 19.2 percent of participants indicated that concern about leaving property was a primary reason for choosing not to leave during a disaster. A complete list of the three most frequently selected reasons for not evacuating is listed below. Notably, 18.2 percent of participants indicated that they did not know why they would not evacuate.

1	Concern about leaving property	19.2 percent
2	Lack of trust in public officials	11.7 percent
3	Concern about family safety	11.2 percent

Study Limitations

One potential limitation to all public opinion research is error derived from not receiving responses from all individuals within a given population. The only approach to eliminate this error is to increase the size of the sample, which is often not a feasible solution for many studies. Fortunately, several solutions exist that help to reduce the level of bias caused by sampling error. One such solution used in the current study is population calibration or “data weighting.”

Data weighting is conducted in order to compensate for discrepancies between the sample of random survey respondents and the demographic profile of the entire county. In the current study, weighting procedures were only necessary for the demographic variable of gender. Specifically, a larger portion of female participants were collected than what is present in the current population. In turn, the weighting process was used to help equalize the opinions of both men and women in Wayne County. All other demographic variables were reasonably close to the demographic profile of the county, thus indicating a robust data collection effort and eliminating the need for additional data weighting.

Appendix A – Supplemental Graphs & Tables

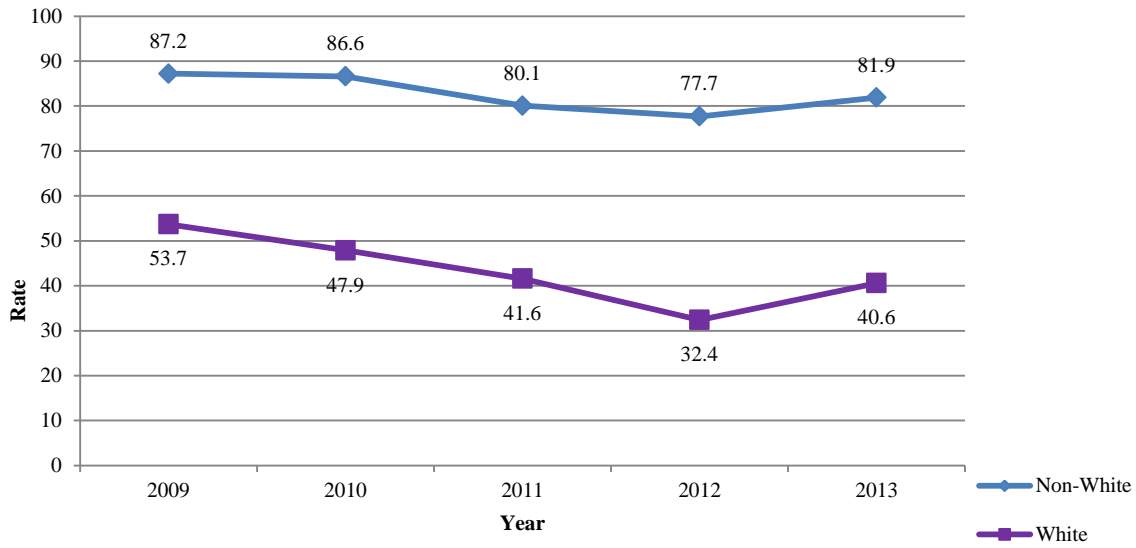


Figure A-1: Wayne County Teen Pregnancy Rates by Race per 1,000 population

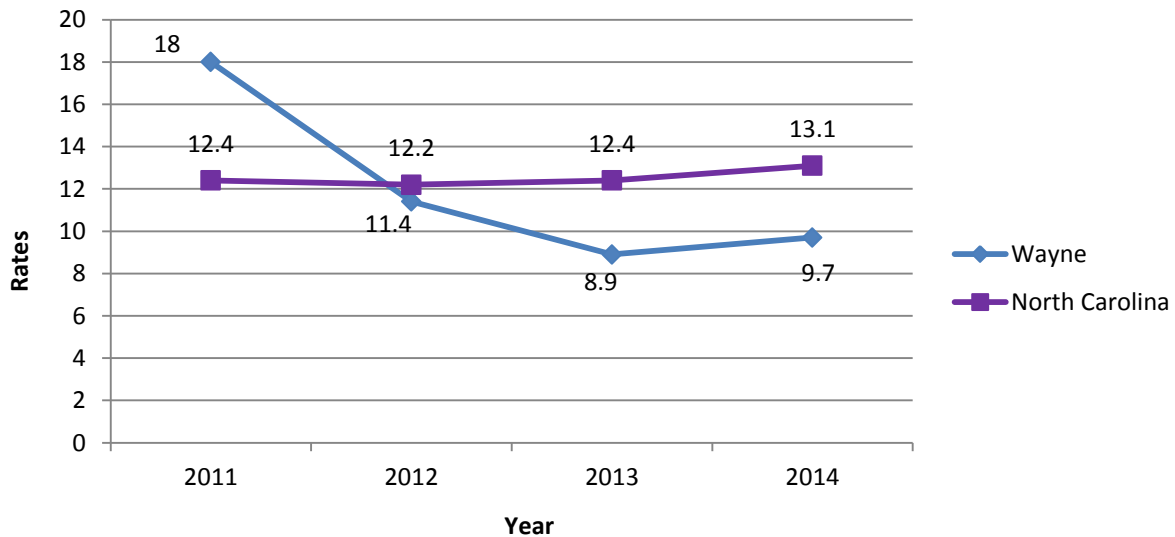


Figure A-2: Wayne County and NC Suicide Rates per 100,000 Population

Table A-1: Wayne County's Top 3 Leading Causes of Death, age-specific- 2009-2013

Wayne County's Top 3 Leading Causes of Death Age-Specific (2009-2013)			
Age Group	Leading Cause of Death	Number of Deaths	Death Rate
0-19	1- Perinatal Conditions	42	24.9
	2- Motor Vehicle injuries	17	10.1
	3- Congenital anomalies (birth defects)	16	9.5
20-39	1- Motor Vehicle injuries	36	21.8
	2- Other Unintentional injuries	30	18.1
	3- Homicide	29	17.5
40-64	1- Cancer- All Sites	427	213.3
	2- Diseases of the heart	286	142.9
	3- Diabetes mellitus	71	35.5
65-84	1- Cancer- Sites Types	693	942.2
	2- Diseases of the heart	537	730.1
	3- Cerebrovascular disease	173	235.2
85+	1- Diseases of the heart	290	3217.2
	2- Cancer- All Sites	150	1664.1
	3- Cerebrovascular disease	87	965.2

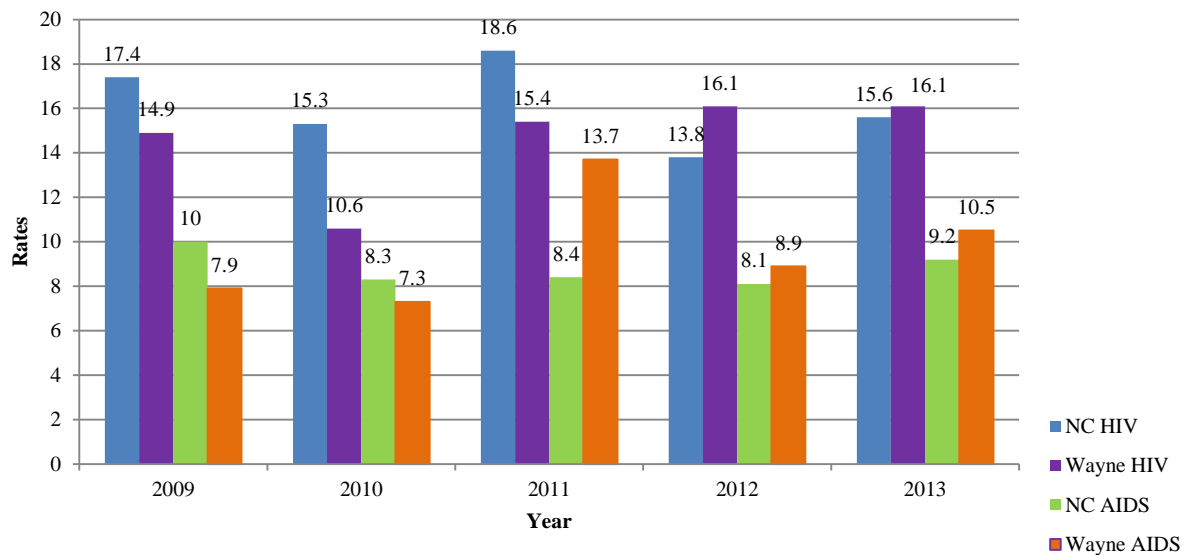


Figure A-3: Wayne County and NC HIV & AIDS Rates per 100,000 population

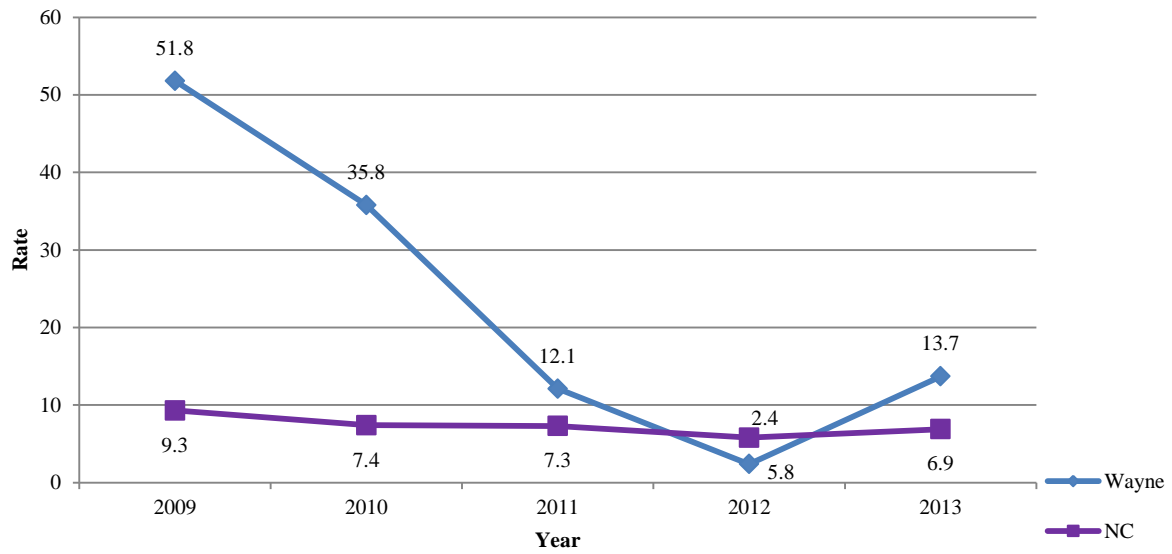


Figure A-4: Wayne County and North Carolina Syphilis Rate Per 100,000 population

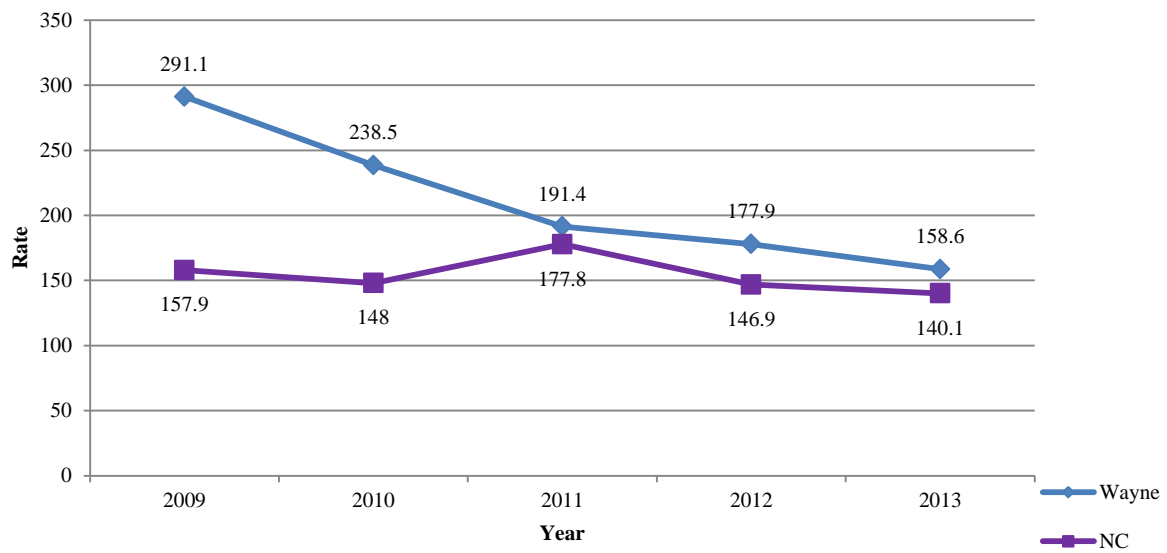


Figure A-5: Wayne County and North Carolina Gonorrhea rates per 100,000 population

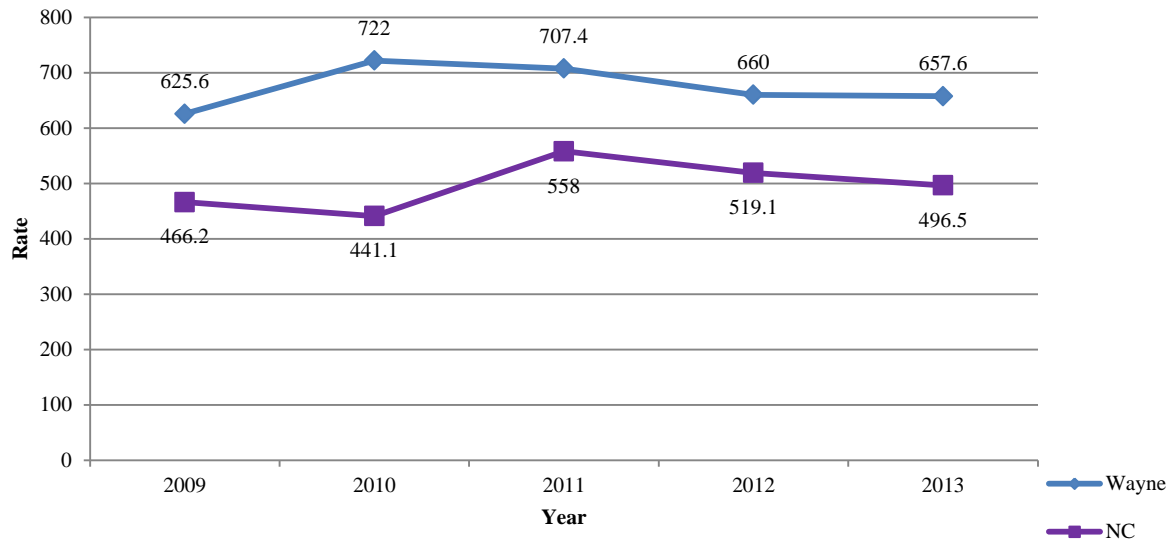


Figure A-6: Wayne County and North Carolina Chlamydia Rates per 100,000 population

Table A-2: Leading Causes of Death 2009-2013--All Ages-- 2009-2013 (Unadjusted Death rates per 100,000 population)

	North Carolina	Wayne	Alamance	Gaston	Pitt	Robeson	Rowan
Heart Disease	170.0	174.8	165.8	205.8	176.8	219.2	192.6
Cancer (all)	173.3	192.8	180.0	193.6	172.5	191.9	190.3
Colon	14.5	17.6	14.8	17.9	14.5	16.6	17.5
Lung	51.6	58.3	51.9	62.9	48.3	57.9	58.6
Breast	21.7	26.3	24.0	22.2	24.7	26.0	22.3
Prostate	22.1	22.1	23.2	17.3	28.8	38.0	22.2
Cerebrovascular Disease	43.7	49.3	42.2	44.7	48.6	44.3	53.0
Chronic Lower Respiratory Diseases	46.1	39.4	51.7	73.5	37.5	44.2	59.5
Diabetes	22.7	32.7	21.6	19.6	28.2	47.7	24.0

Table A-3: 2015 Rankings and Health Behaviors

	North Carolina	Wayne	Alamance	Gaston	Pitt	Robeson	Rowan
Adult Smoking % of adults who are current smokers (2006-2012)	20%	24%	24%	26%	19%	26%	25%
Adult Obesity % of adults that report a BMI of 30 or more (2011)	29%	32%	33%	31%	37%	40%	34%
Physical Inactivity % of adults ages 20 and over reporting no leisure time (2011)	25%	28%	26%	29%	25%	35%	30%
Access to exercise opportunities % of population with adequate access to locations for physical activity (2010 & 2013)	76%	48%	84%	78%	61%	36%	83%
2015 Health Ranking		54	34	77	39	95	76

Table A-4: Access to Care

	North Carolina	Wayne	Alamance	Gaston	Pitt	Robeson	Rowan
Uninsured ¹ % of population under age 65 without health insurance (2010-2014)	15.5%	16.1%	16.2%	17.2%	14.5%	21.5%	16.9%
Physicians per 10,000 population ² (2012)	22.3	14.6	18.1	19.2	43.6	12.1	12.3
Primary Care Physicians per 10,000 population (2012)	7.6	5.8	6.9	7.6	12.3	5.1	9.3
Dentists ³ Dentists per 10,000 residents (2012)	4.5	4.0	4.6	3.7	4.5	1.8	3.7

1. 2010-2014 .American Community Survey 5 –Year Estimates

2. 2012 Active Professionals 2014 UNC Sheps Center for Health Services Research http://www.shepscenter.unc.edu/workforce_product/county-profiles-2012/

3. Trends in Key Health Indicators <http://www.schs.state.nc.us/data/keyindicators/>

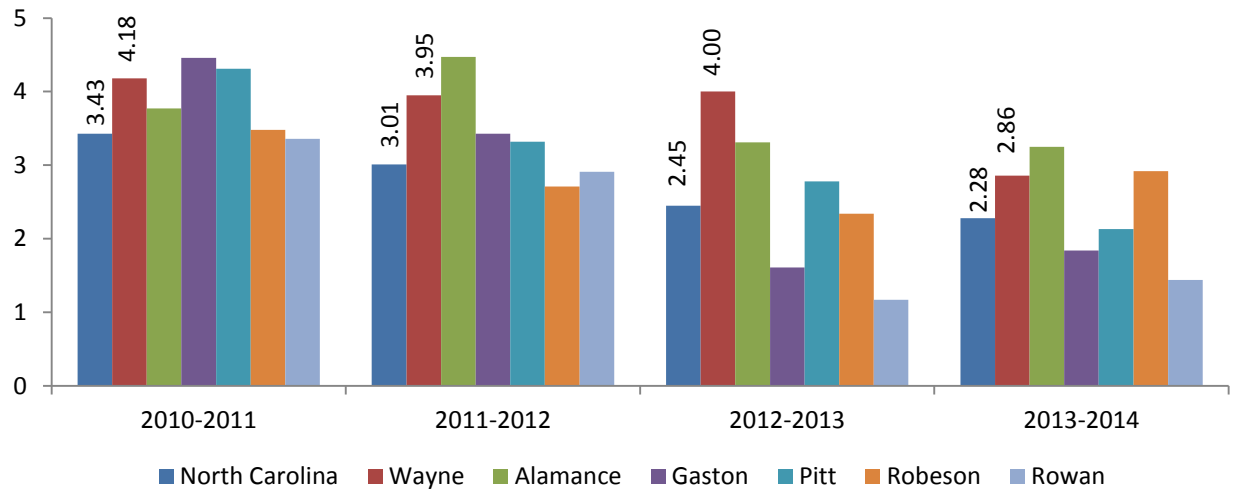
Table A-5: 4 Year Cohort Graduation Rates, Entering 9th Graders 2011-2012, 2010-2011, 2009-2010, 2009-2010 – Peer/State County Comparison

	North Carolina	Wayne	Alamance	Gaston	Pitt	Robeson	Rowan
2011	77.9	74.6	75.5	78.9	70.0	78.8	76.9
2012	80.4	80.1	75.4	80.1	73.1	82.6	81.1
2013	82.5	77.6	78.1	80.8	77.6	85.1	82.9
2014	83.9	79.5	79.0	84.5	82.7	85.0	80.9

Table A-6: Year Cohort Graduation Rate Report for Wayne County Public Schools; 2007-2008 Entering 9th Graders Graduation in 2011 or Earlier – 2010 Entering 9th Graders Graduating in 2013-2014 or Earlier

4-Year High School Graduation Rates State/County Specific				
	2011	2012	2013	2014
Charles B. Aycock	✔ 81.2%	✔ 84.9%	✘ 82.3%	✘ 83.0%
Eastern Wayne	✔ 83.4%	✔ 88.6%	✔ 84.5%	✔ 85.8%
Goldsboro	✘ 67.7%	✘ 65.8%	✘ 72.2%	✘ 70.2%
Rosewood	✔ 83.2%	✔ 81.3%	✔ 85.6%	✔ 86.1%
Southern Wayne	✘ 70.0%	✘ 73.8%	✘ 70.6%	✘ 75.7%
Spring Creek	✘ 73.6%	✔ 84.1%	✘ 75.7%	✘ 80.6%
Wayne Early/Middle	✔ >95%	✔ >95%	✔ >95%	✔ >95%
Wayne School of Engineering	✔ 95%	✔ 95%	✔ >95%	✔ >95%
Wayne County Overall	✘ 74.6	✘ 80.1%	✘ 77.6%	✘ 79.5%
North Carolina Overall	77.9	80.4%	82.5%	83.9%

Highschool Drop-Out Rates State/Peer County Comparison



	2010-2011	2011-2012	2012-2013	2013-2014
North Carolina	3.43	3.01	2.45	2.28
Wayne	4.18	3.95	4.00	2.86
Alamance	3.77	4.47	3.31	3.25
Gaston	4.46	3.43	1.61	1.84
Pitt	4.31	3.32	2.78	2.13
Robeson	3.48	2.71	2.34	2.92
Rowan	3.36	2.91	1.17	1.44

Figure A-7: High School Drop Out Rates State/Peer County Comparison 2010-2011 through 2013-2014

Appendix B —Community Survey

This Community survey was available online and in paper format both English and in Spanish

2016 Wayne County Community Health Assessment

We are conducting a survey of our county to learn about the health and quality of life in Wayne County. The Wayne County Health Department, Healthy Wayne Taskforce, Wayne Memorial Hospital, and Wayne County United Way will use the results of this survey to help address the major health and community issues in our county.

The survey is completely voluntary and should take no longer than 20 minutes to complete. All answers will be completely confidential. The information you provide will not be linked to you in any way.

Do you live in Wayne County?

- ☐ Yes
☐ No

Part 1: Quality of Life Statements

Please indicate your level of agreement with the following statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
There is good healthcare in Wayne County. <i>Consider the cost and quality, number of options and availability of healthcare in the county</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wayne County is a good place to raise children. <i>Consider the quality and safety of schools and child care programs, after school programs and places to play in the county</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wayne County is a good place to grow old. <i>Consider the county's elder-friendly housing, transportation to medical services, recreation, and services for the elderly</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is plenty of economic opportunity in Wayne County. <i>Consider the number and quality of jobs, job training/higher education opportunities and availability of affordable housing in the county</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wayne County is a safe place to live. <i>Consider how safe you feel at home, in the workplace, in schools, at playgrounds, parks and shopping centers in the county</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is plenty of help for people during times of need in Wayne County. <i>Consider social support in this county: neighbors, support groups, faith community outreach, community organizations and emergency monetary assistance</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part 2: Community Improvement

Please look at this list of community issues, select the TOP FIVE issues that most affect the quality of life in Wayne County, and rank the top five issues 1 – 5.

“1” indicates the most significant issue affecting the quality of life in Wayne County.

- | | |
|---|---|
| <input type="checkbox"/> Pollution (air, water, land) | <input type="checkbox"/> Neglect and abuse (elderly and children) |
| <input type="checkbox"/> Dropping out of school | <input type="checkbox"/> Domestic violence and sexual assault |
| <input type="checkbox"/> Low income/poverty | <input type="checkbox"/> Violent crime (murder, assault, theft, rape) |
| <input type="checkbox"/> Homelessness | <input type="checkbox"/> Discrimination/racism |
| <input type="checkbox"/> Lack of/inadequate health insurance | <input type="checkbox"/> Lack of community support |
| <input type="checkbox"/> Hopelessness | <input type="checkbox"/> Workplace safety (injuries, accidents) |
| <input type="checkbox"/> Substance abuse (alcohol, illegal drugs) | <input type="checkbox"/> Gambling (Internet lottery) |
| <input type="checkbox"/> Prescription drug abuse | <input type="checkbox"/> Overweight/obesity |

In your opinion, which ONE of the following services needs the most improvement in your neighborhood or community?

- | | |
|---|--|
| <input type="radio"/> Child care options | <input type="radio"/> Better/more recreational facilities (parts, trails, community centers) |
| <input type="radio"/> Elder care options | <input type="radio"/> Positive teen activities |
| <input type="radio"/> Services for disabled people | <input type="radio"/> Transportation options |
| <input type="radio"/> More affordable health services | <input type="radio"/> Availability of employment |
| <input type="radio"/> Better/more healthy food choices | <input type="radio"/> Higher paying employment |
| <input type="radio"/> More affordable/better housing | <input type="radio"/> Road maintenance |
| <input type="radio"/> Number of health care providers (specify type of provider): _____ | <input type="radio"/> Road safety |
| <input type="radio"/> Culturally appropriate health services | <input type="radio"/> Parent education |
| <input type="radio"/> Counseling/mental health/support groups | <input type="radio"/> Other: _____ |
| <input type="radio"/> Healthy family activities | <input type="radio"/> None |

Part 3: Health Information

In your opinion, which ONE health behavior do people in your own community need more information about?

- | | |
|---|--|
| <input type="radio"/> Eating well/nutrition | <input type="radio"/> Caring for family members with special needs/disabilities |
| <input type="radio"/> Exercising/fitness | <input type="radio"/> Preventing pregnancy and sexually transmitted disease (safe sex) |
| <input type="radio"/> Managing weight | <input type="radio"/> Substance abuse prevention (alcohol and drugs) |
| <input type="radio"/> Going to a dentist for check-ups/preventive care | <input type="radio"/> Suicide prevention |
| <input type="radio"/> Going to the doctor for yearly check-ups and screenings | <input type="radio"/> Stress management |
| <input type="radio"/> Getting prenatal care during pregnancy | <input type="radio"/> Symptoms and health consequences of diabetes |
| <input type="radio"/> Getting flu shots and other vaccines | <input type="radio"/> Anger management |
| <input type="radio"/> Preparing for an emergency/disaster | <input type="radio"/> Domestic violence prevention |
| <input type="radio"/> Using child safety seats | <input type="radio"/> Crime prevention |
| <input type="radio"/> Using seat belts | <input type="radio"/> Rape/sexual abuse prevention |
| <input type="radio"/> Driving safely | <input type="radio"/> Other: _____ |
| <input type="radio"/> Quitting smoking/tobacco use prevention | <input type="radio"/> None |
| <input type="radio"/> Child care/parenting | |
| <input type="radio"/> Elder care | |

Where do you get most of your health-related information? Select the TOP THREE sources of health-related information and rank the sources 1 – 3.

“1” indicates the top source of health-related information.

- | | |
|---|---|
| <input type="text"/> Friends and family | <input type="text"/> Hospitals |
| <input type="text"/> Doctors/nurses | <input type="text"/> Health departments |
| <input type="text"/> Pharmacists | <input type="text"/> Help lines |
| <input type="text"/> Churches | <input type="text"/> Books/magazines |
| <input type="text"/> Internet | <input type="text"/> WATCH/Free Clinics |
| <input type="text"/> Schools | <input type="text"/> Other: _____ |

Do you have children between the ages of 9 and 19 for which you are the caretaker? (Includes step-children, grandchildren or other relatives)

- ☐ Yes
☐ No

If you said “Yes” about children, which of the following health topics do you think your child/children need(s) more information about? Please choose all that apply.

- | | |
|---|--|
| <input type="checkbox"/> Dental hygiene | <input type="checkbox"/> Sex education |
| <input type="checkbox"/> Nutrition | <input type="checkbox"/> Alcohol |
| <input type="checkbox"/> Eating disorders | <input type="checkbox"/> Drug abuse |
| <input type="checkbox"/> Asthma management | <input type="checkbox"/> Reckless driving/speeding |
| <input type="checkbox"/> Diabetes management | <input type="checkbox"/> Mental health issues |
| <input type="checkbox"/> Tobacco | <input type="checkbox"/> Suicide prevention |
| <input type="checkbox"/> Sexually transmitted diseases (STDs) | <input type="checkbox"/> Other: _____ |

Part 4: Personal Health

Would you say that, in general, your health is...

- ☐ Excellent
☐ Very good
☐ Good
☐ Fair
☐ Poor
☐ Don't know/Not sure

Have you ever been told by a doctor, nurse, or other health professional that you have any of the following health conditions?

	Yes	No		Yes	No
Asthma	<input type="radio"/>	<input type="radio"/>	Osteoporosis	<input type="radio"/>	<input type="radio"/>
Depression or anxiety	<input type="radio"/>	<input type="radio"/>	Overweight/obesity	<input type="radio"/>	<input type="radio"/>
High blood pressure	<input type="radio"/>	<input type="radio"/>	Angina/heart disease	<input type="radio"/>	<input type="radio"/>
High cholesterol	<input type="radio"/>	<input type="radio"/>	Cancer	<input type="radio"/>	<input type="radio"/>
Diabetes (not during pregnancy)	<input type="radio"/>	<input type="radio"/>	Substance abuse (alcohol and drugs)	<input type="radio"/>	<input type="radio"/>

Have you undergone any annual preventive screenings (in the last 3 years)?

- ☐ Yes ☐ Don't know/Not sure
☐ No

In the past 30 days, have there been any days when feeling sad or worried kept you from going about your normal business?

- ☐ Yes ☐ Don't know/Not sure
☐ No

In the past 30 days, have you had any physical pain or health problems that made it hard for you to do your usual activities such as driving, working around the house or going to work?

- ☐ Yes ☐ Don't know/Not sure
☐ No

During a normal week, other than in your regular job, do you engage in any physical activity or exercise that lasts at least a half an hour?

- ☐ Yes (specify the number of times per week): ____ ☐ Don't know/Not sure
☐ No

If you said "Yes" about exercising, where do you go to exercise or engage in physical activity? Please choose all that apply.

- | | |
|--------------------------------------|--|
| <input type="checkbox"/> Home | <input type="checkbox"/> County, city, and state parks |
| <input type="checkbox"/> Private gym | <input type="checkbox"/> Public recreation center |
| <input type="checkbox"/> YMCA | <input type="checkbox"/> Other: _____ |

If you said "No" about exercising, what are the reasons you do not exercise for at least a half hour during a normal week? Please choose all that apply.

- | | |
|--|---|
| <input type="checkbox"/> My job is physical or hard labor | <input type="checkbox"/> I don't like to exercise |
| <input type="checkbox"/> Exercise is not important to me | <input type="checkbox"/> It costs too much to exercise |
| <input type="checkbox"/> I don't have access to a facility that has the things I need, like a pool, golf course or a track | <input type="checkbox"/> There is no safe place to exercise |
| <input type="checkbox"/> I don't have enough time to exercise | <input type="checkbox"/> I'm too tired to exercise |
| <input type="checkbox"/> I would need child care and I don't have it | <input type="checkbox"/> I'm physically disabled |
| <input type="checkbox"/> I don't know how to find exercise partners | <input type="checkbox"/> I don't know |
| | <input type="checkbox"/> Other: _____ |

Not counting lettuce salad or potato products, think about how often you eat fruits and vegetables in an average week. How many cups PER WEEK of fruits and vegetables would you say you eat? Put "0" in each space, if you never consume fruits, vegetables, or 100% fruit juice.

One apple or 12 baby carrots equal one cup. Lettuce salad is the typical "house salad" with iceberg lettuce or the salad mixes you get at the store or fast food restaurants, even if they have meat on top. Potato products are French Fries, baked potatoes, hash browns, mashed potatoes - anything made from white potatoes. For the purposes of this study, ketchup is NOT considered a vegetable.

Number of cups of fruit per week _____
Number of cups of vegetables per week _____
Number of cups 100% fruit juice per week _____

How often do you consume 3 or more alcoholic drinks in one sitting?

- ☐ Never
- ☐ A few times per year
- ☐ Several times per month
- ☐ Multiple times per week
- ☐ Daily

Have you been exposed to secondhand smoke in the past year?

- ☐ Yes
- ☐ No

Where do you think you are exposed to secondhand smoke most often?

- ☐ Home
- ☐ Workplace
- ☐ Hospitals
- ☐ Restaurants
- ☐ Schools
- ☐ Other: _____
- ☐ I am not exposed to secondhand smoke

Do you smoke, chew tobacco, or use electronic cigarettes (e-cigs)?

- ☐ Yes
- ☐ No

Where would you go for help if you wanted to quit?

- ☐ Quit Line NC
- ☐ Doctor
- ☐ Church
- ☐ Pharmacy
- ☐ Private counselor/therapist
- ☐ Health Department
- ☐ I don't know
- ☐ Other: _____
- ☐ Not applicable; I don't want to quit

Part 5: Access to Care/Family Health

Where do you go when you are sick? Please choose all that apply.

- ☐ Health Department
- ☐ Doctor's office
- ☐ Dentist's office
- ☐ WATCH
- ☐ Emergency Department
- ☐ Goshen Medical Clinic
- ☐ Urgent Care Center
- ☐ Other: _____

What is your primary health insurance plan? This is the plan which pays the medical bills first or pays most of the medical bills.

- ☐ State Employee Health Plan
- ☐ Blue Cross and Blue Shield of North Carolina
- ☐ Other private health insurance plan purchased from employer or workplace
- ☐ Other private health insurance plan purchased directly from an insurance company
- ☐ Medicare
- ☐ Medicaid, Carolina ACCESS, or Health Choice 55
- ☐ The military, Tricare, CHAMPUS, or the VA
- ☐ The Indian Health Service
- ☐ Other (government plan)
- ☐ No health plan of any kind
- ☐ Don't know/Not sure

In the past 12 months, did you have a problem getting the health care you needed for you personally or for a family member?

- ☐ Yes
- ☐ No

In the past 12 months, have you had trouble getting specialty care?

- ☐ Yes (specify the type of specialty care): _____
- ☐ No

If you had a problem getting the care you needed (including specialty care), where did you or your family member have trouble getting health care? Please choose all that apply.

- | | |
|--|--|
| <input type="checkbox"/> Health Department | <input type="checkbox"/> Emergency Department |
| <input type="checkbox"/> Doctor's office | <input type="checkbox"/> Goshen Medical Clinic |
| <input type="checkbox"/> Dentist's office | <input type="checkbox"/> Urgent Care Center |
| <input type="checkbox"/> WATCH | <input type="checkbox"/> Other: _____ |

If you had a problem getting the care you needed (including specialty care), which of these problems prevented you or your family member from getting the necessary health care? Please choose all that apply.

- | | |
|--|--|
| <input type="checkbox"/> No health insurance | <input type="checkbox"/> Dentist would not take my/our insurance or Medicaid |
| <input type="checkbox"/> Insurance didn't cover what I/we needed | <input type="checkbox"/> No way to get there |
| <input type="checkbox"/> My/our share of the cost (deductible/co-pay) was too high | <input type="checkbox"/> Didn't know where to go |
| <input type="checkbox"/> Doctor would not take my/our insurance or Medicaid | <input type="checkbox"/> Couldn't get an appointment |
| <input type="checkbox"/> Hospital would not take my/our insurance | <input type="checkbox"/> The wait was too long |
| <input type="checkbox"/> Pharmacy would not take my/our insurance or Medicaid | <input type="checkbox"/> Other: _____ |

Part 6: Emergency Preparedness

Does your household have working smoke detectors?

- | | |
|---------------------------|---|
| <input type="radio"/> Yes | <input type="radio"/> Don't know/Not sure |
| <input type="radio"/> No | |

Does your family have a basic emergency supply kit?

Kit includes water, non-perishable food, any necessary prescriptions, first aid supplies, flashlight and batteries, non-electric can opener, blanket, etc.

- ☐ Yes (specify the number of days you have supplies for): _____
- ☐ No

What would be your main way of getting information from authorities in a large-scale disaster or emergency?

- ☐ Television
- ☐ Radio
- ☐ Internet
- ☐ Print media (newspaper)
- ☐ Social networking site
- ☐ Neighbors
- ☐ Text message (emergency alert system)
- ☐ Other: _____
- ☐ Don't know/Not sure

If public authorities announced a mandatory evacuation from your neighborhood or community due to a large-scale disaster or emergency, would you evacuate?

- ☐ Yes
- ☐ No
- ☐ Don't know/Not sure

If "No" or "Don't know/Not sure", what would be the main reason you might not evacuate if asked to do so?

- ☐ Lack of transportation
- ☐ Lack of trust in public officials
- ☐ Concern about leaving property behind
- ☐ Concern about personal safety
- ☐ Concern about family safety
- ☐ Concern about leaving pets
- ☐ Concern about traffic jams and inability to get out
- ☐ Health problems (could not be moved)
- ☐ Other: _____
- ☐ Don't know/Not sure

Are you or anyone in your household current in CPR?

- ☐ Yes
- ☐ No

Part 7: Demographic Questions

The next questions are general questions about you, which will only be reported as a summary of all answers given by survey participants. Your answers will remain anonymous.

How old are you?

- ☐ 15 - 19
- ☐ 20 - 24
- ☐ 25 - 29
- ☐ 30 - 34
- ☐ 35 - 39
- ☐ 40 - 44
- ☐ 45 - 49
- ☐ 50 - 54
- ☐ 55 - 59
- ☐ 60 - 64
- ☐ 65 - 69
- ☐ 70 - 74
- ☐ 75 - 79
- ☐ 80 - 84
- ☐ 85 or older

Are you Male or Female?

- ☐ Male
- ☐ Female

Are you of Hispanic, Latino or Spanish origin?

- ☐ Yes
- ☐ No

If you are of Hispanic, Latino or Spanish origin, are you:

- ☐ Mexican, Mexican American, or Chicano
- ☐ Puerto Rican
- ☐ Cuban
- ☐ Other Hispanic or Latino: _____

What is your race? Please choose all that apply.

- ☐ White
- ☐ Black or African American
- ☐ American Indian or Alaska Native
- ☐ Asian Indian
- ☐ Other Asian including Japanese, Chinese, Korean, Vietnamese and Filipino/a: _____
- ☐ Pacific Islander including Native Hawaiian, Samoan, Guamanian/Chamorro: _____
- ☐ Other race not listed here: _____

Do you speak a language other than English at home?

- ☐ Yes (specify what language other than English you speak at home): _____
- ☐ No

What is your marital status?

- ☐ Never married/single
- ☐ Married
- ☐ Unmarried partner
- ☐ Divorced
- ☐ Widowed
- ☐ Separated
- ☐ Other

What is the highest level of school, college or vocational training that you have finished?

- ☐ Less than 9th grade
- ☐ 9 - 12th grade, no diploma
- ☐ High school graduate (or GED/equivalent)
- ☐ Associate's degree or vocational training
- ☐ Some college (no degree)
- ☐ Bachelor's degree
- ☐ Graduate or professional degree
- ☐ Other: _____

What is your combined annual household income?

- ☐ Less than \$10,000
- ☐ \$10,000 to \$14,999
- ☐ \$15,000 to \$24,999
- ☐ \$25,000 to \$34,999
- ☐ \$35,000 to \$49,999
- ☐ \$50,000 to \$74,999
- ☐ \$75,000 to \$99,999
- ☐ \$100,000 or more

What is your employment status? Please choose all that apply.

- ☐ Employed full-time
- ☐ Employed part-time
- ☐ Retired
- ☐ Armed Forces
- ☐ Disabled
- ☐ Student
- ☐ Homemaker
- ☐ Self-employed
- ☐ Unemployed for 1 year or less
- ☐ Unemployed for more than 1 year

Do you have access to the Internet?

- ☐ Yes
- ☐ No

Please write your 5 digit home zip code: _____

Thank you for your participation

Appendix C- References *(to include graph/table references)*

- ¹Wayne County Agriculture Highlights. Available at:
<http://wayne.ces.ncsu.edu/files/library/96/WAYNE%20COUNTY%20AGRICULTURE%20HIGHLIGHTS.pdf>
- ²Wayne County Government Website – Wayne County History - www.waynegov.com
- ³ Wayne County Government Website – General Information – www.waynegov.com
- ⁴US Census Bureau, American Fact Finder, Annual Estimates of the Resident Population: April 1, 2010-July 1, 2014: 2014 Population Estimates
<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>
- ⁵ US Census Bureau, American Fact Finder, ACS Demographics and Housing Estimates: 2010-2014, 5 Year Estimates, Wayne County
<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>
- ⁶ US Census Bureau, American Fact Finder. Selected Economic Characteristics, 2010-2014, American Community Survey 5 Year Estimates Educational Attainment, 2010-2014 American Community Survey 5-Year Estimates
<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>
- ⁷ NC Department of Commerce, Labor & Economic Analysis Division, D4, Local Area Unemployment Statistics (LAUS) Jan 2010-Dec 2014
<http://d4.nccommerce.com/>
- ⁸ Public Schools of North Carolina, State Board of Education, Department of Public Instruction – 4 Year Cohort Graduation Rates 2010-11 Entering 9th Graders Graduating in 2013-14 or Earlier <http://www.ncpublicschools.org/accountability/reporting/cohortgraduate>
- ⁹ Public Schools of North Carolina, State Board of Education, Department of Public Instruction – 2014-2015 Annual Dropout Report
<http://www.ncpublicschools.org/research/dropout/reports/>
- ¹⁰ NC Department of Public Safety, SBI Crime Reporting 2014 Annual Report, County Rates 10 Year Trend
<http://crimereporting.ncsbi.gov/Reports.aspx>
- ¹¹ NC Department of Public Safety, SBI Crime Reporting 2014 Annual Report, County Offenses 10 Year Trend
<http://crimereporting.ncsbi.gov/Reports.aspx>
- ¹² NC Division of Public Health, State Center for Health Statistics, 2015 County Health Data Book, 2009-2013 Pregnancy Rates per 1,000 Population, by Race/Ethnicity for Females <http://www.schs.state.nc.us/schs/data/databook/2015>
- ¹³ NC Division of Public Health, State Center for Health Statistics, 2015 County Health Data Book, 2009-2013 Abortion Rates per 1,000 Population, by Race/Ethnicity for Females <http://www.schs.state.nc.us/schs/data/databook/2015>
- ¹⁴ NC Division of Public Health, State Center for Health Statistics, Vital Statistics, Reported Pregnancies 2014, Pregnancy Rates ages 15-19
<http://www.schs.state.nc.us/data/vital/pregnancies/2014/>
- ¹⁵ NC Division of Public Health, State Center for Health Statistics, 2015 County Health Data Book, Low (<2500 grams) and Very Low (<1500 grams) Weight Births by Race/Ethnicity, 2009-2013 <http://www.schs.state.nc.us/schs/data/databook/2015>
- ¹⁶ NC Division of Public Health, State Center for Health Statistics, 2015 County Health Data Book, Births Where Mothers Smoked During Pregnancy, 2011-2013 <http://www.schs.state.nc.us/schs/data/databook/2015>
- ¹⁷ NC Division of Public Health, State Center for Health Statistics, 2015 County Health Data Book, Birth Indicators/Wayne/2013, 2012
<http://www.schs.state.nc.us/schs/data/databook/2015>
- ¹⁸ NC Division of Public Health, State Center for Health Statistics, Vital Statistics, Infant Mortality Statistics, 2014, 2013, 2012, 2011, 2010
<http://www.schs.state.nc.us/data/vital.cfm>
- ¹⁹ NC Division of Public Health, State Center for Health Statistics, Vital Statistics, Leading Causes of Death, Suicide, 2013, 2012, 2011, 2010, 2009 <http://www.schs.state.nc.us/data/vital.cfm>
- ²⁰ NC Division of Public Health, State Center for Health Statistics, 2013 NC BRFSS Survey Results, Tobacco Use/Current Smoker
<http://www.schs.state.nc.us/data/brfss/2013/>

- ²¹ NC Division of Public Health, State Center for Health Statistics, 2015 County Health Data Book, Death Counts and Crude Death Rates per 100,000 Population for Leading Causes of Death, by Age Groups NC 2009-2013 <http://www.schs.state.nc.us/schs/data/databook/2015>
- ²² NC Division of Public Health, State Center for Health Statistics, County Health Data Book. 2009-2013 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County <http://www.schs.state.nc.us/schs/data/databook/2015>
- ²³ NC Division of Public Health, State Center for Health Statistics, Cancer Annual Reports 2013 NC Cancer Incidence Rates, 2009-2013 http://www.schs.state.nc.us/data/cancer/incidence_rates.htm
- ²⁴ NC Division of Public Health, State Center for Health Statistics, Cancer Annual Reports 2013 NC Cancer Mortality Rates, 2009-2013 http://www.schs.state.nc.us/data/cancer/incidence_rates.htm
- ²⁵ NC Division of Public Health, State Center for Health Statistics, Cancer Annual Reports 2015 Cancer Projections _ County <http://www.schs.state.nc.us/data/cancer/projections.htm>
- ²⁶ NC Division of Public Health, State Center for Health Statistics, 2014 NC Vital Statistics, Volume 2, Heart Disease <http://www.schs.state.nc.us/data/vital/lcd/2014/>
- ²⁷Centers for Disease Control and Prevention. Division of Diabetes Translation.US Diabetes Surveillance System <http://www.cdc.gov/diabetes/data>
- ²⁸ NC Division of Public Health, State Center for Health Statistics, 2015 County Health Data Book, asthma Hospital Discharges per 100,000 population, 2013 <http://www.schs.state.nc.us/data/databook2015/>
- ²⁹Robert Wood Johnson Foundation. (2015). County Demographic. Retrieved from County Health Rankings and Roadmaps: <http://www.countyhealthrankings.org/app/north-carolina/2015/rankings/wayne/county/outcomes/overall/snapshot>
- ³⁰ NC 2013 HIV/STD Surveillance Report, Communicable Disease Branch <http://epi.publichealth.nc.gov/cd/stds/figures/std13rpt.pdf>
- ³¹ NC Division of Public Health, State Center for Health Statistics, 2015 County Health Data Book, 2009-2013 Resident Race/Ethnicity-Specific and Sex Specific Age-Adjusted Death Rates per 100,000
- ³² NC Division of Public Health, State Center for Health Statistics, Behavioral Risk Factor Surveillance System (BRFSS). Available at: <http://www.schs.state.nc.us/schs/brfss/>

Appendix D – Health Care Resources

- **Cliffs of the Neuse State Park**
- **Edgewood Community Development School**
 - Services for autistic and moderate to profoundly mentally handicapped children between the ages of 3 and 21 years of age
- **Eastern Associates Speech and Language Services, Inc.**
 - Speech language and communicative disorder therapy for adults and children
- **Eastpointe**
 - Information, referral, crisis intervention telephone services provided by Wayne County Mental Health Association
- **Family First**
 - Provides mental health services for the public
- **Family Works**
 - Provides mental health services for the public
- **Goldsboro Pediatrics**
 - Provides quality pediatric care and referrals as needed
- **Goshen Medical Center**
 - Provides income-based health care services
- **Habitat for Humanity of Greater Goldsboro**
 - Provides home ownership opportunities for low-income families
- **Mount Olive Family Medicine**
- **Mount Olive Counseling Services**
 - Provides mental health services for the public
- **Mount Olive Pediatrics**
- **Project YESS Academy After School Program**
- **Salvation Army**
 - Provides food, clothing, medicine, and other necessities to low income families
- **Soup Kitchen**
 - Provides meals Monday through Saturday to needy people in downtown Goldsboro
- **The Shelter of Wayne County**
 - Emergency shelter for abused women and children
- **United Church Ministries**
 - Interdenominational organization providing emergency assistance
- **WAGES**
 - Community action agency dedicated to helping Wayne County mobilize its resources to combat poverty
- **WATCH Healthcare Program**
 - Provides a medical home to the uninsured of Wayne County. A mobile medical unit and a stationary clinic at the Goldsboro Family YMCA provide free acute and primary health care with indicated labs and free prescription medications for those who qualify.
- **Wayne Community College**

- Provides adult high school, GED, post-secondary, and continuing educational opportunities to Wayne County citizens
- **Wayne County Communities in Schools**
 - Community based organization that works to prevent students from dropping out of school
- **Wayne County Department of Social Services**
 - Comprehensive financial and family preservation services provided to income eligible and at risk residents
- **Wayne County Health Department**
- **Wayne County Mental Health Center**
 - Treatment for mental illness and substance abuse
- **Wayne Memorial Hospital**
- **Wayne Uplift Resource Center**
 - Provides comprehensive family development services to residents of low-income housing communities in Goldsboro
- **Wayne Initiative for School Health (WISH)**
 - School-based program that provides services for minor illness, injuries, immunizations, nutrition services, lab services, comprehensive physicals, health education, chronic illness management, and dental screenings
 - Brogden Middle, Dillard Middle, Goldsboro High, Wayne School of Engineering, Mount Olive Middle, Southern Wayne High

Parks and Recreation Facilities

- **Goldsboro Family YMCA**
- **Parks**
- **Berkley Park**
 - Fairview Park
 - Henry C. Mitchell Park
 - Herman Park
 - H.V. Brown Park
 - Mina Weil Park
 - North End Park
 - Peacock Park
 - Quail Park
 - South End Park
 - Stoney Creek Park
- **Recreation:**
 - Boys and Girls Club
 - Herman Park Center
 - Senior Citizens Building
 - W.A. Foster Recreation Center