

2012

# Wayne County Community Health Assessment

WCCHA  
2012



## Acknowledgements

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## ***Purpose***

Local health departments within North Carolina are required to conduct a community health assessment every four years. In March of 2010, legislation was passed requiring not-for-profit hospitals to also conduct community health assessments. To meet the requirements, Wayne Memorial Hospital and the Wayne County Health Department partnered with the Wayne County Board of Health, Wayne Action Teams for Community Health (WATCH) and East Carolina University (ECU) 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 ascertain priority areas of focus for the next three to four years. The health needs assessment process is inclusive and transparent. It involves various key stakeholder groups, including members of the community. Action plans for addressing key community health priorities will be formulated beginning Spring 2013.

## ***Team Composition***

Representatives from the Wayne County Health Department, Wayne Memorial Hospital, Wayne County Board of Health, WATCH and ECU cooperatively conducted the community health assessment. The collaboration identified the types and sources of data to be collected, determined the methods for collecting input from the community and key stakeholders concerning health related issues as well as communicating this information to the various stakeholders in order to prioritize community health concerns.

## ***Process Overview***

The community health assessment has several requirements. One requirement is the collection of primary data from community members. Wayne County elected to elicit feedback from key stakeholder groups, conduct focus groups throughout the county, as well as conduct a health opinion survey. The health opinion survey was adapted from the Community Health Assessment Guidebook, NC Division of Public Health.

The stakeholder group of more than 50 members met quarterly throughout this process to provide feedback. A specific meeting with Goshen clinic providers was held near the end of data collection to assess their opinions of the needs. Ten focus groups were held in specific geographic locations to discover community members' perception of health concerns and suggestions for improving health within the community. There were a total of 86 focus group participants. The survey was available online and in paper format in both English and Spanish. A total of 1,369 surveys were completed.

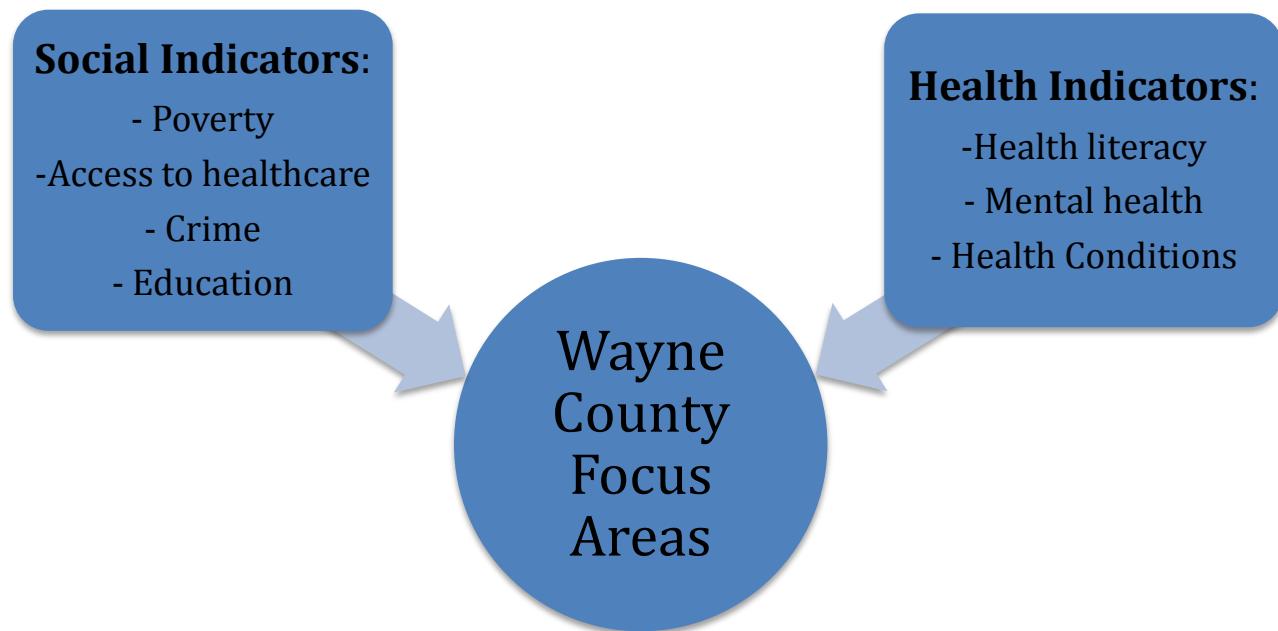
A review of secondary data was conducted by examining county level health data primarily compiled by the NC State Center for Health Statistics. Examples of such data

included leading causes of mortality, health care resource 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. These data were 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. Members of the Wayne County Board of Health received the data presentation electronically prior to their January 2013 meeting. A review of the data was conducted at the January Board of Health meeting, as well as a review of the process undertaken to determine the focus areas including the recommendations from the leadership team.

### ***Outcomes***

The community health assessment identified the following focus areas for 2013 – 2016. Although this was a community health assessment, the social indicators below both directly and indirectly influence community health. Without addressing both social and health together, significant health improvements will not be accomplished.



## ***County Overview: The Good Life. Grown Here.***

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, at \$353 million in 2011.<sup>1</sup> 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 more time in front of computer screens have impacted health statistics that are dependent on diet, exercise and health habits, while communicable diseases (which were the cause of most hospital admissions years ago) 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.<sup>2</sup>

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 4<sup>th</sup> Fighter Wing and the 916<sup>th</sup> Air Refueling Wing.<sup>3</sup>

### ***Population Demographics***

#### *Population Estimates*

As of July, 2011, the estimated population of Wayne County was up to 123,710 from the April, 2010 population count of 122,623. This is a growth of 0.9% with a net migration of 0.3%. Since April, 2000, the population of Wayne County has grown from 113,449, representing an 8.3% increase.<sup>4</sup>

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<sup>1</sup> Wayne County Agriculture Highlights. Available at:  
<http://wayne.ces.ncsu.edu/files/library/96/WAYNE%20COUNTY%20AGRICULTURE%20HIGHLIGHTS.pdf>

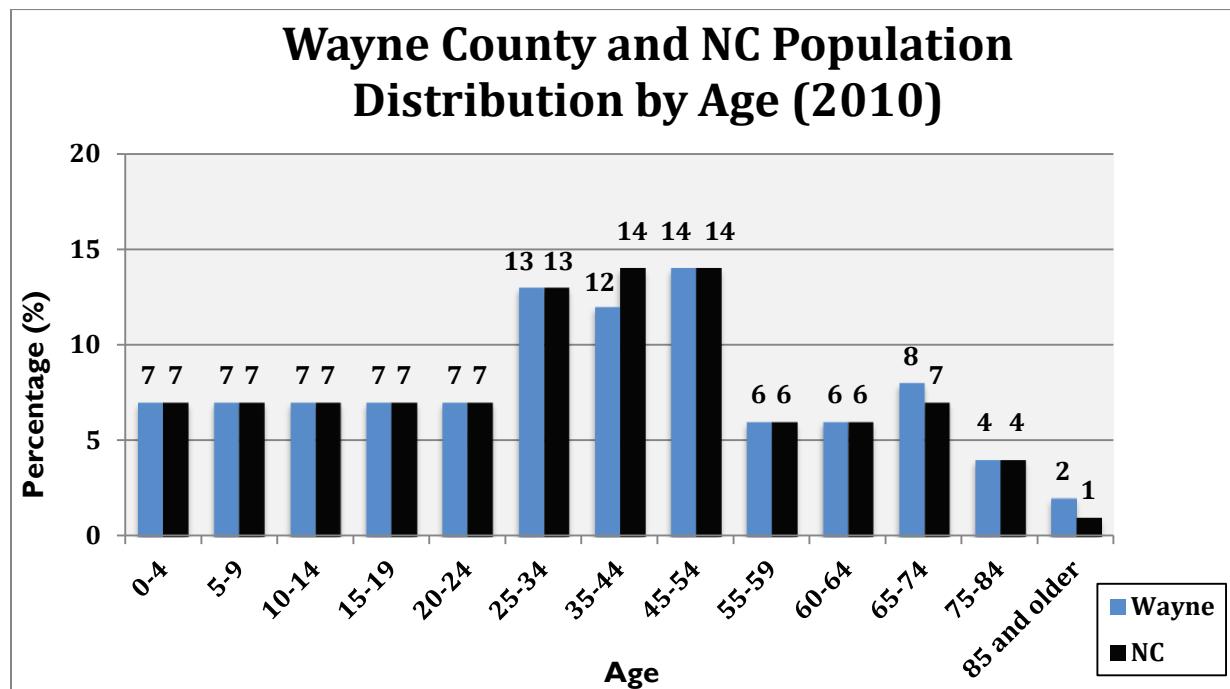
<sup>2</sup> Wayne County Government Website. Available at:  
<http://www.waynegov.com/Page/16>

<sup>3</sup> Wayne County Government Website. Available at:  
<http://www.waynegov.com/Page/16>

<sup>4</sup> NC Office of State Budget and Management. Available at:  
[http://www.osbm.state.nc.us/ncosbm/facts\\_and\\_figures/socioeconomic\\_data/population\\_estimates/county\\_estimates.shtml](http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/county_estimates.shtml)

## Age Distribution

The graph below represents population data for Wayne County as of 2010. The median age in Wayne County is 36.7 years, whereas the median age in North Carolina was 36.7. The majority of the population in Wayne County is between the ages of 25 and 54 (39 percent). The school age (ages 5-19) population for Wayne County comprises 21 percent of the total population. Furthermore, 14 percent of the population in Wayne County is senior citizens (65 and older), which is slightly older than the North Carolina average, and older than the major metropolitan areas where major universities are situated.<sup>5</sup>



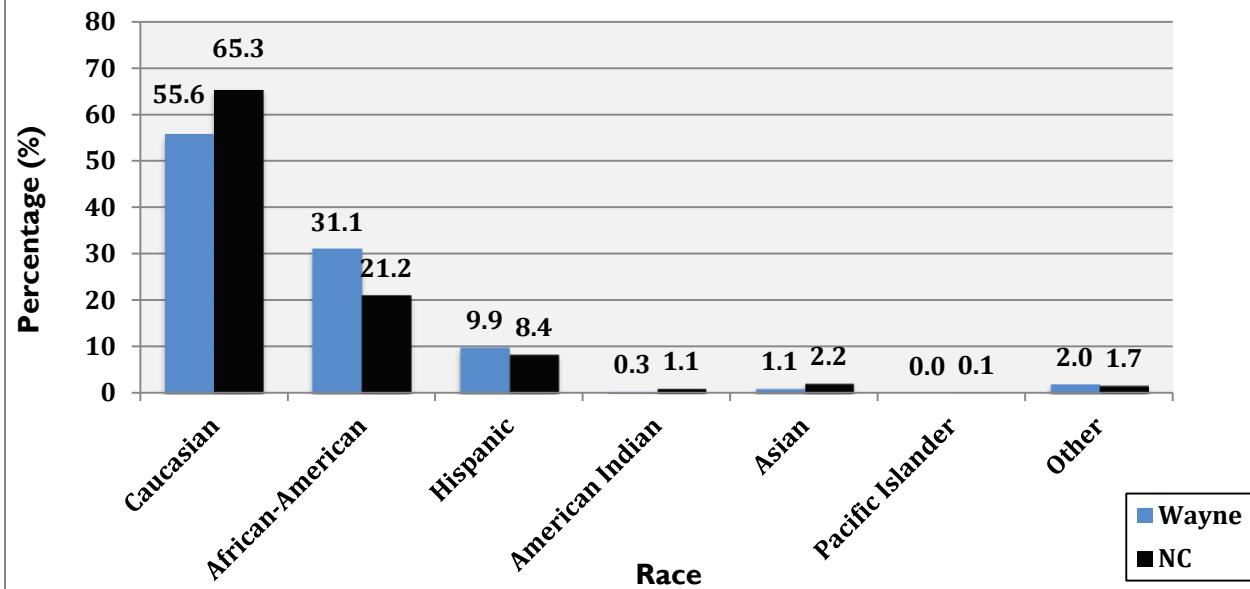
## Race Distribution

The majority of Wayne County citizens are Caucasian (55.6 percent), whereas African-Americans represent 31.1 percent of the population. Since 2000, the Hispanic population in Wayne County has grown from 4.9 percent to 9.9 percent in 2010. American Indian, Alaska Native, Asian, Pacific Islander or persons reporting two or more races represent the remaining population. Overall, the race distribution is quite different from that of North Carolina. In North Carolina, 65.5 percent of the population is Caucasian and 21.5 percent is African-American. North Carolina's percent population of Hispanic origin is 8.4 percent compared to 16.3 percent of the US population.<sup>6</sup>

<sup>5</sup> US Census Bureau, American Fact Finder. Available at: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

<sup>6</sup> US Census Bureau, American Fact Finder. Available at: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

## Wayne County and NC Population Distribution by Race (2010)



### *Sex Distribution*

The sex distribution in Wayne County as of 2010 is relatively equal with 51 percent being female and 49 percent being male. These percentages are identical to that of North Carolina in 2010.<sup>7</sup>

### **Economic Factors**

#### *Income and Poverty*

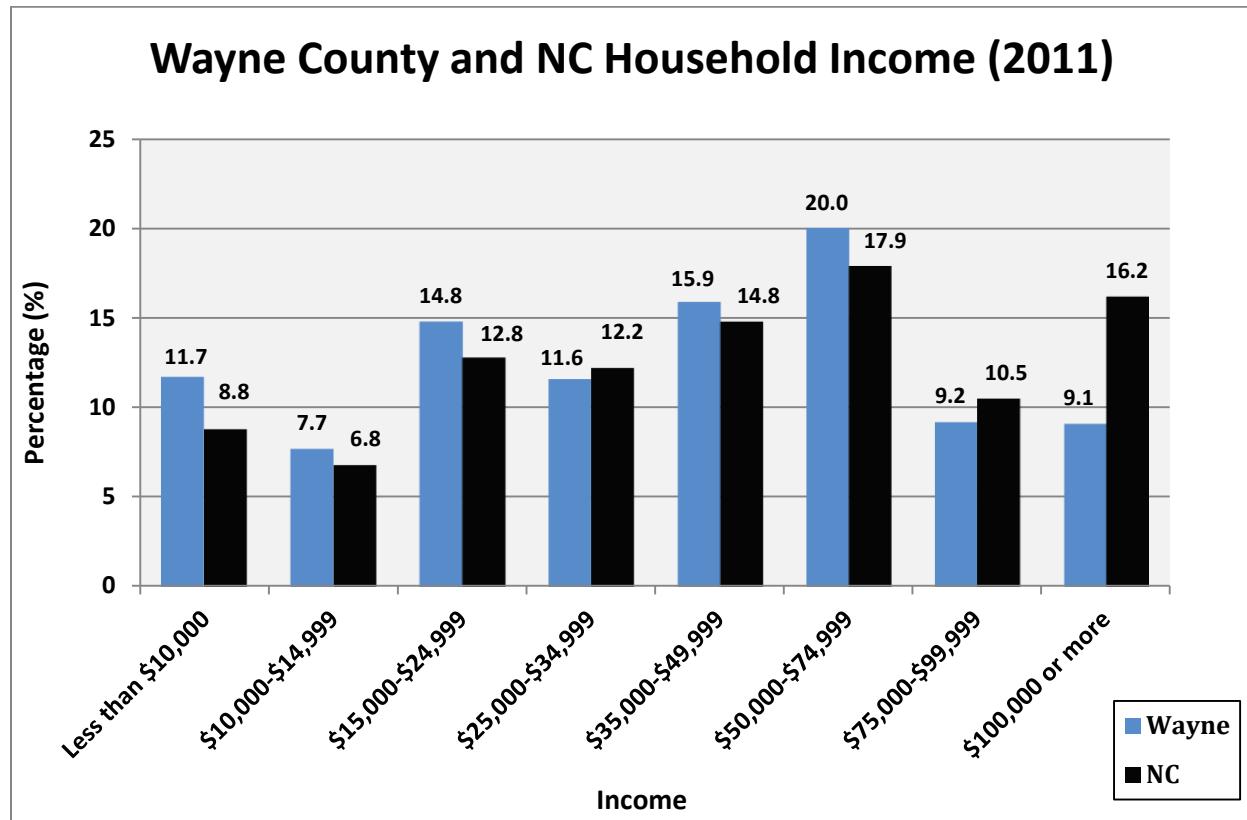
The graphs below depict Wayne County's annual household income, median annual household income, per capita income, and percent of population below the poverty threshold. In 2011, 11.7 percent of Wayne County residents reported an annual household income less than \$10,000, compared to 8.8 percent in North Carolina. Additionally, only 9.1 percent of Wayne County residents reported an annual household income of \$100,000 or more, compared to 16.2 percent in North Carolina.<sup>8</sup> The average median annual household

<sup>7</sup> US Census Bureau, State and County Quick Facts. Available at: <http://quickfacts.census.gov/qfd/states/37/37191.html>

<sup>8</sup> US Census Bureau, American Fact Finder. Available at: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

income in Wayne County in 2011 was \$39,085, compared to \$43,916 in North Carolina.<sup>9</sup> From 2007-2011, the average per capita income in Wayne County was \$21,135, compared to \$25,256 and \$27,915 in North Carolina and the US, respectively.<sup>10</sup> As of 2011, 23.5 percent of Wayne County residents reported living in poverty, whereas 17.9 percent reported living in poverty in North Carolina.<sup>11</sup>

These statistics are similar to previously reported statistics, and are typical of rural counties compared to more urbanized counties in North Carolina. In general, North Carolina is a more rural state than the average state, and income has always been lower than national averages. The average of North Carolina per capita income in 2007-2011 per the US census is 90.5% of the US average, compared to 82.8% in 1969.

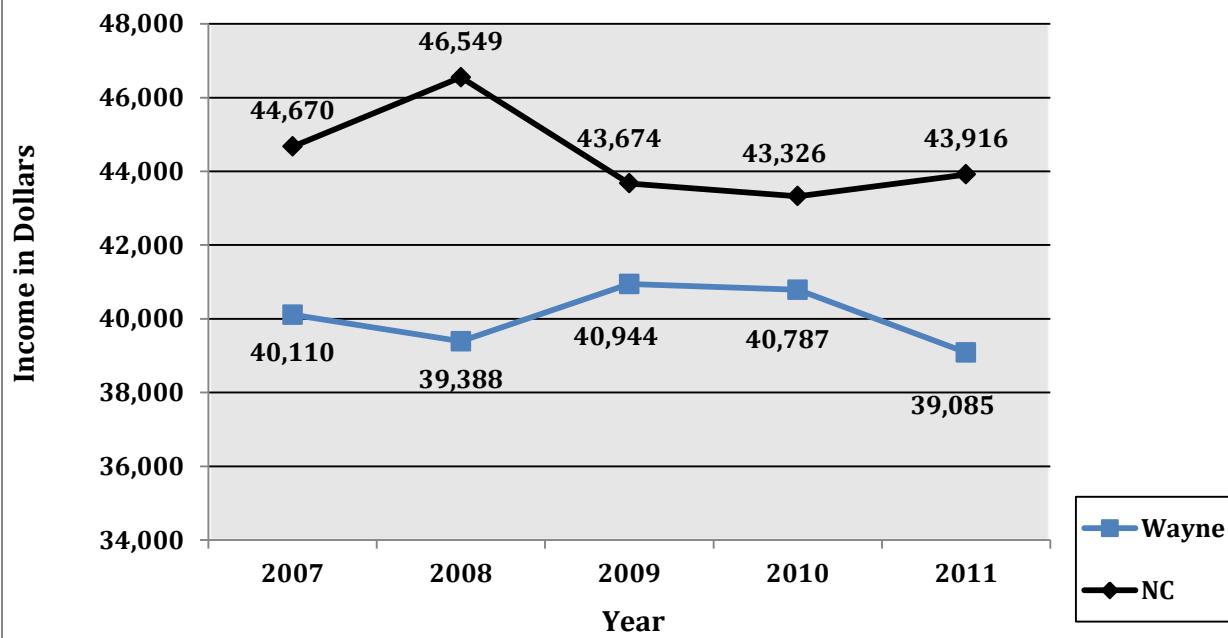


<sup>9</sup> US Census Bureau, American Fact Finder. Available at:  
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

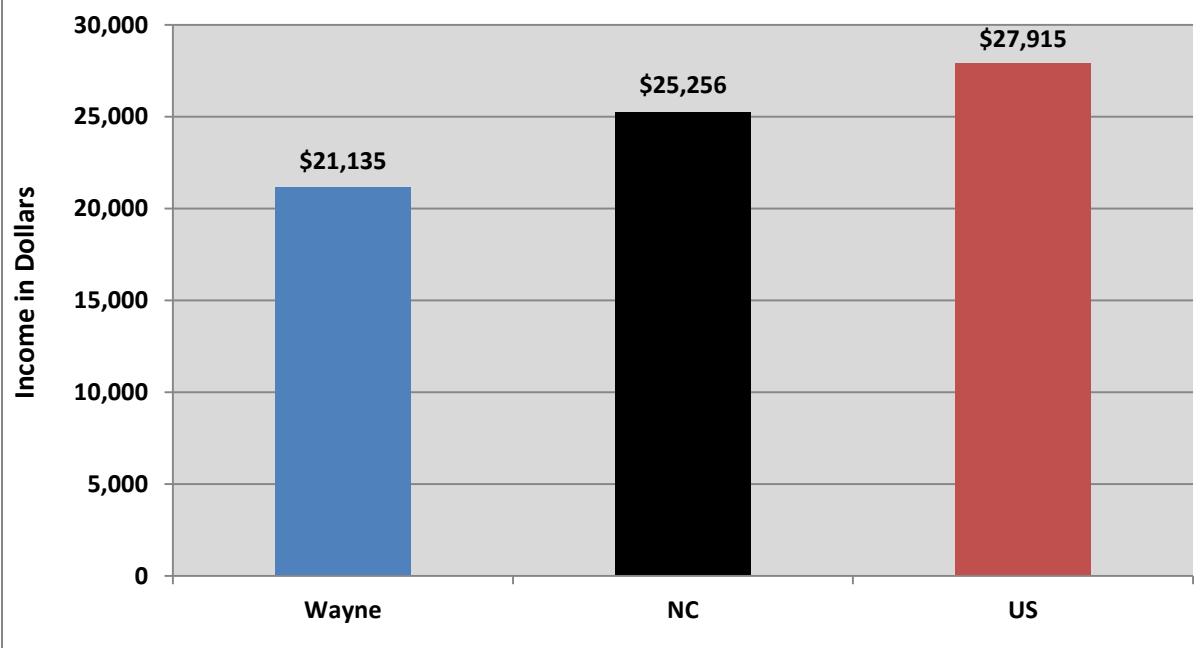
<sup>10</sup> US Census Bureau, State and County Quick Facts. Available at:  
<http://quickfacts.census.gov/qfd/states/37/37191.html>

<sup>11</sup> US Census Bureau, American Fact Finder. Available at:  
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

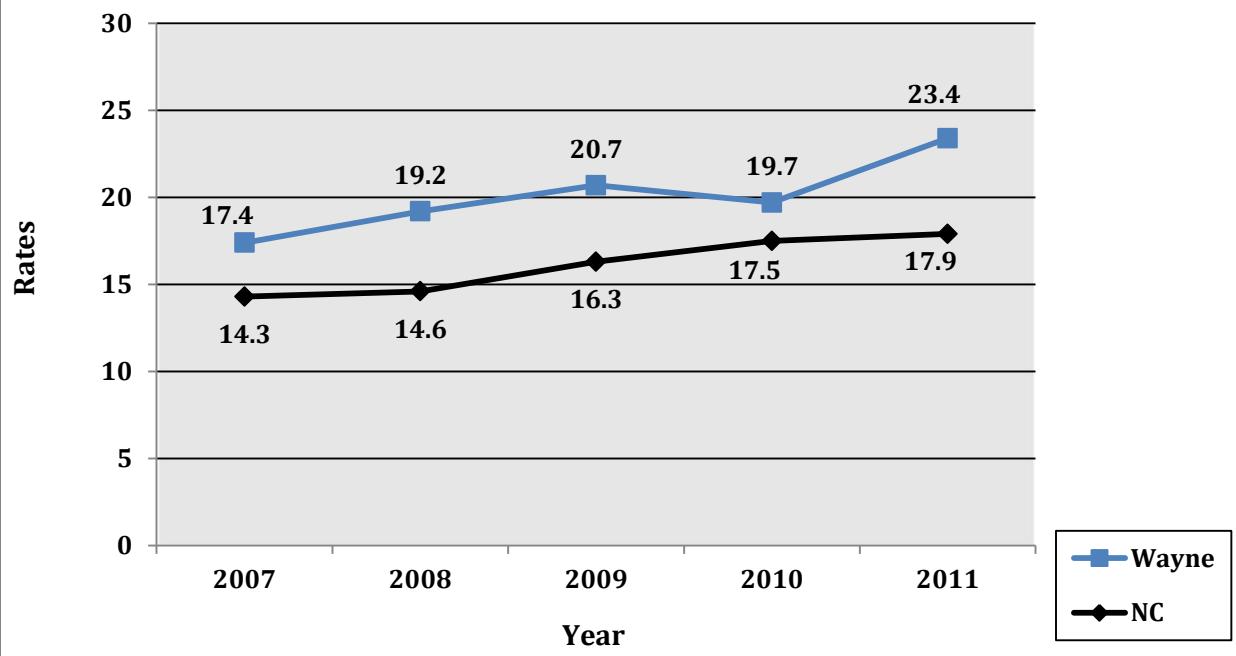
## Wayne County and NC Median Annual Household Income



## Per Capita Income (2007-2011)



## Wayne County and NC Poverty Rates

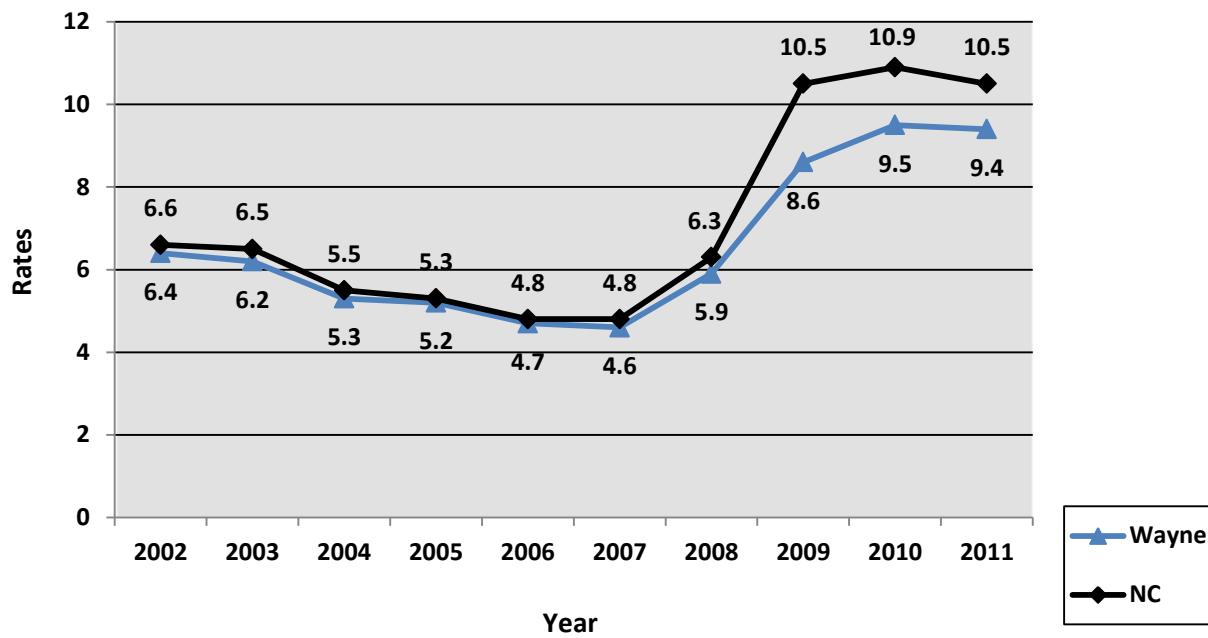


### Employment

Wayne County's unemployment rate for 2011 was estimated at 9.4 percent compared to 10.5 percent for North Carolina. The unemployment rate in Wayne County has risen 3 percent since 2002. The highest unemployment rates for Wayne County for the past ten years were reported in 2010 with 9.5 percent of the population being unemployed.<sup>12</sup> Though unemployment in Wayne County is lower than North Carolina averages, the average wage in Wayne County is more similar to other rural areas of North Carolina, which is less than the average wage in urban areas, giving lower per capita income.

<sup>12</sup> The Employment Security Commission of North Carolina, Labor Market Information. Available at: <http://www.ncesc1.com/LMI/workForceStats/workForceMain.asp>

## Wayne County and NC Unemployment Rates



## *Education*

### *Educational Attainment*

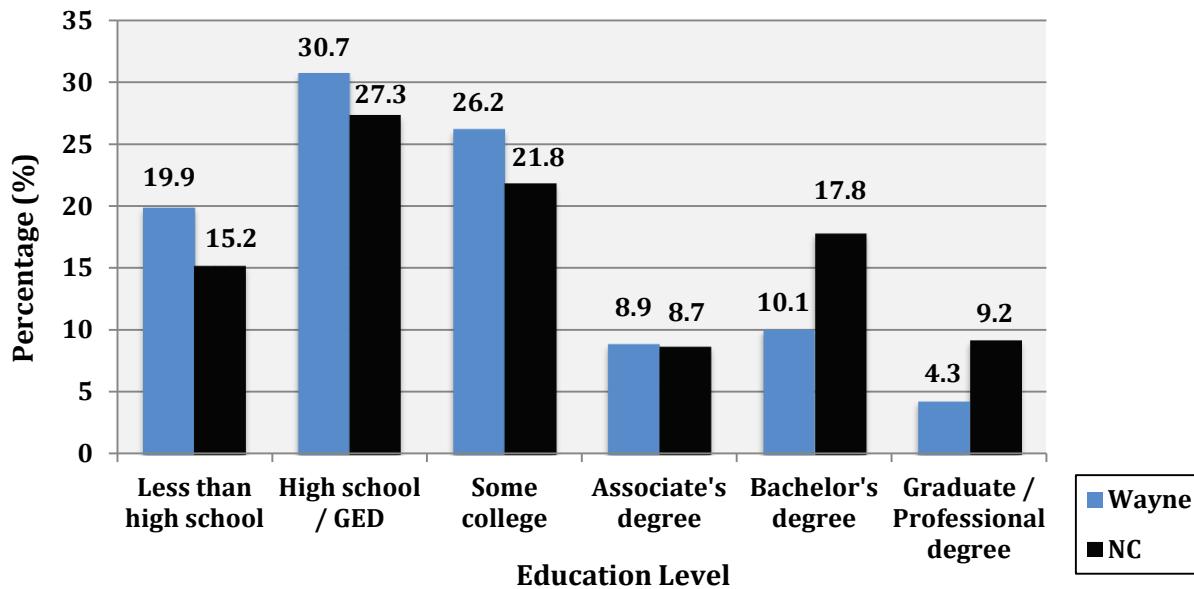
The following graph depicts the educational attainment of Wayne County's population age 25 and older. According to the 2010 estimates, 19.9 percent of the population 25 and older have not completed high school or received an equivalency diploma, compared to 15.2 percent of North Carolina adults. Wayne County has a lower percentage of adults (14.4 percent) who report having a bachelor's degree or higher compared to North Carolina adults (27 percent).<sup>13</sup>

Additionally, enrollment at Wayne Community College in the fall of 2012 was at near-record levels, due to the commitment of the college to serve employer needs in Wayne County, including agriculture. In addition, many Wayne County students are transferring to 4-year colleges after the first two years at Wayne Community College.<sup>14</sup>

<sup>13</sup> US Census Bureau, American Fact Finder. Available at: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

<sup>14</sup> The Goldsboro News-Argus. Available at: [http://www.newsargus.com/news/archives/2012/11/28/colleges\\_enrollment\\_hits\\_new\\_high/](http://www.newsargus.com/news/archives/2012/11/28/colleges_enrollment_hits_new_high/)

## Wayne County and NC Educational Attainment (2010)

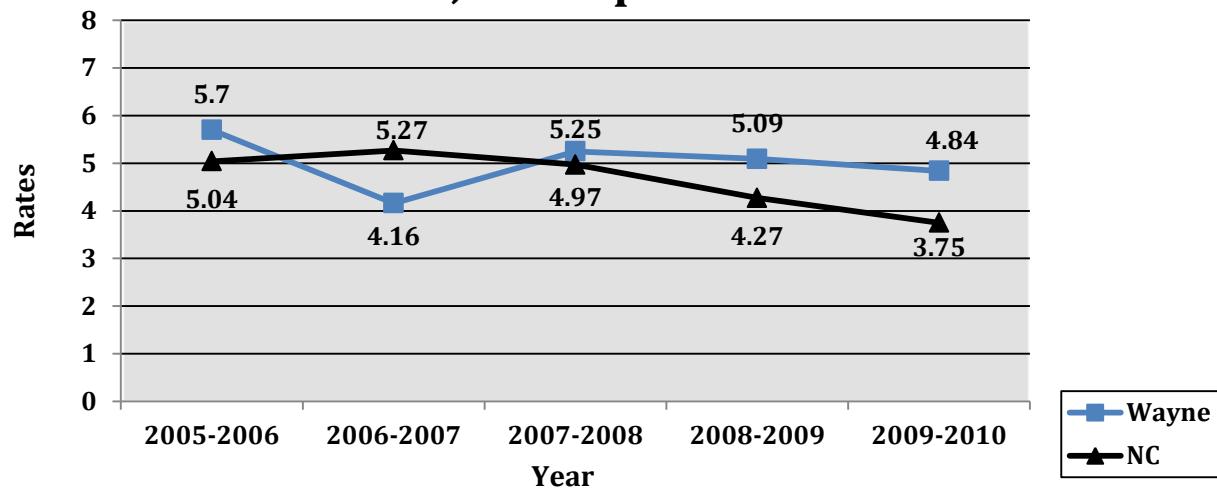


### *Dropout Rates*

The graph below depicts the dropout rates for Wayne County and North Carolina from 2006-2010. While the dropout rate in Wayne County has decreased from 5.7 per thousand students to 4.8 per thousand students in this time period, the 2010 estimate remains higher than North Carolina (3.7).<sup>15</sup>

<sup>15</sup> NC Public Schools Reports and Statistics. Available at:  
<http://www.ncpublicschools.org/data/reports/>

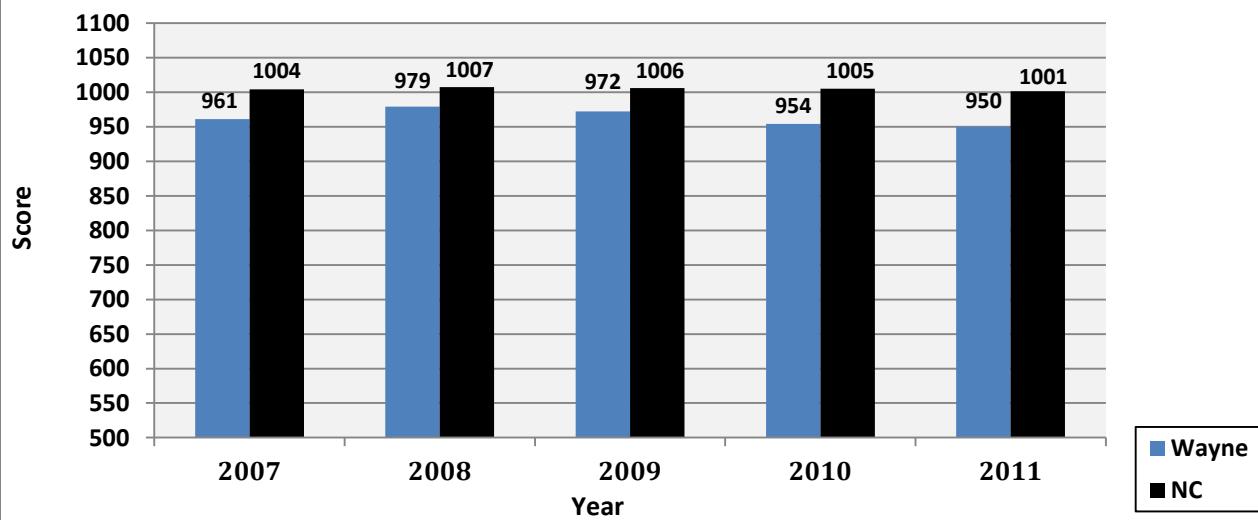
## Wayne County and NC Dropout Rates per 1,000 Population



### SAT Scores

The following graph reports the average SAT scores for Wayne County and North Carolina, calculated by adding the verbal and quantitative scores from 2007 to 2011. In this five year period, Wayne County has remained marginally lower than North Carolina, with average scores in 2011 being 950 in Wayne County and 1001 in North Carolina.<sup>16</sup>

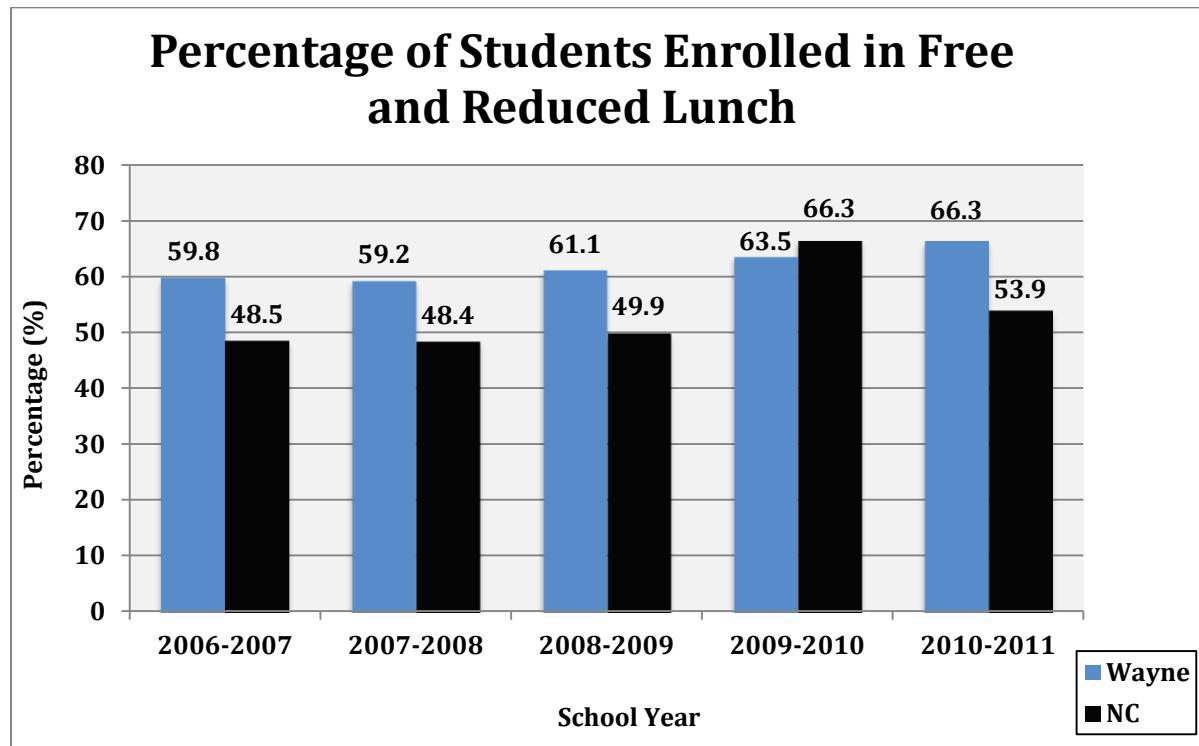
### Average SAT Scores (Verbal + Quantitative)



<sup>16</sup> NC Public Schools Reports and Statistics. Available at: <http://www.ncpublicschools.org/data/reports/>

## *Free and Reduced Lunch*

According to Wayne County Schools, 66.3 percent of children enrolled in Wayne County Schools for the 2010-2011 school years were enrolled for free or reduced price meal benefits. This percentage increased from 59.8 percent in the 2006-2007 school years. In contrast, 53.9 percent of children in North Carolina were enrolled in free and reduced lunch benefits in the 2010-2011 school years.<sup>17</sup>



## *Crime and Violence*

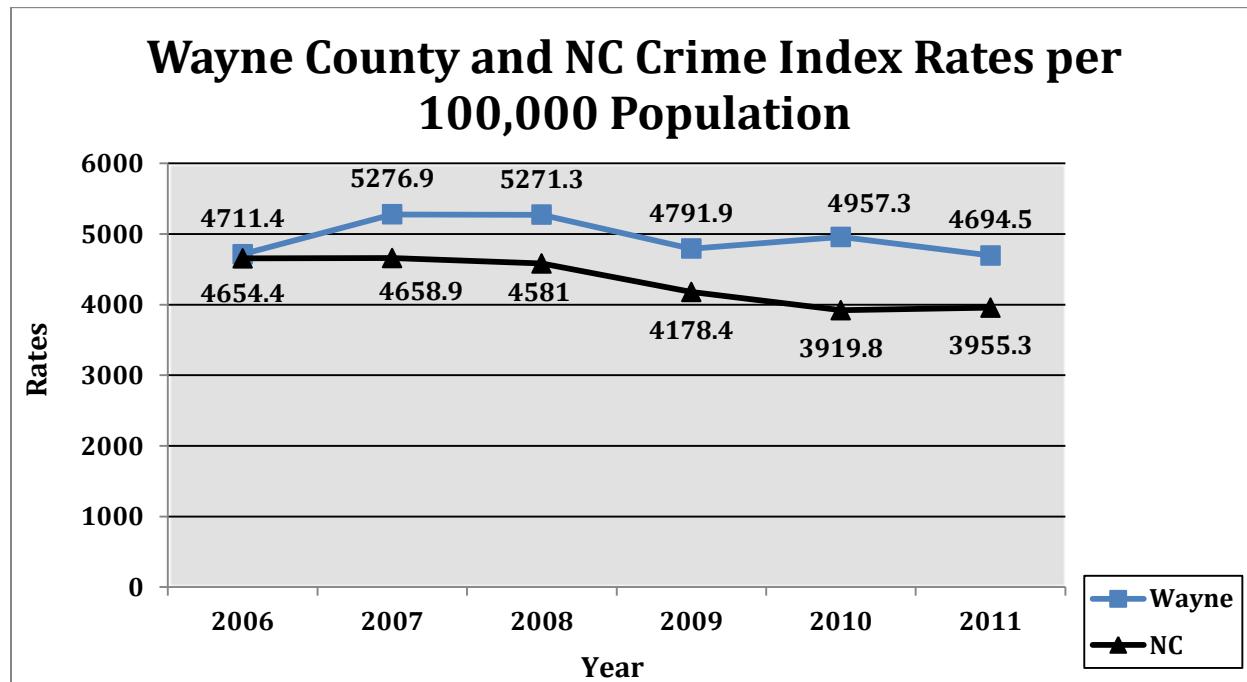
### *Crime Index Rates*

As illustrated in the chart below, the index crime rates for Wayne County have decreased since 2006. However, when compared to neighboring counties such as Johnston County, the index crime rates are relatively high.<sup>18</sup> The table below provides detailed crime statistics for Wayne County from 2011. While the overall crime index rate has decreased

<sup>17</sup> Data Center, Kids count. Available at:  
<http://datacenter.kidscount.org/data/bystate/Rankings.aspx?ind=2239&state=NC>

<sup>18</sup> NC Department of Justice, Crime. Available at:  
<http://www.ncdoj.gov/Crime/View-Crime-Statistics.aspx>

since 2006, the table indicates increases in specific crimes since 2003 such as burglary and larceny. Moreover, the violent crimes including murder, rape, robbery, and aggravated assault have steadily decreased since 2003.<sup>19</sup> As of 2012, Wayne County and Goldsboro reported 19 cases of murder, which is the most since 2007.<sup>20</sup>



#### *Detailed Crime Statistics*

2011 Crime Detailed Crime Statistics for Wayne County									
Offense	2003	2004	2005	2006	2007	2008	2009	2010	2011
Murder	10	12	13	7	20	11	14	8	10
Rape	9	11	8	8	10	5	11	6	5
Robbery	148	126	146	142	131	155	129	151	126
Aggravated Assault	418	415	356	434	362	372	348	420	402
Burglary	1,476	1,585	1,329	1,532	1,653	1,658	1,658	1,878	1,625
Larceny	3,137	3,084	3,362	3,010	3,385	3,256	2,922	2,886	3,163
MV Theft	289	332	256	284	347	428	290	250	282
<b>Total</b>	<b>5,487</b>	<b>5,565</b>	<b>5,470</b>	<b>5,417</b>	<b>5,908</b>	<b>5,885</b>	<b>5,372</b>	<b>5,599</b>	<b>5,613</b>

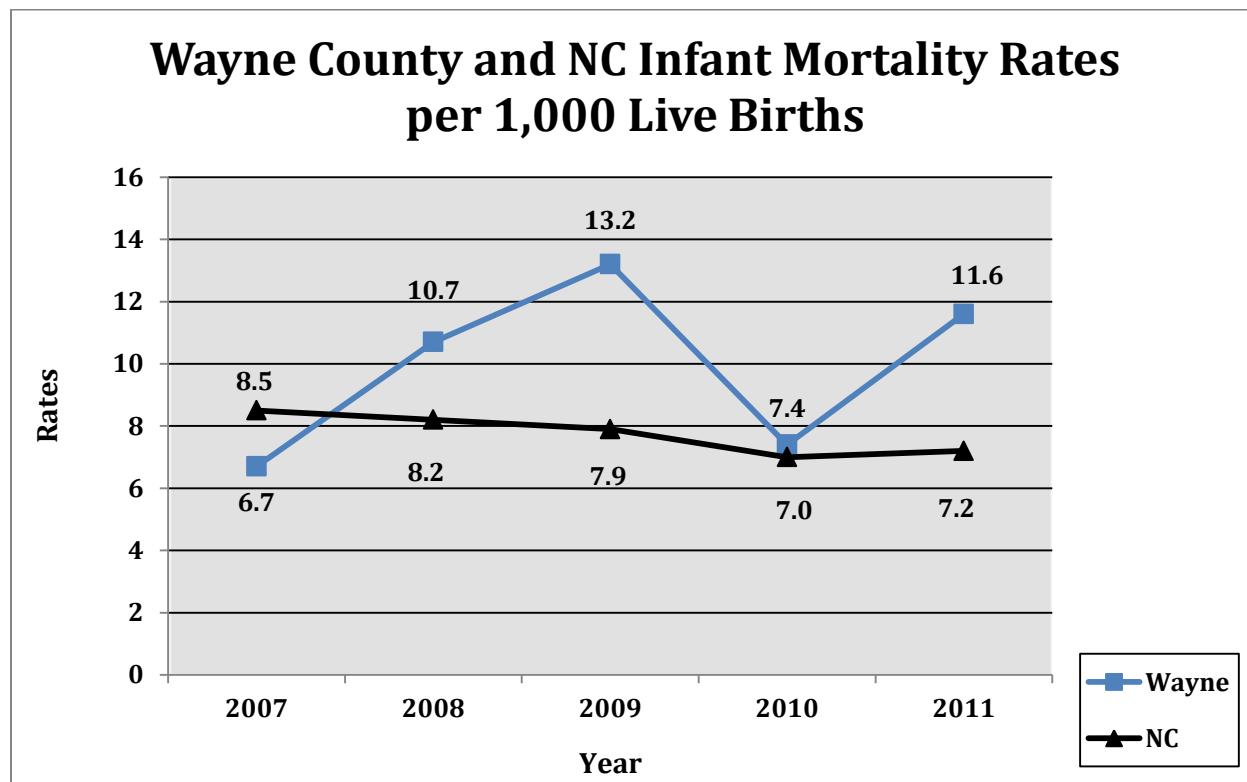
<sup>19</sup> NC Department of Justice, Crime. Available at: <http://www.ncdoj.gov/Crime/View-Crime-Statistics.aspx>

<sup>20</sup> The Goldsboro News-Argus. Available at: <http://www.newsargus.com/news/archives/2012/12/31/the top ten stories of wayne county and goldsboro in 2012/>

## Health Indicators

### *Infant Mortality Rates*

Infant mortality is the death of an infant prior to his/her first birthday. Wayne County's total infant mortality rate in 2011 was 11.6 per thousand live births compared to North Carolina's total infant mortality rate of 7.2 per thousand live births, respectively. The infant mortality rate in Wayne County increased from 7.4 per thousand live births in 2010 to 11.6 per thousand births in 2011. Wayne County's infant mortality rate declined between the years of 2009 and 2010, but the rate has increased from 6.7 per thousand live births in 2007.<sup>21</sup>

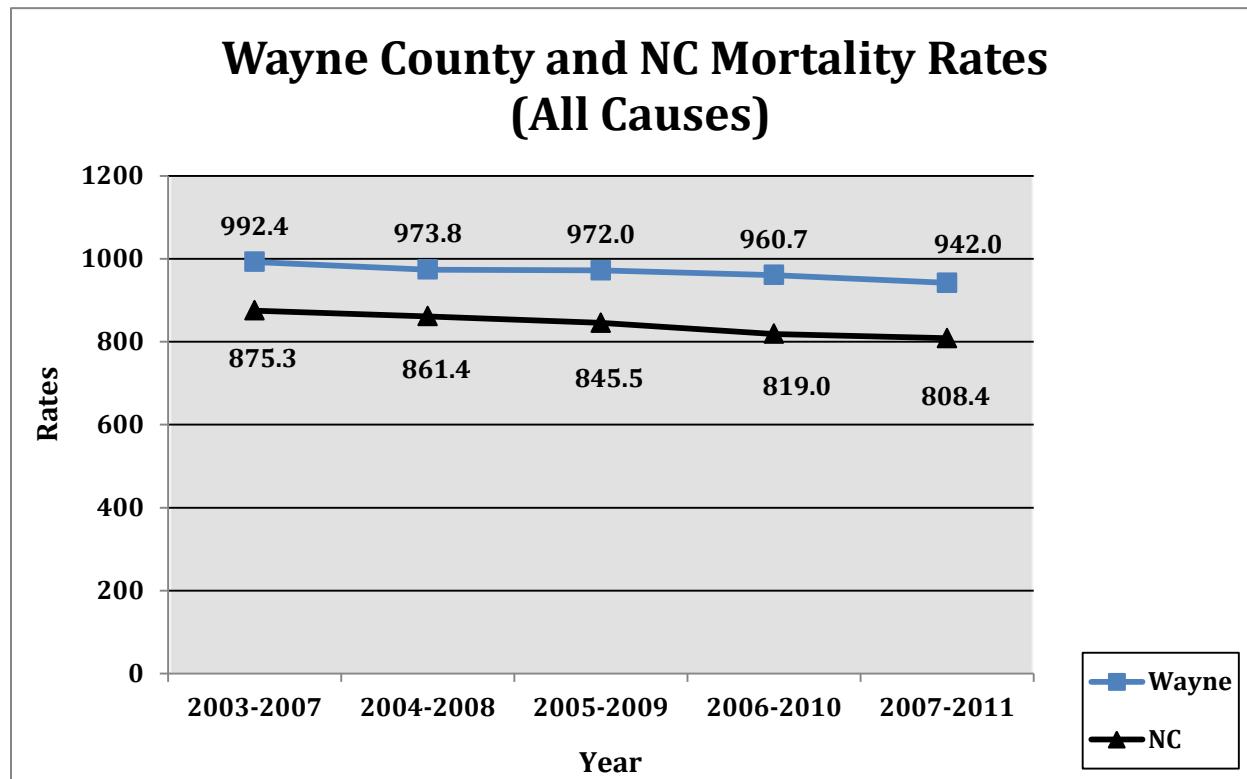


### *General Mortality Rates*

The chart below depicts the overall mortality rates for Wayne County and North Carolina in five year averages from 2003 to 2011. Each of the five year averages for Wayne County were more than 100 deaths higher per 100,000 population than North Carolina. The 2007-2011 average death rate in Wayne County was 942.0 per 100,000 population

<sup>21</sup> NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

compared to 808.4 per 100,000 population in North Carolina. Overall, the mortality rates for both Wayne County and North Carolina have decreased steadily since 2003.<sup>22</sup>



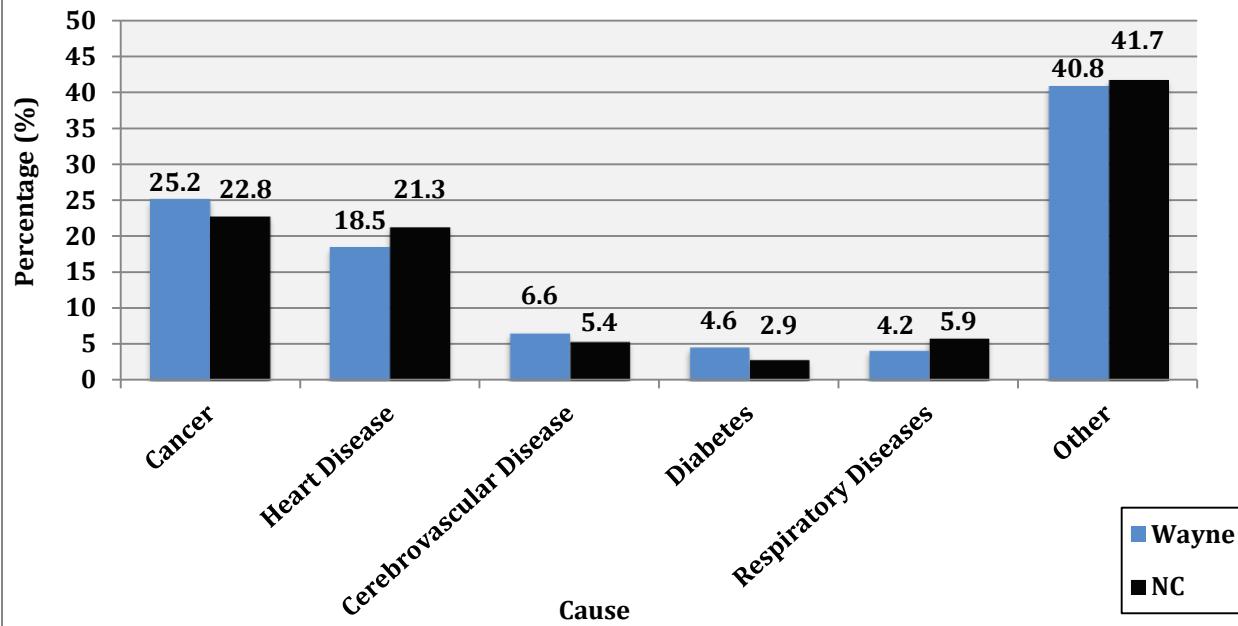
#### *Leading Causes of Death*

A comparison of the top five leading causes of death for all ages in Wayne County and North Carolina are depicted in the graph below. 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 heart disease, respiratory diseases, and all other causes, whereas Wayne County exceeds the state in deaths caused by cancer, cerebrovascular disease, and diabetes.<sup>23</sup>

<sup>22</sup> NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

<sup>23</sup> NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

## Wayne County and NC Leading Causes of Death (2011)



### Age-Specific Death Rates

The table below presents the top three leading causes of death categorized by age group from 2007-2011. For the population age 0-19 in Wayne County, the death rates per 100,000 population for perinatal deaths (31.6) and motor vehicle deaths (12.8) are higher than those for North Carolina. For the population age 20-39 in Wayne County, the death rates for motor vehicle deaths (24.9) and homicide (21.7) are higher than those for North Carolina. For the population age 40-64 in Wayne County, the death rates for cancer (215.5), heart disease (157.2) and diabetes (38.9) are higher than those for North Carolina. For the population age 65-84 in Wayne County, the death rates for cancer (1018.4), heart disease (812.6) and cerebrovascular diseases (252.8) are higher than those for North Carolina. For the population age 85 and older in Wayne County, the death rate for heart disease (3927.1) is higher than those for North Carolina.<sup>24</sup>

<sup>24</sup> NC Division of Public Health, State Center for Health Statistics, County Health Data Book. Available at: <http://www.schs.state.nc.us/schs/data/databook/>

## The Top Three Leading Causes of Death in Wayne County by Age (2007-2011)

Age Groups	Cause of Death	# of Deaths (2007-2011)	2007-2011 Death Rate	
			Wayne	NC
0-19	Perinatal Cond.	52	31.6	19.9
	Motor Vehicle	21	12.8	7.9
	Birth Defects	12	7.3	8.8
20-39	Motor Vehicle	39	24.9	21.1
	Homicide	34	21.7	12.2
	Injuries	31	19.8	21.0
40-64	Cancer	410	215.5	179.2
	Heart Disease	299	157.2	120.5
	Diabetes	74	38.9	20.5
65-84	Cancer	693	1018.4	898.0
	Heart Disease	553	812.6	717.9
	Cerebrovascular	172	252.8	187.7
85+	Heart Disease	308	3927.1	3871.4
	Cancer	123	1568.3	1638.4
	Cerebrovascular	89	1134.8	1146.8

### *Race/Sex-Specific Death Rates*

The leading causes of death by age and sex from 2007-2011 can be found in the following table. Cancer is the leading cause of death for all age and sex groupings, except for African-American females. African-American males and females have diabetes as one of the top five leading causes of death, whereas white males and females have respiratory diseases as a top five leading cause of death. Overall, the death rates for cancer and heart disease are substantially higher in males for both whites and African-Americans.<sup>25</sup>

<sup>25</sup> NC Division of Public Health, State Center for Health Statistics, County Health Data Book. Available at: <http://www.schs.state.nc.us/schs/data/databook/>

## The Five Leading Causes of Death in Wayne County by Race and Gender (2007-2011)

	<b>White Males</b>	<b>African-American Males</b>	<b>White Females</b>	<b>African-American Females</b>
<b>1</b>	Cancer (259.4)	Cancer (263.6)	Cancer (165.3)	Heart Disease (183.3)
<b>2</b>	Heart Disease (254.4)	Heart Disease (257.5)	Heart Disease (153.4)	Cancer (159.6)
<b>3</b>	Cerebrovascular Disease (63.0)	Cerebrovascular Disease (84.6)	Cerebrovascular Disease (46.3)	Diabetes (61.5)
<b>4</b>	Respiratory Diseases (43.9)	Diabetes (76.0)	Respiratory Diseases (40.3)	Cerebrovascular Disease (47.0)
<b>5</b>	Injuries (43.0)	Nephritis (62.3)	Alzheimer's Disease (31.3)	Nephritis (38.6)

### ***Health Conditions***

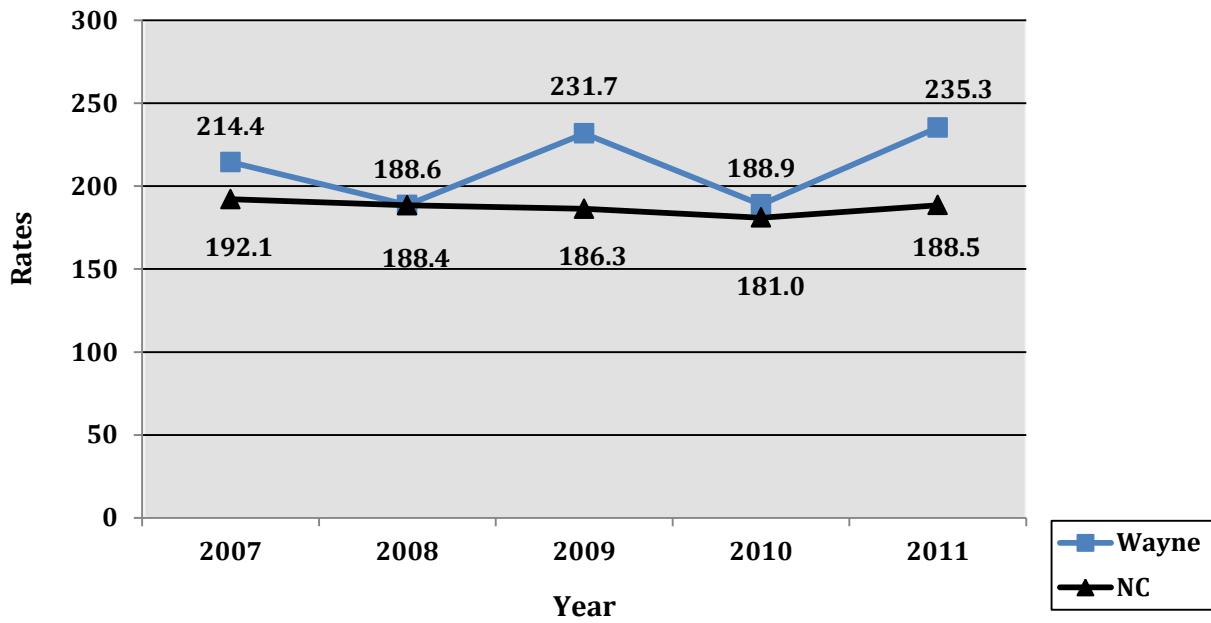
#### *Cancer*

The leading cause of death in Wayne County is cancer, and the following graph depicts the cancer mortality rates for Wayne County and North Carolina from 2007 to 2011 per 100,000 population. From 2010 to 2011, Wayne County experienced an increase in cancer mortality rates of almost 46 deaths per 100,000 population. As of 2011 the cancer mortality rate in Wayne County is nearly 46 deaths per 100,000 population higher than the state.<sup>26</sup>

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<sup>26</sup> NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

## Wayne County and NC Cancer Mortality Rates per 100,000 Population



The following tables report the cancer incidence rates, cancer mortality rates, and projected new cancer cases and deaths by type of cancer. From 2006 to 2010, the incidence rates for prostate, lung, and colon cancers were higher than the state. From 2007 to 2011, the mortality rates for all four major types of cancer were higher than the state. Wayne County is projected to have 706 new cancer cases and 250 cancer deaths in 2013. Breast cancer is projected to have the most new cases in 2013, whereas lung cancer is projected to have the most deaths in 2013 for Wayne County.<sup>27</sup>

### Cancer Incidence Rates by Type per 100,000 Population (2006-2010)

Place	Prostate	Breast	Lung	Colon
Wayne	155.9	151.7	80.6	51.0
NC	153.7	155.9	74.8	43.4

### Cancer Mortality Rates by Type per 100,000 Population (2007-2011)

Place	Lung	Prostate	Breast	Colon
Wayne	61.8	27.5	27.5	17.1
NC	54.1	24.3	22.6	15.2

<sup>27</sup> NC Division of Public Health, State Center for Health Statistics, Cancer Data. Available at: <http://www.schs.state.nc.us/schs/data/cancer.cfm>

<b>Projected New Cancer Cases and Deaths - 2013</b>				
	<b>Projected New Cases</b>		<b>Projected Deaths</b>	
	Wayne	NC	Wayne	NC
<b>Total</b>	<b>706</b>	<b>56,164</b>	<b>250</b>	<b>19,855</b>
Lung	108	8,559	77	6,126
Breast	117	9,339	18	1,393
Prostate	104	8,316	12	1,015
Colon	61	4,852	21	1,671

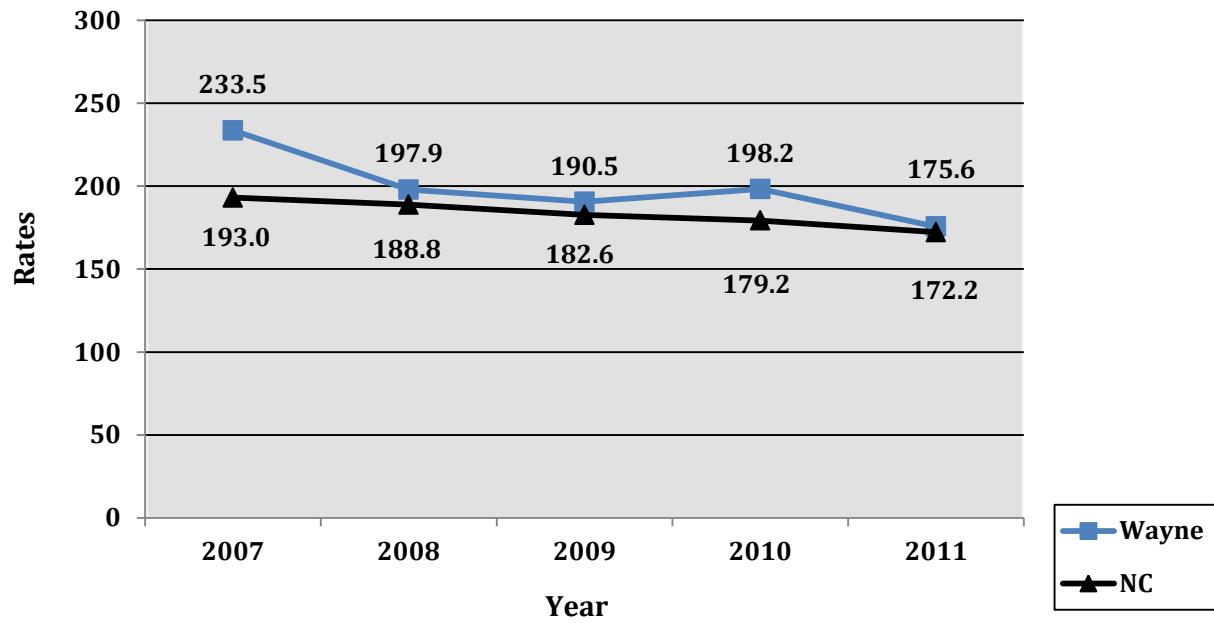
### *Heart Disease*

The second leading cause of death in Wayne County is heart disease, and the following graph depicts the heart disease mortality rates for Wayne County and North Carolina from 2007 to 2011. Although heart disease rates in Wayne County are high, the rates have decreased dramatically since 2007. As of 2011, the heart disease rate for Wayne County was marginally higher than that of the state.<sup>28</sup>

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<sup>28</sup> NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

## Wayne County and NC Heart Disease Mortality Rates per 100,000 Population

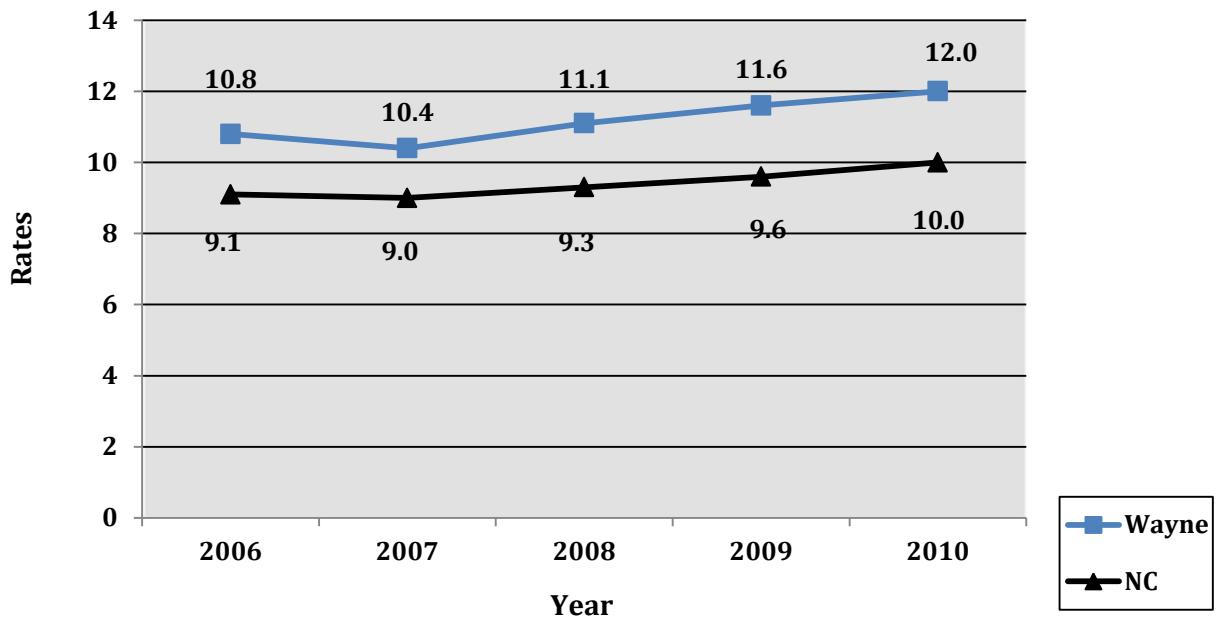


### *Diabetes*

The fourth leading cause of death in Wayne County is diabetes. The graph below shows a comparison of the percentage of the population diagnosed with diabetes among Wayne County and North Carolina. From 2006 to 2010, Wayne County has demonstrated a consistently higher percentage of residents having diabetes than the state. Furthermore, the percentage of the population of Wayne County diagnosed with diabetes has steadily increased since 2007, with the 2010 percentage being 12%. <sup>29</sup>

<sup>29</sup> Centers for Disease Control and Prevention. Available at:  
<http://www.cdc.gov/>

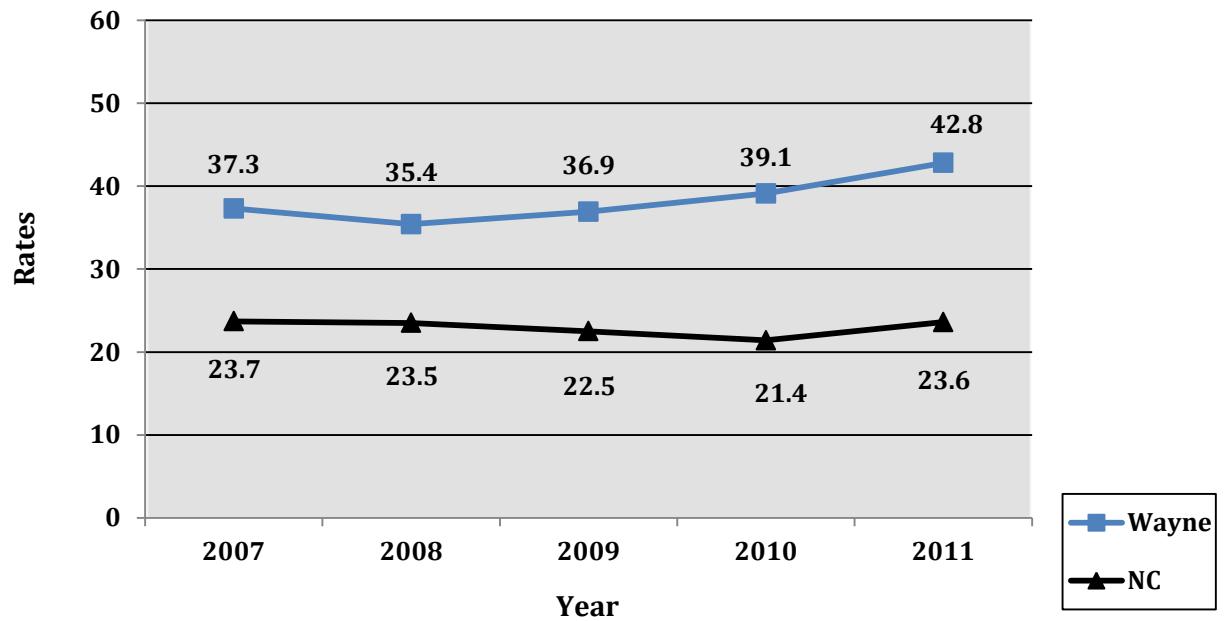
## Wayne County and NC Percentage of Population Diagnosed with Diabetes



The following graph shows the diabetes mortality rates for Wayne County and North Carolina from 2007 to 2011. The mortality rate for diabetes in Wayne County has increased 7.4 per 100,000 population from 2008 (35.4) to 2011 (42.8). As of 2011, the diabetes rate in Wayne County is 19.2 per 100,000 population higher than that of the state. Furthermore, the 2007-2011 diabetes mortality rate per 100,000 population was higher for African-American males (50.9) and females (40.4) than white males (21.7) and females (14.2).<sup>30</sup>

<sup>30</sup> NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

## Wayne County and NC Diabetes Mortality Rates per 100,000 Population



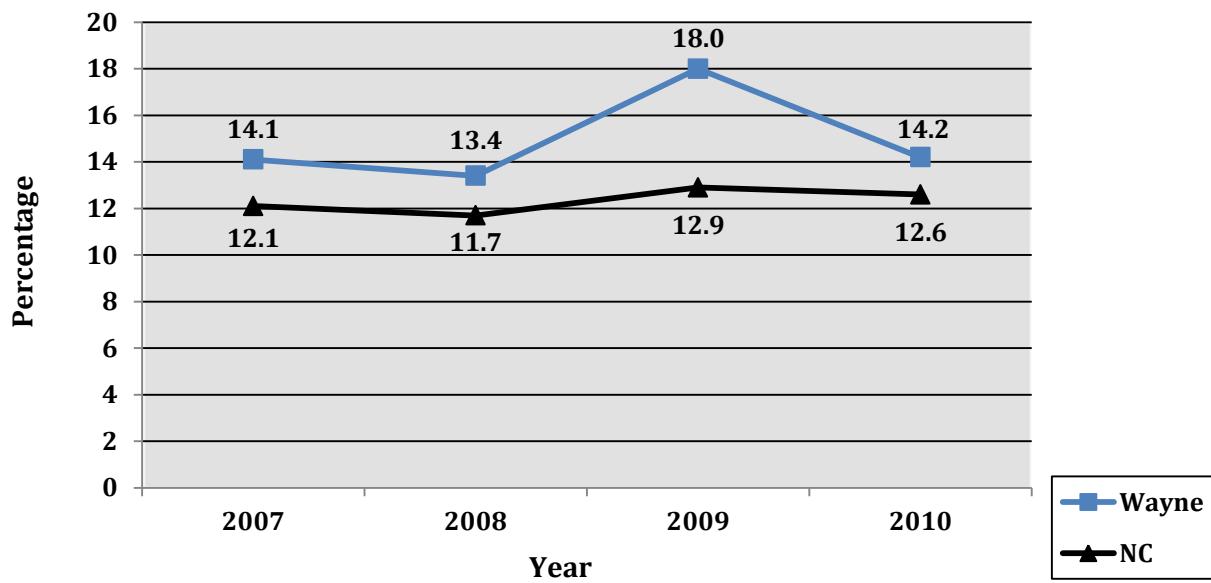
### Asthma

The following graph details the percentage of the population diagnosed with asthma in Wayne County and North Carolina from 2007 to 2010. The percentage has decreased in Wayne County from 2009 (18 percent) to 2010 (14.2), but remains higher than that of the state as of 2010 (12.6 percent).<sup>31</sup> The table below the graph reports the 2011 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.<sup>32</sup>

<sup>31</sup> 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/>

<sup>32</sup> NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

## Wayne County and NC Percentage of Population Diagnosed With Asthma



### 2011 Hospital Discharges with Asthma

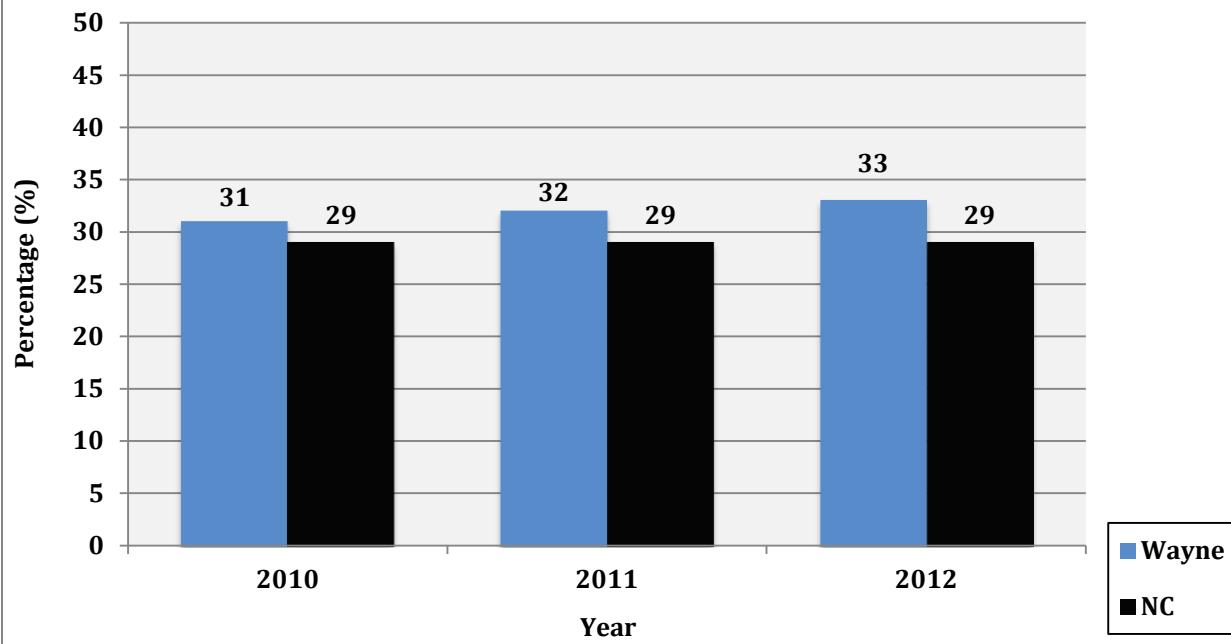
Residence	Total Number	Total Rate	Ages 0-14	Rate Ages 0-14
Wayne	166	134.2	44	172.4
NC	9,880	102.3	3,004	157.3

### Overweight/Obesity

Obesity has been shown to contribute to the leading causes of death including heart disease, some cancers, and diabetes. The graph below depicts a comparison between Wayne County and North Carolina from 2010 to 2012 on the percentage of adults reporting obesity. The percentage of obese adults in Wayne County has increased from 31 percent to 33 percent, whereas the percentage of obese adults in North Carolina has remained constant at 29 percent from 2010 to 2012.<sup>33</sup>

<sup>33</sup> NC State University Institute for Emerging Issues. Available at: <http://www.ncsu.edu/iei/wp-content/uploads/2012/03/Wayne.pdf>

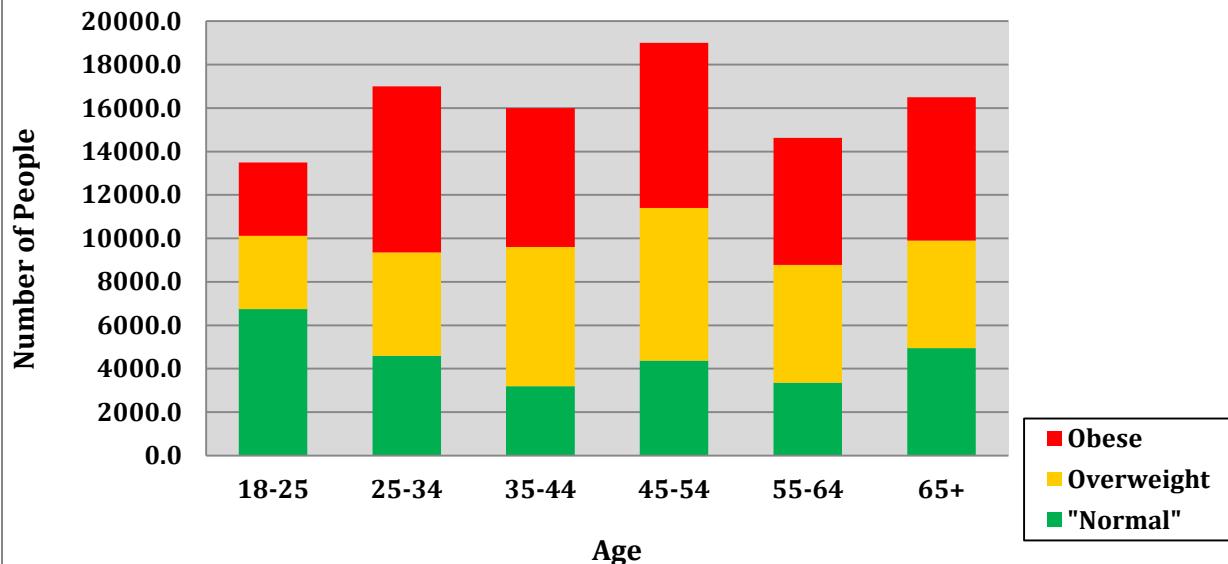
## Wayne County and NC Percentage of Obese Adults



The following graph illustrates the number of people reporting normal weight, overweight, and obesity across age groups. In 2010, the age groups of 35-44, 45-54, and 55-64 reported higher numbers in the overweight and obese categories than the normal weight category. Conversely, more than half of the population age 18-25 reported being at a normal weight.<sup>34</sup>

<sup>34</sup> NC State University Institute for Emerging Issues. Available at: <http://www.ncsu.edu/iei/wp-content/uploads/2012/03/Wayne.pdf>

## Wayne County Overweight and Obese by Age (2010)

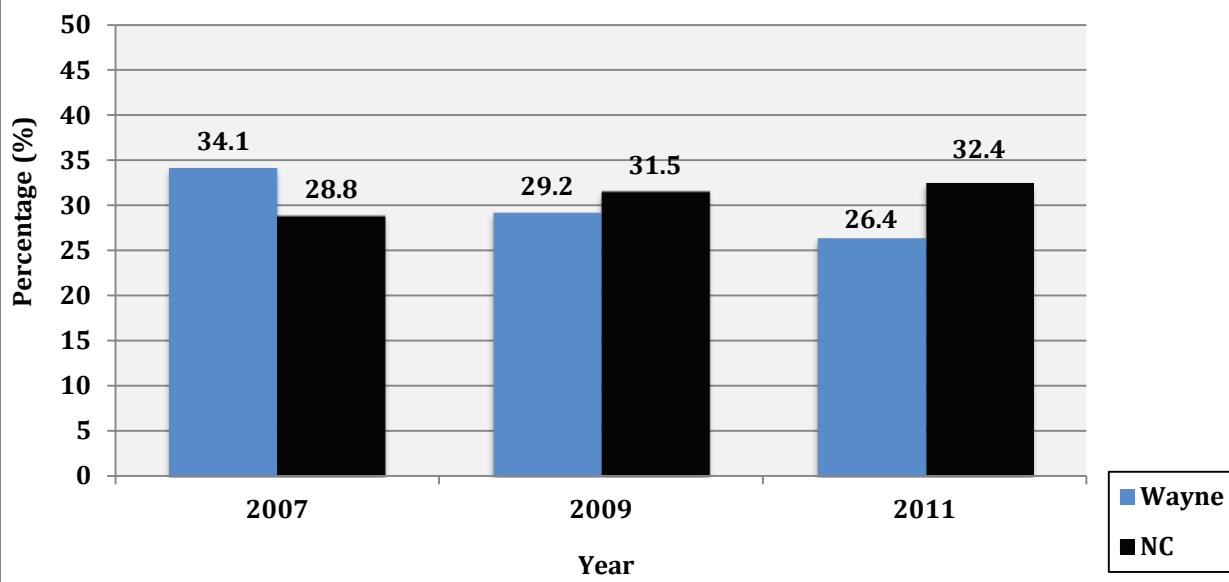


### High Blood Pressure

High blood pressure, or hypertension, has been found to be correlated with the leading causes of death including heart disease, some cancers, and diabetes. The following graph depicts the percentage of Wayne County and North Carolina residents informed of hypertension by a physician. The percentages in Wayne County have decreased from 2007 (34.1 percent) to 2011 (26.4 percent). In contrast, the percentages for North Carolina have increased from 2007 (28.8 percent) to 2011 (32.4 percent). <sup>35</sup>

<sup>35</sup> 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/>

## Wayne County and NC Percentage of Population Informed by Doctor of High Blood Pressure

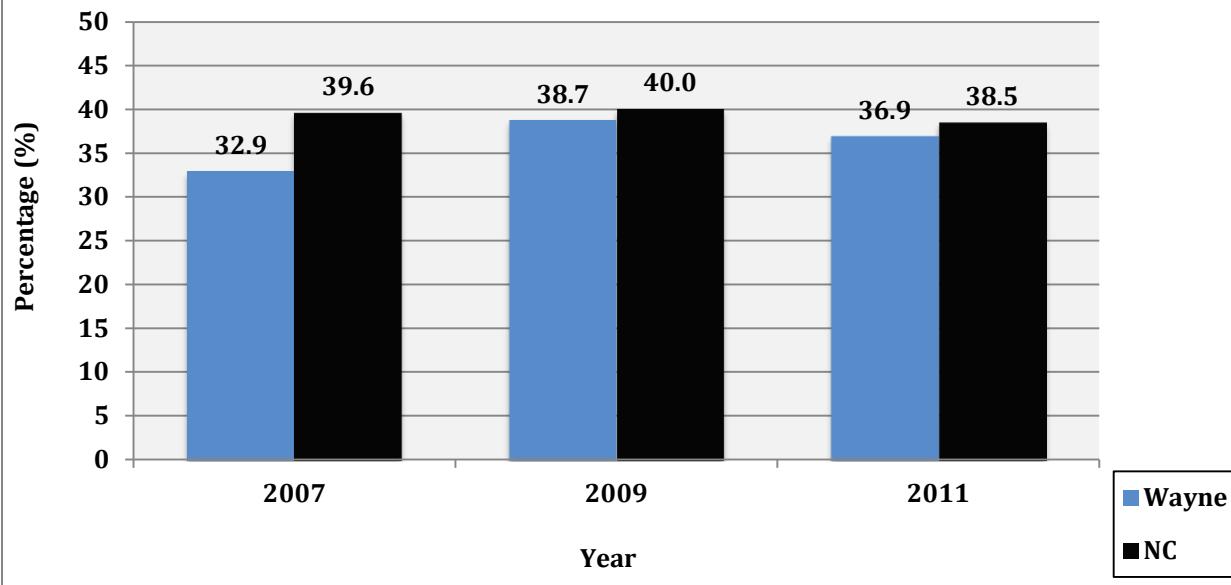


### *High Cholesterol*

A third precipitating factor in relation to leading causes of death including heart disease, some cancers, and diabetes is high cholesterol. The graph below shows the comparison of Wayne County and North Carolina with regards to the percentage of the population informed by a doctor of high cholesterol. The percentage of Wayne County residents informed of high cholesterol increased from 2007 (32.9 percent) to 2009 (38.7 percent), but decreased from 2009 to 2011 (36.9 percent). In comparison, the percentages for North Carolina have remained higher than Wayne County in 2007, 2009, and 2011.<sup>36</sup>

<sup>36</sup> 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/>

## Wayne County and NC Percentage of Population Informed by Doctor of High Cholesterol



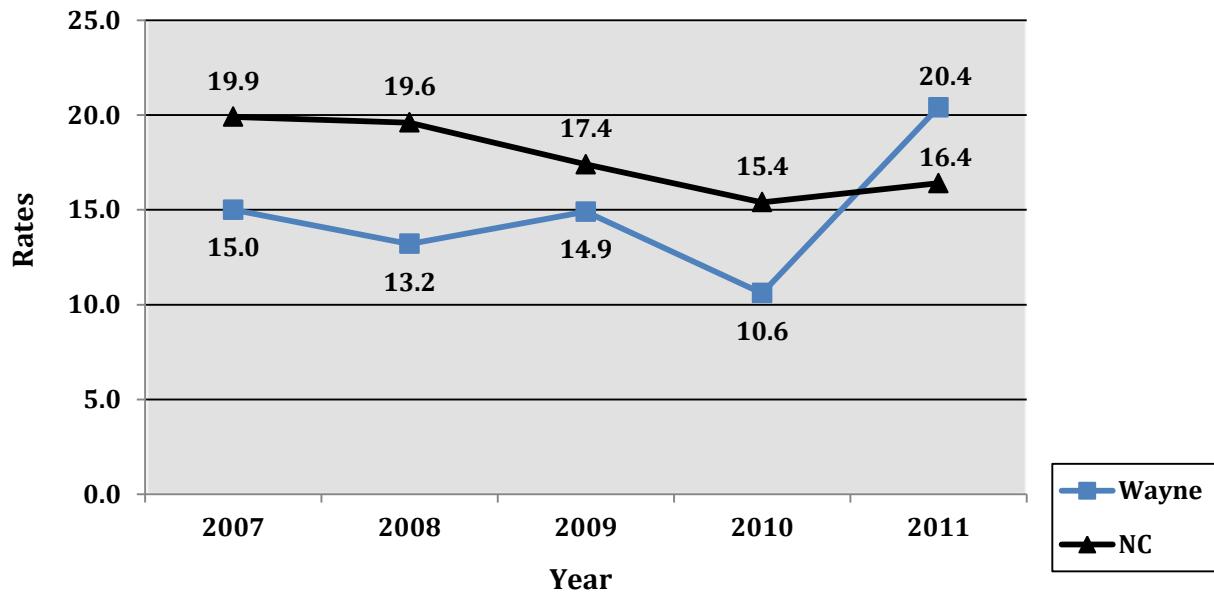
### ***Communicable Diseases***

#### ***HIV***

While the number of HIV diagnoses, asthma and AIDS diagnoses rates are not 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 managed as chronic diseases in the US now. The following graph depicts the HIV rates per 100,000 population for Wayne County and North Carolina from 2007 to 2011. In the period between 2010 and 2011, the HIV rate nearly doubled from 10.6 to 20.4 per 100,000 population in Wayne County. As of 2011, Wayne County's HIV rate has surpassed that of the state.<sup>37</sup>

<sup>37</sup> NC Department of Health and Human Services, Facts and Figures. Available at: <http://epi.publichealth.nc.gov/cd/stds/figures.html#annual>

## Wayne County and NC HIV Rates per 100,000 Population

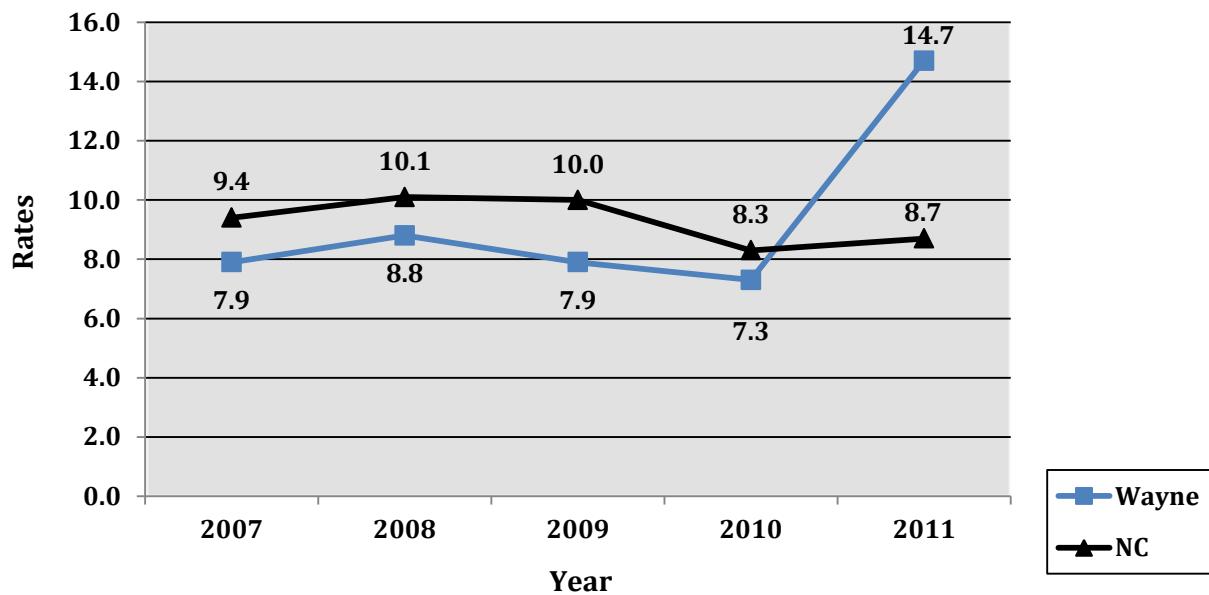


### AIDS

The following graph depicts the AIDS rates per 100,000 population for Wayne County and North Carolina from 2007 to 2011. In the period between 2010 and 2011, the AIDS rate more than doubled from 7.3 to 14.7 per 100,000 population in Wayne County. As of 2011, Wayne County's AIDS rate has almost doubled that of the state.<sup>38</sup>

<sup>38</sup> NC Department of Health and Human Services, Facts and Figures. Available at: <http://epi.publichealth.nc.gov/cd/stds/figures.html#annual>

## Wayne County and NC AIDS Rates per 100,000 Population



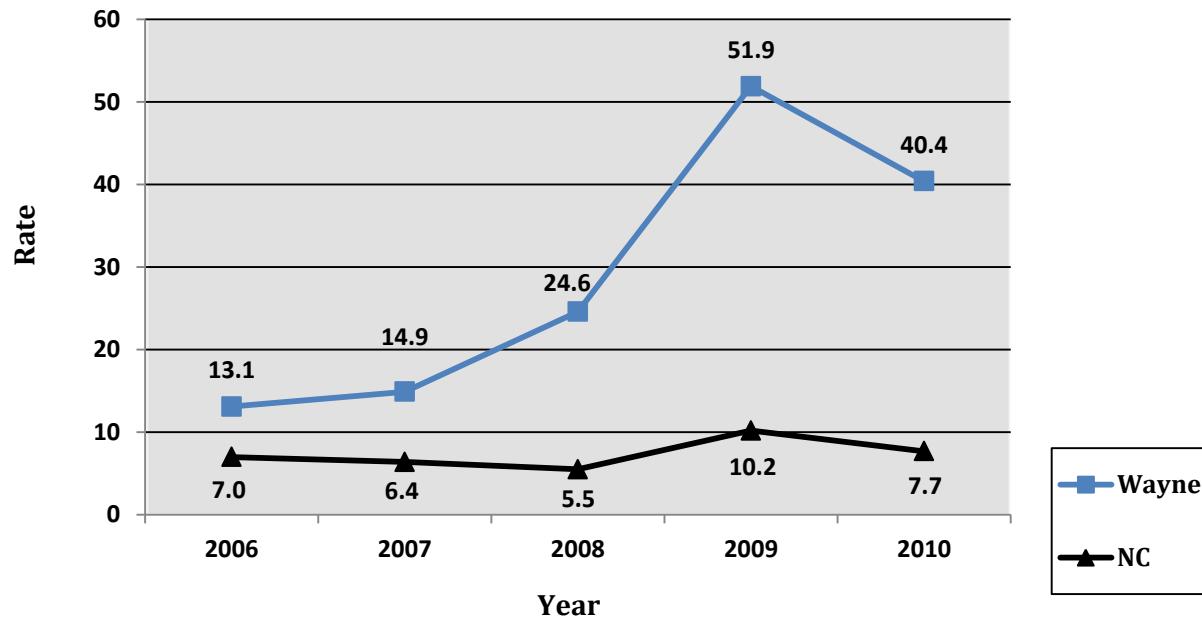
STDs

Syphilis:

Sexually transmitted diseases have increased in Wayne County compared to the state of North Carolina, and the Health Department is working with various agencies to bring these under control. The following graph depicts the syphilis rates per 100,000 population for Wayne County and North Carolina from 2006 to 2010. Wayne County has experienced a dramatic increase in syphilis rates since 2006, with an increase of 27.3 per 100,000 population from 2006 to 2010. The highest syphilis rates were recorded in 2009 with a rate of 51.9 per 100,000 population. As of 2010, Wayne County has a syphilis rate more than five times higher than that of North Carolina.<sup>39</sup>

<sup>39</sup> NC Department of Health and Human Services, Facts and Figures. Available at: <http://epi.publichealth.nc.gov/cd/stds/figures.html#annual>

## Wayne County and North Carolina Syphilis Rates per 100,000 Population

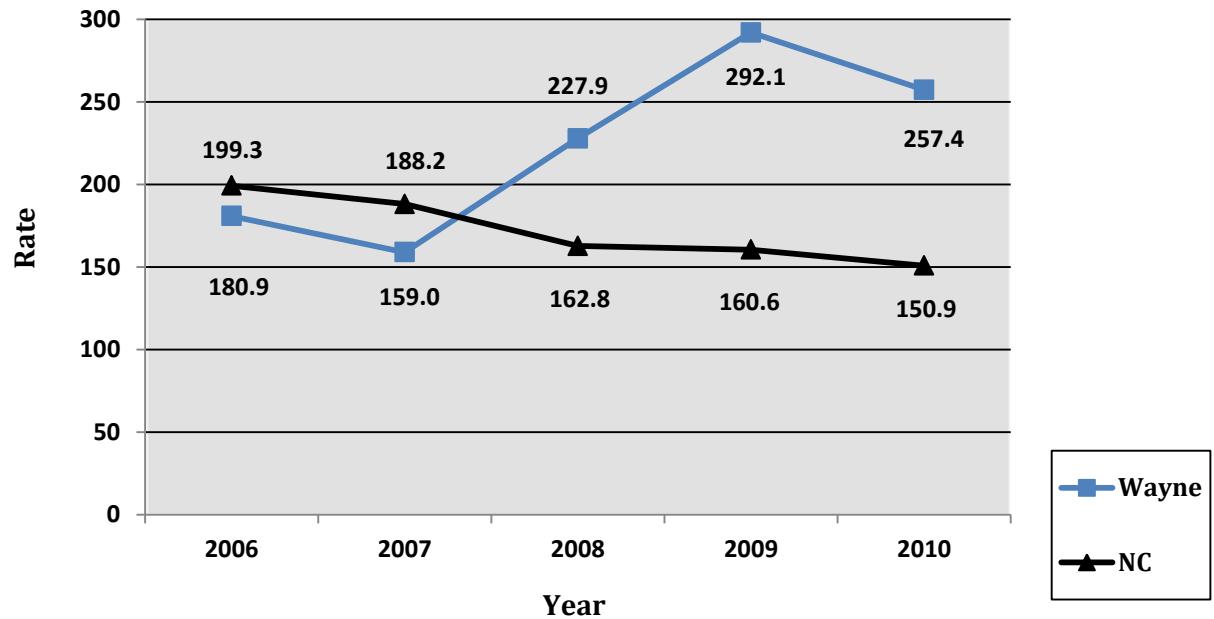


### Gonorrhea:

The following graph reports the gonorrhea rates per 100,000 population for Wayne County and North Carolina from 2006 to 2010. The gonorrhea rates in Wayne County have increased dramatically since 2006, with an increase of more than 75 per 100,000 population as of 2010. Wayne County experienced the highest gonorrhea rates in 2009 (292.1). As of 2010, the gonorrhea rate in Wayne County is more than 100 per population higher than the state.<sup>40</sup>

<sup>40</sup> NC Department of Health and Human Services, Facts and Figures. Available at: <http://epi.publichealth.nc.gov/cd/stds/figures.html#annual>

## Wayne County and North Carolina Gonorrhea Rates per 100,000 Population

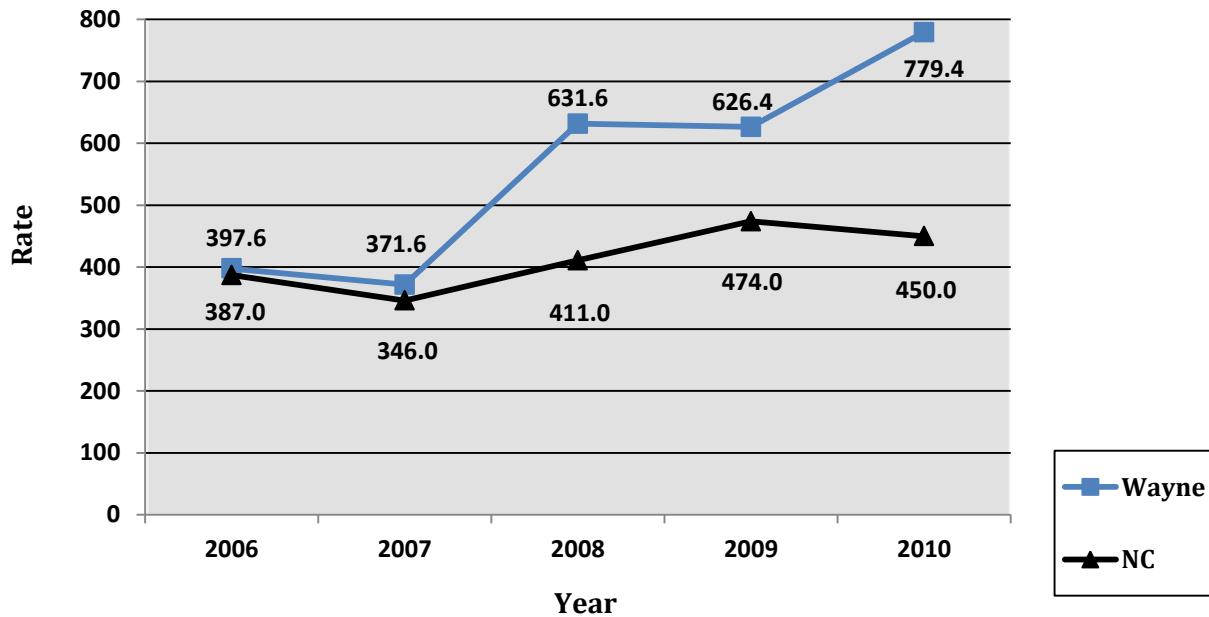


### Chlamydia:

The most prevalent STD in Wayne County is chlamydia. The following graph depicts the chlamydia rates in Wayne County and North Carolina from 2006 to 2010. The chlamydia rate in Wayne County has doubled from 2006 to 2010. As of 2010, the chlamydia rates in Wayne County were almost 330 per 100,000 population higher than the state.<sup>41</sup>

<sup>41</sup> NC Department of Health and Human Services, Facts and Figures. Available at: <http://epi.publichealth.nc.gov/cd/stds/figures.html#annual>

## Wayne County and North Carolina Chlamydia Rates per 100,000 Population

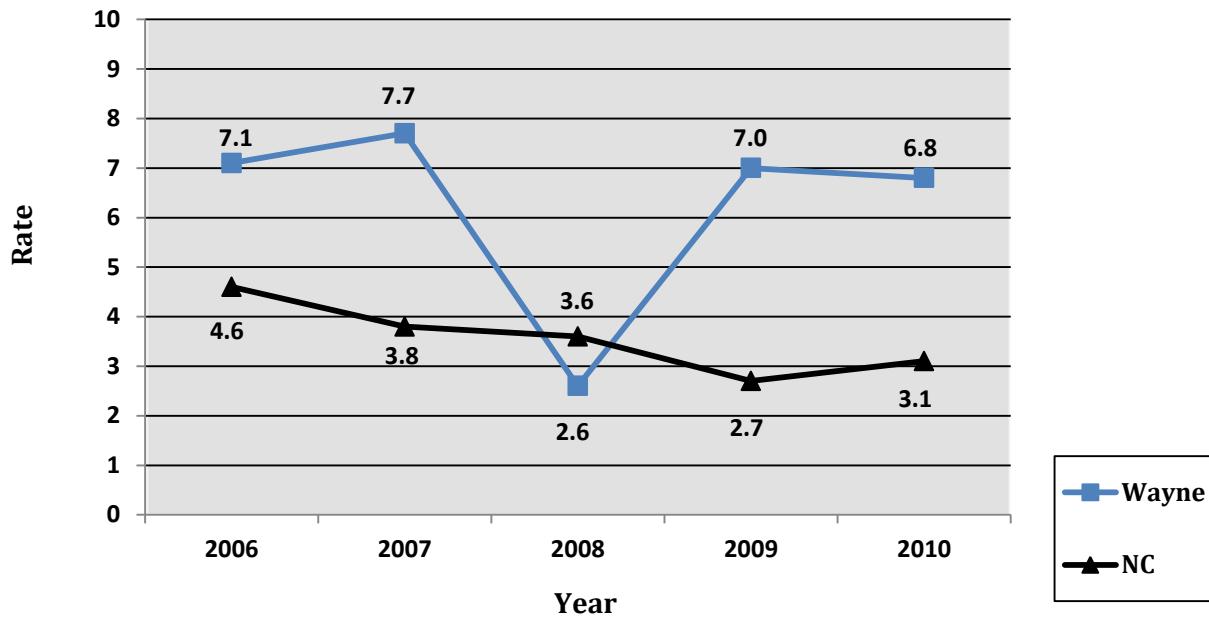


### *Tuberculosis (TB)*

The following graph shows the tuberculosis rates for Wayne County and North Carolina from 2006 to 2010. In 2008, Wayne County experienced a dramatic decrease in the tuberculosis rate, but the rate in 2010 is nearly two times higher than that of 2008. As of 2010, the tuberculosis rate in Wayne County is more than twice that of the state.<sup>42</sup>

<sup>42</sup> NC Department of Health and Human Services, Disease and Topics. Available at: <http://epi.publichealth.nc.gov/cd/diseases/tb.html>

## Wayne County and North Carolina Tuberculosis Rates per 100,000 Population



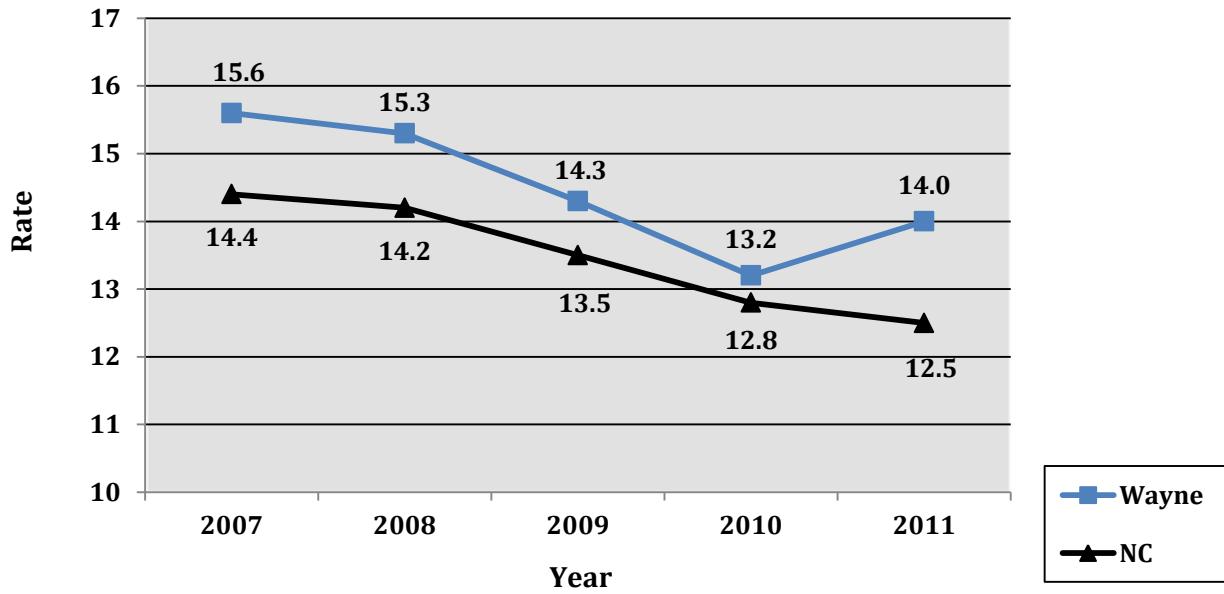
### ***Maternal Health***

#### ***Birth Rates***

The following graph reports the overall birth rates for Wayne County and North Carolina from 2006 to 2010. The birth rate in Wayne County has steadily decreased since 2007. As of 2010, the birth rate in Wayne County (13.2) is marginally higher than that of the state (12.8).<sup>43</sup>

<sup>43</sup> NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

## Wayne County and North Carolina Birth Rates per 1,000 Population

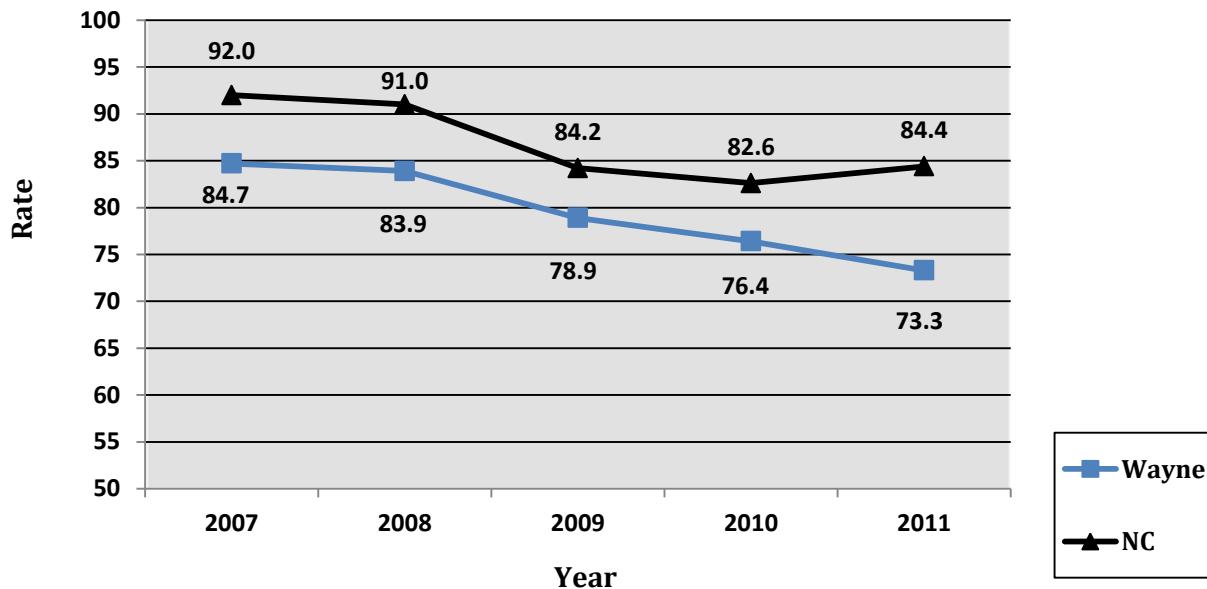


### *Pregnancy Rates*

The following graph depicts the pregnancy rates for females ages 15 to 44 in Wayne County and North Carolina from 2007 to 2011. Over the five year period, Wayne County has demonstrated consistently lower pregnancy rates than the state. As of 2011, the pregnancy rate in North Carolina (84.4) is higher than that of Wayne County (73.3). <sup>44</sup>

<sup>44</sup> NC Division of Public Health, State Center for Health Statistics, County Health Data Book. Available at: <http://www.schs.state.nc.us/schs/data/databook/>

## Wayne County and North Carolina Pregnancy Rates for Females Ages 15-44 per 1,000 Population

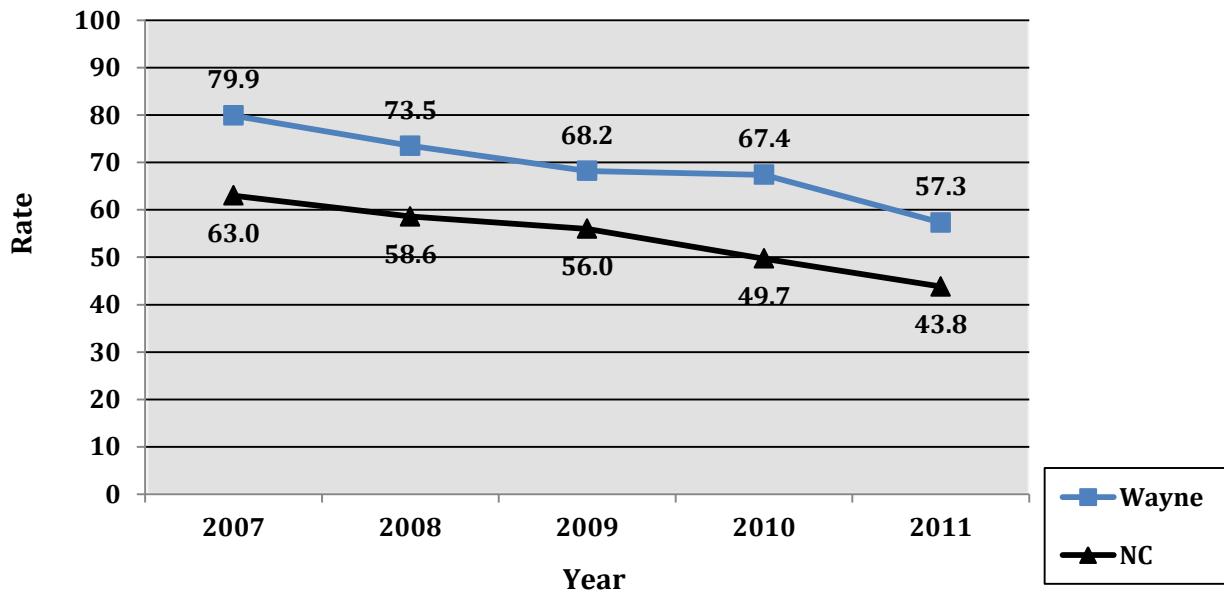


The next two graphs depict overall teen pregnancy rates and teen pregnancy rates by race from 2006 to 2010 for Wayne County and North Carolina. The overall teen pregnancy rate in Wayne County has steadily declined from 2007 to 2010. However, the teen pregnancy rates in Wayne County have remained higher than the state over the five year period. As of 2010, Wayne County reported more than 17 teen pregnancies per 1,000 population than the state.<sup>45</sup> Teen pregnancy is an issue that differentially affects races, as shown in the second graph. Non-white residents of Wayne County have reported at least 25 more teen pregnancies per 1,000 population than white residents each year over the five year period. However, the teen pregnancy rates for both non-white and white residents of Wayne County have decreased since 2007.<sup>46</sup>

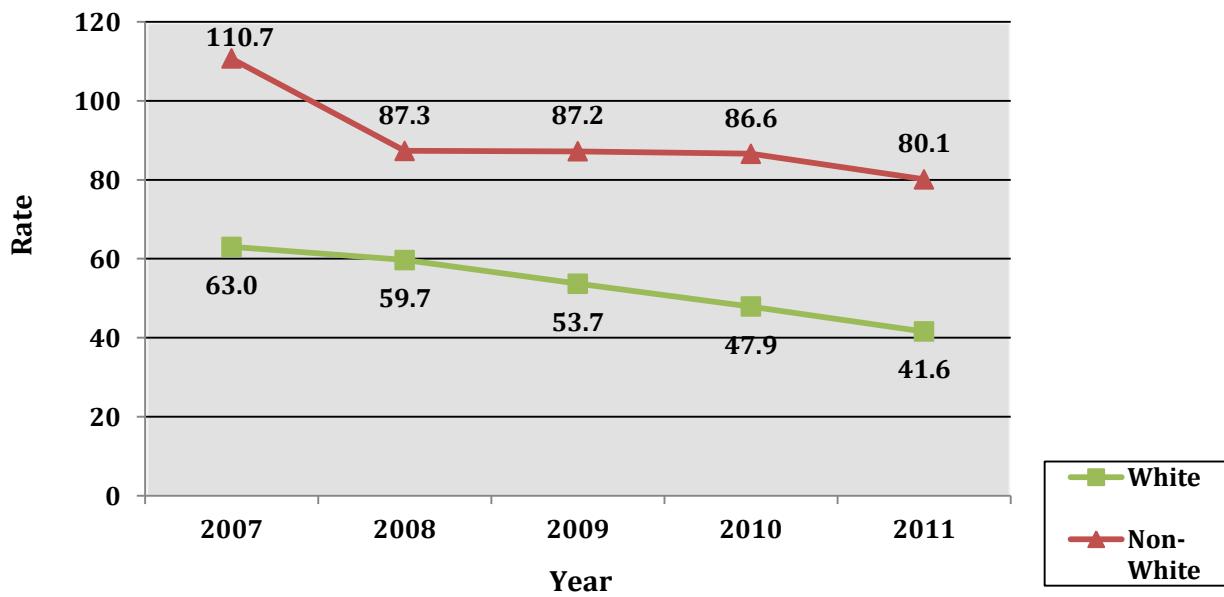
<sup>45</sup> NC Division of Public Health, State Center for Health Statistics, County Health Data Book. Available at: <http://www.schs.state.nc.us/schs/data/databook/>

<sup>46</sup> NC Division of Public Health, State Center for Health Statistics, County Health Data Book. Available at: <http://www.schs.state.nc.us/schs/data/databook/>

## Wayne County and North Carolina Teen Pregnancy Rates per 1,000 Population

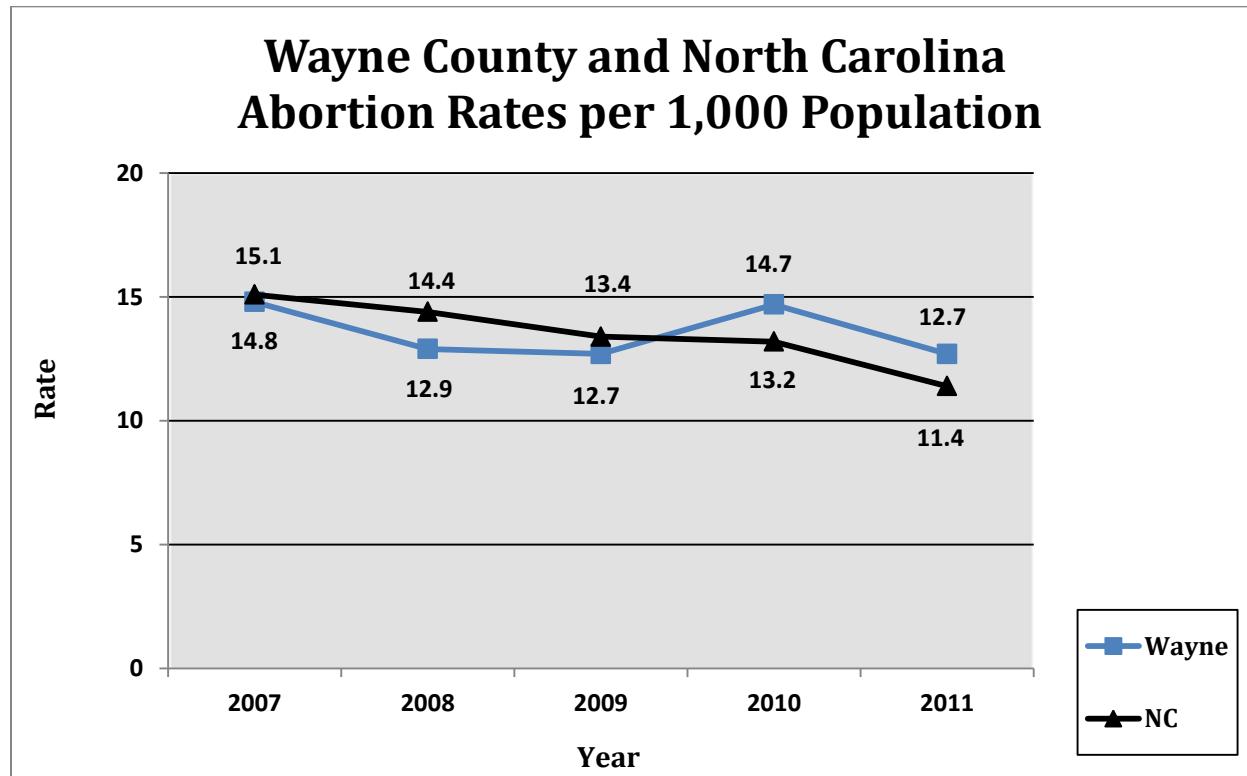


## Wayne County Teen Pregnancy Rates by Race per 1,000 Population



## Abortion Rates

The following graph depicts the abortion rates for Wayne County and North Carolina from 2007 to 2011. The abortion rates in Wayne County surpassed those of the state in 2009 and remain marginally higher than the state as of 2011. Overall, the abortion rates in Wayne County have decreased by 2.4 per 1,000 population since 2007.<sup>47</sup>



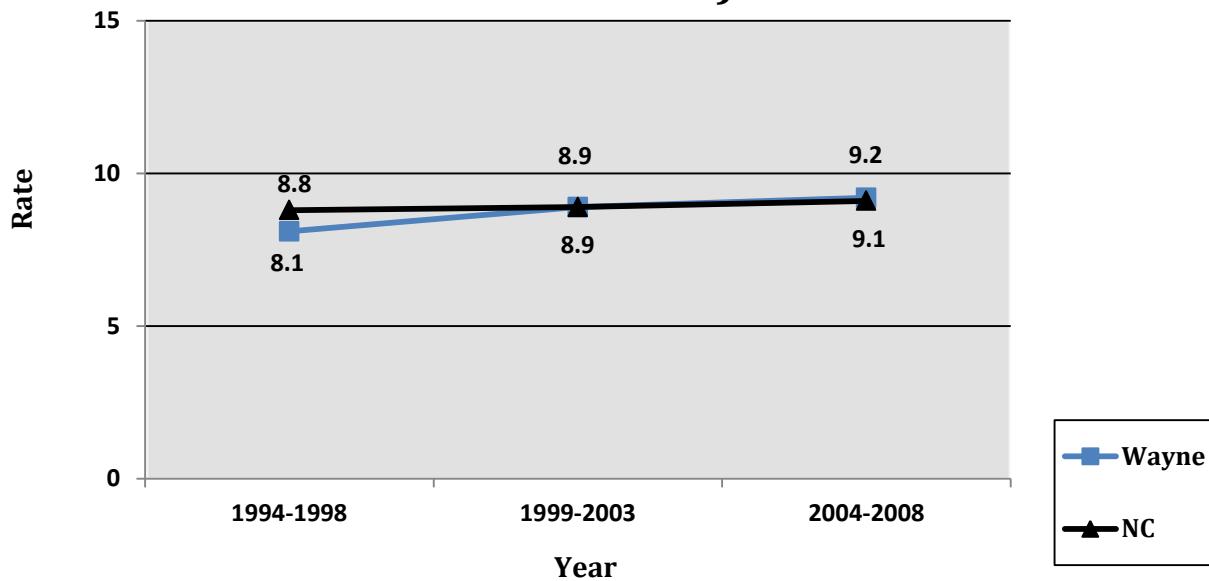
## Maternal Health Indicators

The following graph details the percentage of resident live births classified as low birth weight in Wayne County and North Carolina in five year periods from 1994 to 2008. The percentages of low birth weights have remained fairly constant across this time period for both Wayne County and the state. Since the 1994 to 1998 time period, Wayne County's percentage of low birth weights has increased 1.1 percent, whereas the state has increased 0.3 percent.<sup>48</sup>

<sup>47</sup> NC Division of Public Health, State Center for Health Statistics, County Health Data Book. Available at: <http://www.schs.state.nc.us/schs/data/databook/>

<sup>48</sup> NC Division of Public Health, State Center for Health Statistics, Trends in Key Health Indicators. Available at: <http://www.schs.state.nc.us/schs/data/trends/pdf/Wayne.pdf>

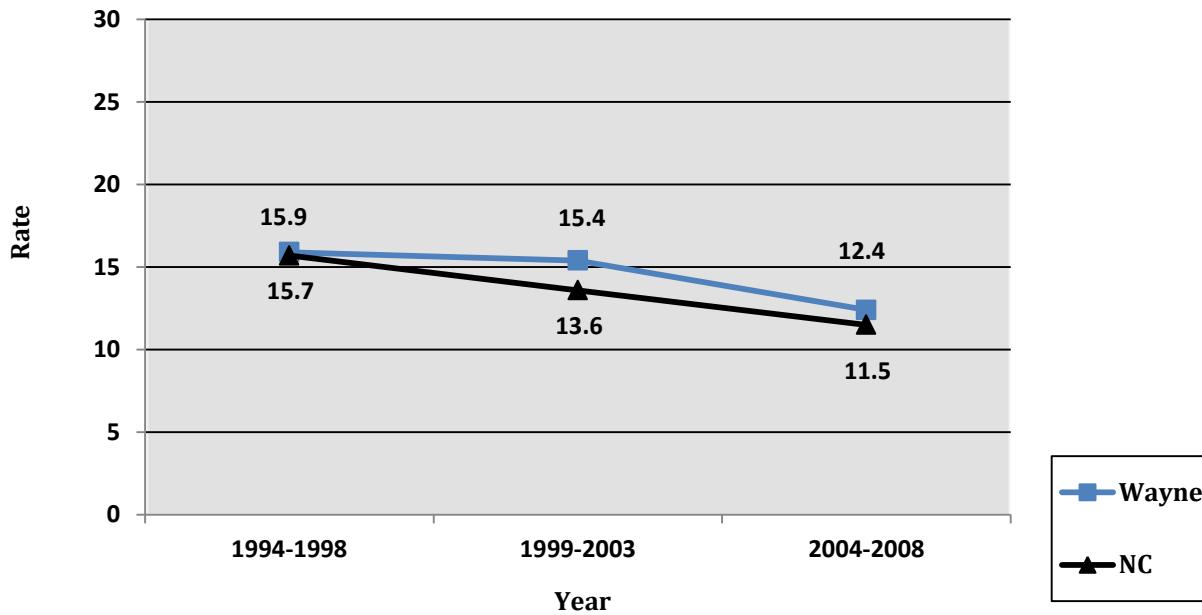
## Percentage of Resident Live Births Classified As Low Birthweight (2,500 grams/ 5 lbs 8 ozs or less)



The following graph portrays the percentage of resident live births where the mother smoked during pregnancy for Wayne County and North Carolina in five year periods beginning in 1994. The percentages of mothers who smoked during pregnancy have steadily decreased for Wayne County and the state from 1994 to 2008. From 2004 to 2008, 12.4 percent of mothers in Wayne County smoked during pregnancy, whereas 11.5 percent of mothers in the state smoked during pregnancy.<sup>49</sup>

<sup>49</sup> NC Division of Public Health, State Center for Health Statistics, Trends in Key Health Indicators. Available at: <http://www.schs.state.nc.us/schs/data/trends/pdf/Wayne.pdf>

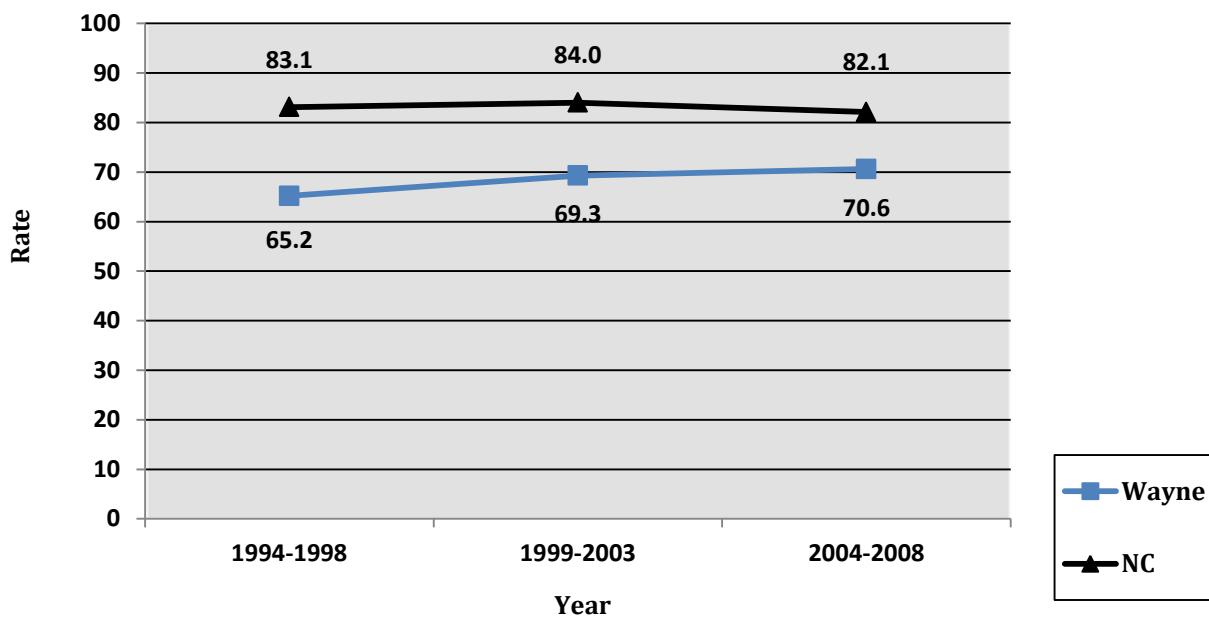
## Percentage of Resident Live Births Where Mother Smoked During Pregnancy



The graph below portrays the percentage of mothers who received prenatal care in the first trimester for Wayne County and North Carolina. Although the percentage of mothers who received prenatal care in the first trimester in Wayne County has increased since the 1994 to 1998 time period, the percentage in the 2004 to 2008 time period remains 11.5 percent lower than the state.<sup>50</sup>

<sup>50</sup> NC Division of Public Health, State Center for Health Statistics, Trends in Key Health Indicators. Available at: <http://www.schs.state.nc.us/schs/data/trends/pdf/Wayne.pdf>

## Percentage of Resident Live Births Where Mother Received Prenatal Care in the 1st Trimester



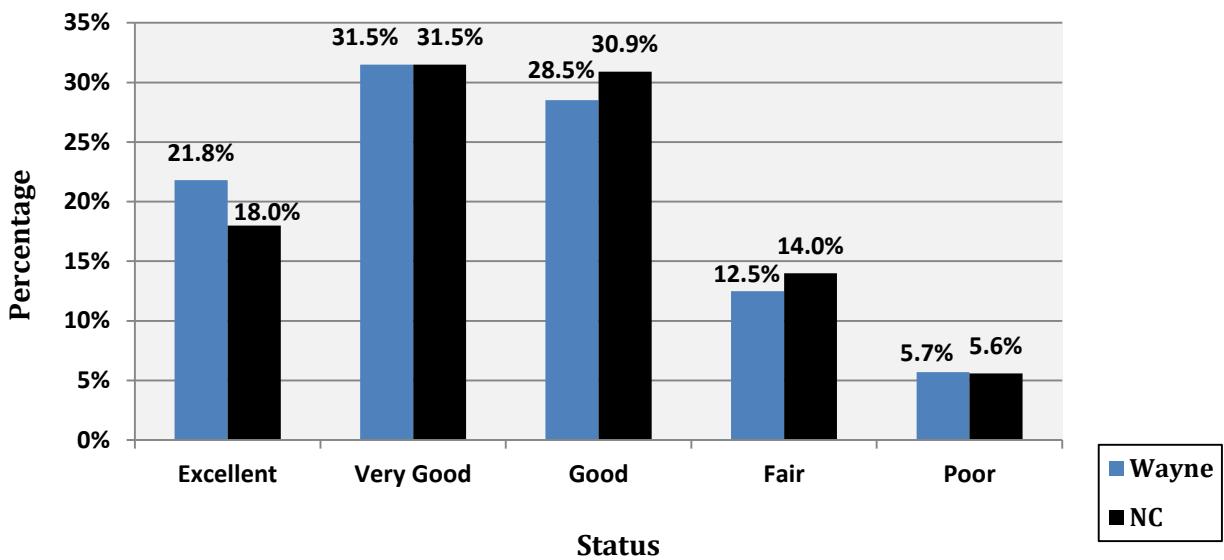
### ***Other Health Status Data***

#### ***General Health Status***

The following graph depicts the results of the Center for Disease Control's Behavioral Risk Factor Surveillance System (BRFSS) survey question regarding general health status for Wayne County and North Carolina residents. A higher percentage of residents in Wayne County report having excellent health (21.8 percent) than the state (18 percent). Additionally, the majority of Wayne County residents report have good, very good, or excellent health (81.8 percent).<sup>51</sup>

<sup>51</sup> 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/>

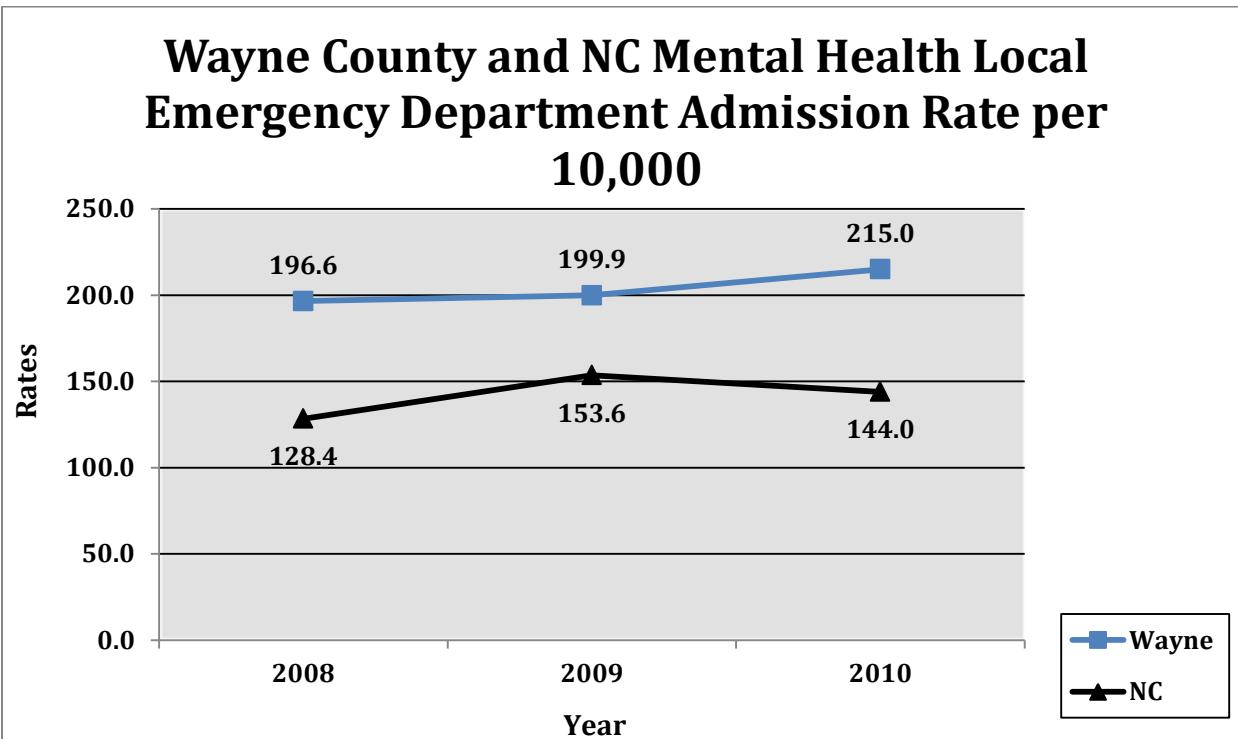
## 2011 General Health Status for Wayne County and NC



### *Mental Health*

Mental health has been identified as a top issue in Wayne County. However, the ability to report mental health statistics is limited. The following graph depicts the mental health emergency admission rate per 10,000 population for Wayne County and North Carolina from 2008 to 2010. The rate has increased steadily from 2008 to 2010 and has remained higher than the state's rate. Moreover, the 2010 rate in Wayne County was 71 per 10,000 population higher than that of the state.<sup>52</sup>

<sup>52</sup> NC Department of Health and Human Services, Statistics and Publications. Available at: <http://www.ncdhhs.gov/mhddsas/statspublications/Reports/>



The following tables report the number of Wayne County residents served in area mental health programs and alcohol / drug treatment centers from 2006 to 2010. The number of residents served in area mental health programs has increased by over 2,500 from 2006 to 2010. Additionally, the number of residents served in alcohol / drug treatment centers has increased by 37 from 2006 to 2010.<sup>53</sup>

<b>Wayne County Residents Served in Area Mental Health Programs</b>				
<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
4,020	3,574	4,267	4,832	6,546

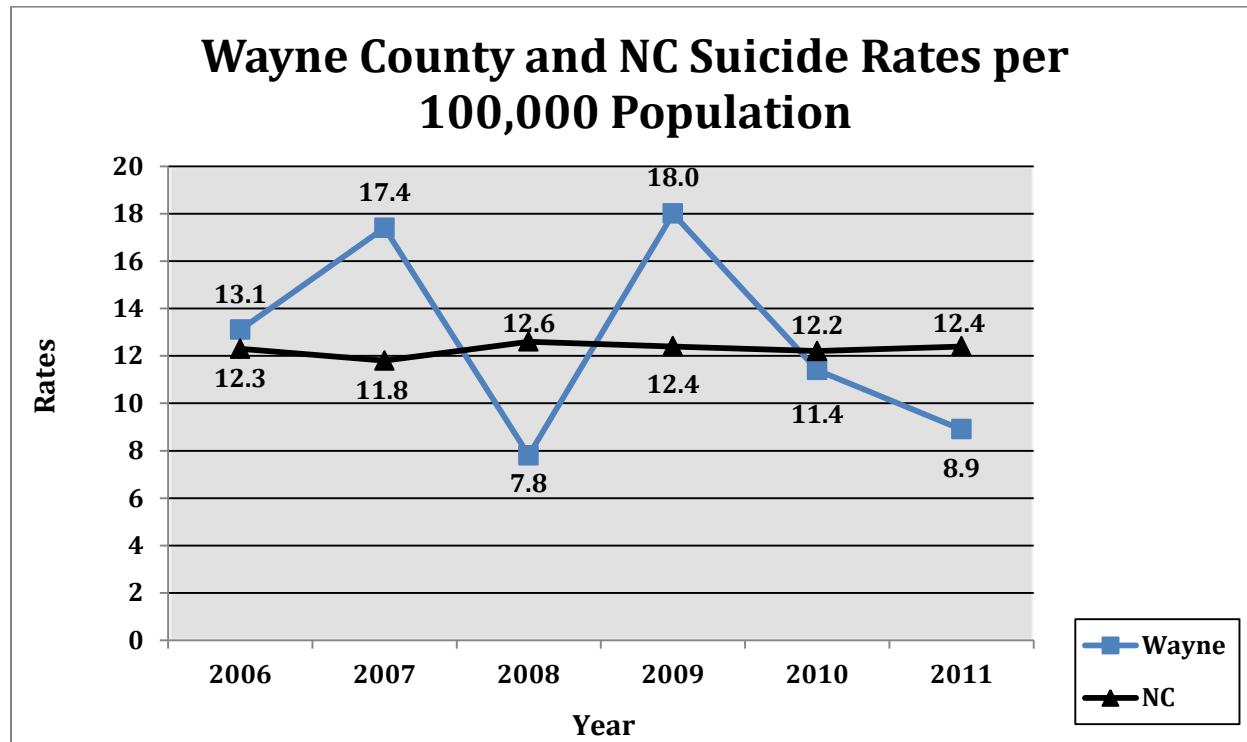
<b>Wayne County Residents Served in Alcohol / Drug Treatment Centers</b>				
<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
65	88	95	85	102

#### Suicide:

Another conceptualization of the mental health issue can be determined by the suicide rates in a particular location. The following graph portrays the suicide rates per 100,000 population in Wayne County and North Carolina from 2006 to 2011. The rates in this time period for Wayne County have fluctuated but have steadily decreased from 2009

<sup>53</sup> Log Into North Carolina (LINC). Available at:  
[http://data.osbm.state.nc.us/pls/linc/dyn\\_linc\\_main.show](http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show)

to 2011. As of 2011, the suicide rate in Wayne County is lower than that of the state. However, the 6-year average from 2006 to 2011 for Wayne County is very close to the state.<sup>54</sup>



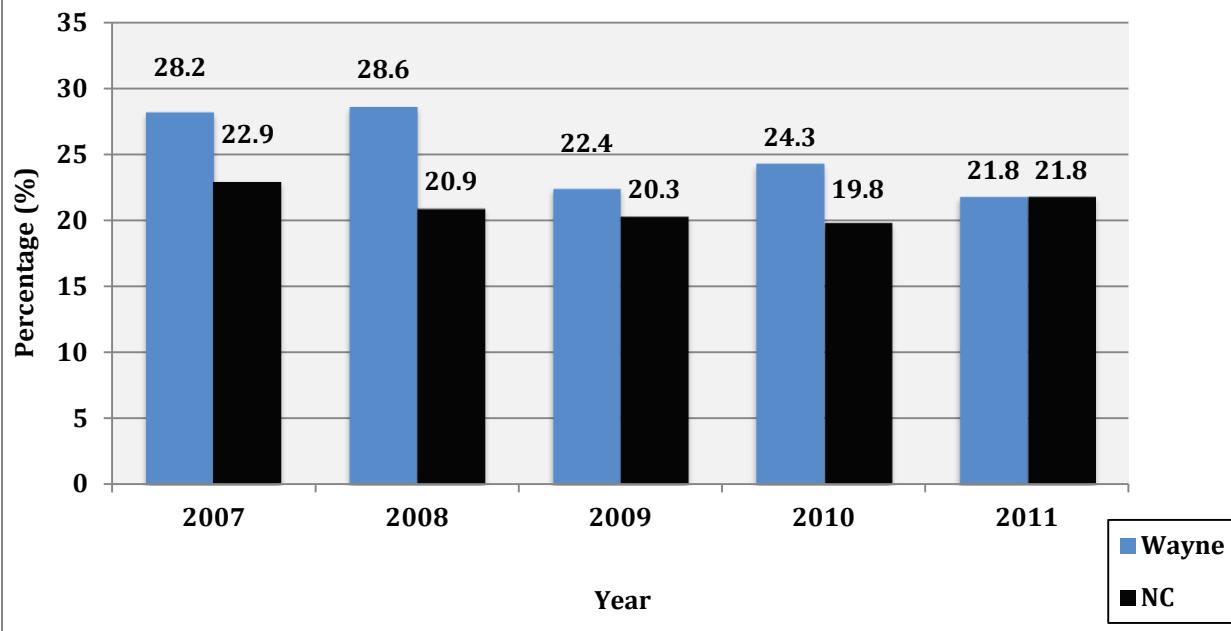
#### *Smoking /Tobacco*

Smoking and tobacco use are notorious precipitating factors in cancer-related deaths. Specifically, the smoking statistics presented below are indicative of the prevalence and mortality rates associated with lung cancer in Wayne County and the state. The following graph depicts the percentage of smokers in Wayne County and North Carolina from 2007 to 2011 as reported by the BRFSS survey. According to the results of the survey, the percentage of smokers in Wayne County has decreased by 6.4 percent from 2007 to 2011. As of 2011, the percentage of smokers in Wayne County and North Carolina are identical at 21.8 percent.<sup>55</sup>

<sup>54</sup> NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

<sup>55</sup> 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/>

## Wayne County and NC Percentage of Smokers



The following tables report additional information concerning tobacco and tobacco use as reported by the BRFSS survey. As of 2011, half of the residents in Wayne County never smoked and 27.9 percent indicated that they were a former smoker. Furthermore, 16.3 percent of respondents reported that they smoke every day, whereas 5.4 percent smoke some days. The next table indicates that 8.8 percent of residents in Wayne County chew tobacco, whereas 5.2 percent of residents in the state chew tobacco. The third table shows that 16 percent of Wayne County residents report being exposed to secondhand smoke in their homes, whereas only 5 percent report exposure in the workplace.<sup>56</sup>

2011 Smoking Status				
Residence	Smoke Everyday	Smoke Some Days	Former Smoker	Never Smoked
Wayne	16.3%	5.4%	27.9%	50.3%
NC	15.6%	6.1%	24.8%	53.4%

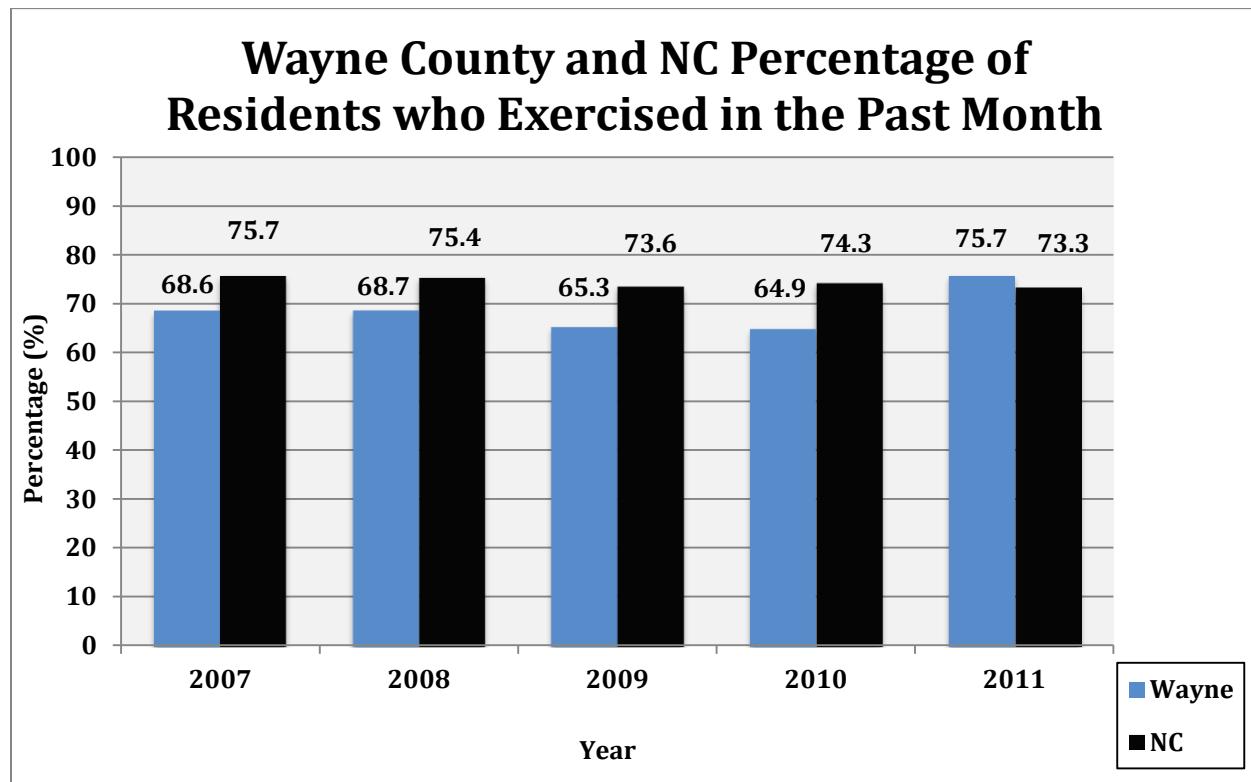
2011 Chewing Tobacco Use		
Residence	Yes	No
Wayne	8.8%	91.2%
NC	5.2%	94.8%

<sup>56</sup> 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/>

Percentage of People Exposed to Secondhand Smoke in the Past Seven Days (2011)		
Residence	Home	Work
Wayne	16%	5%
NC	14%	8%

### *Exercise*

The following graph depicts the percentage of residents who exercised in the past month from according to the BRFSS survey. From 2010 to 2011, the percentage of Wayne County residents who exercised in the past month increased 10.8 percent and surpassed the 73.3 percent of North Carolina residents who exercised in the past month in 2011.<sup>57</sup>

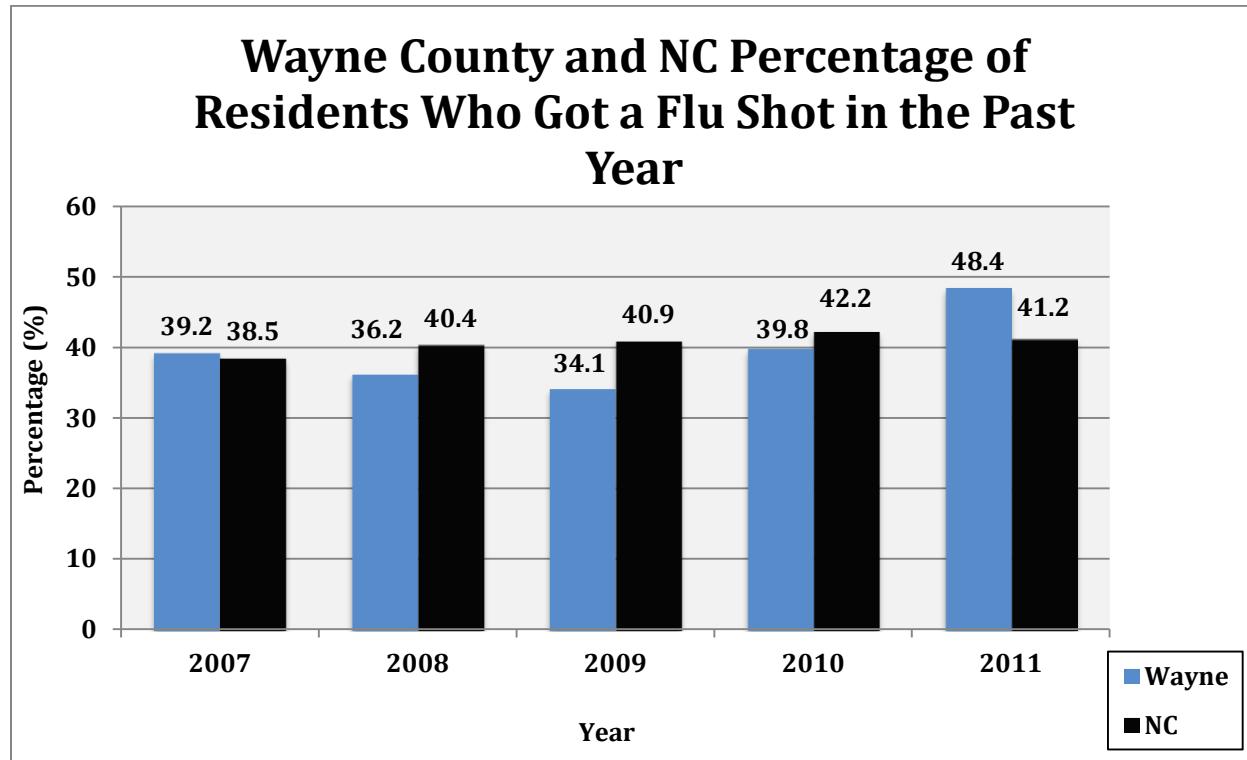


### *Screenings*

The following graph portrays the percentage of residents in Wayne County and North Carolina who got a flu shot in the past year from 2007 to 2011 according to the BRFSS survey. From 2010 to 2011, the percentage of Wayne County residents who got flu shots increased 8.6 percent. As of 2011, the percentage of residents who got flu shots in

<sup>57</sup> 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/>

Wayne County was 7.2 percent higher than the state. The combined efforts of Wayne Memorial Hospital and the Wayne County Health Department have been important with regard to the increases in flu shots amongst residents in Wayne County.<sup>58</sup>



### *Child Health*

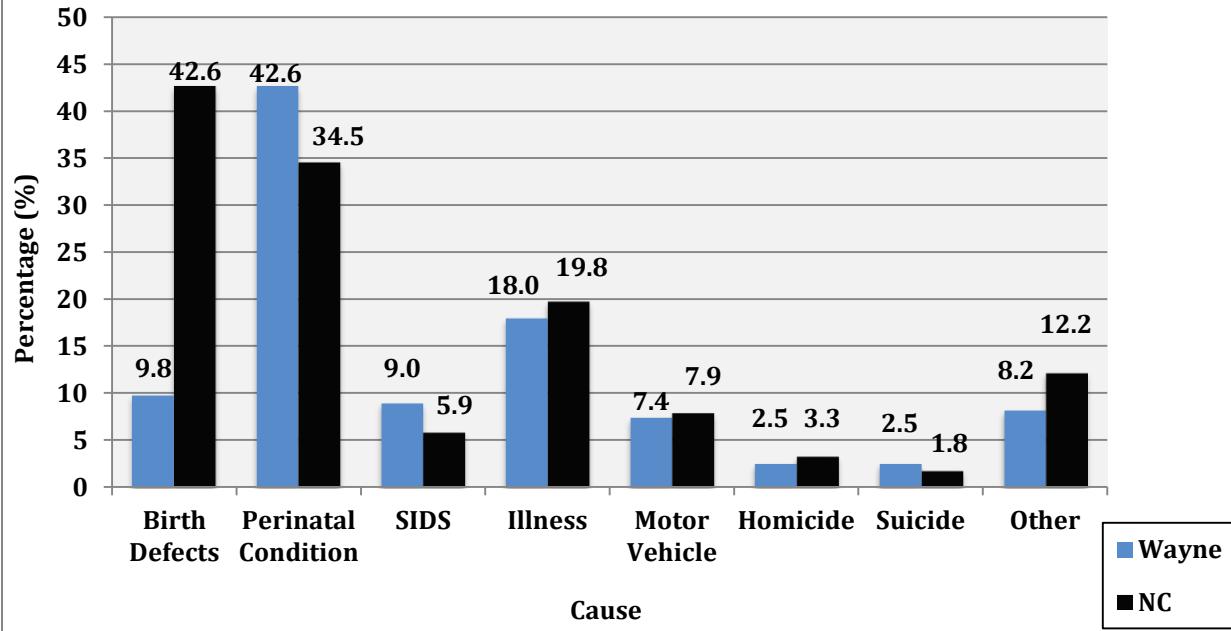
The following graph depicts the leading causes of child deaths ages 0 to 19 in Wayne County and North Carolina in the 2007 to 2011 time period. Prenatal conditions are the highest percentage of child deaths (42.6 percent), followed by illness (18 percent) and birth defects (9.8 percent) in Wayne County. Alternatively, the highest percentage of child deaths in North Carolina is birth defects (42.6 percent), followed by prenatal conditions (34.5 percent) and illness (19.8 percent).<sup>59</sup> The table below the graph reports the total number of child deaths in Wayne County and North Carolina by cause of death and age. The majority of child deaths are the result of prenatal conditions and occur before the age of one.<sup>60</sup>

<sup>58</sup> 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/>

<sup>59</sup> NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

<sup>60</sup> NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

## Leading Causes of Child Deaths (Ages 0-19) in Wayne County and NC (2007-2011)



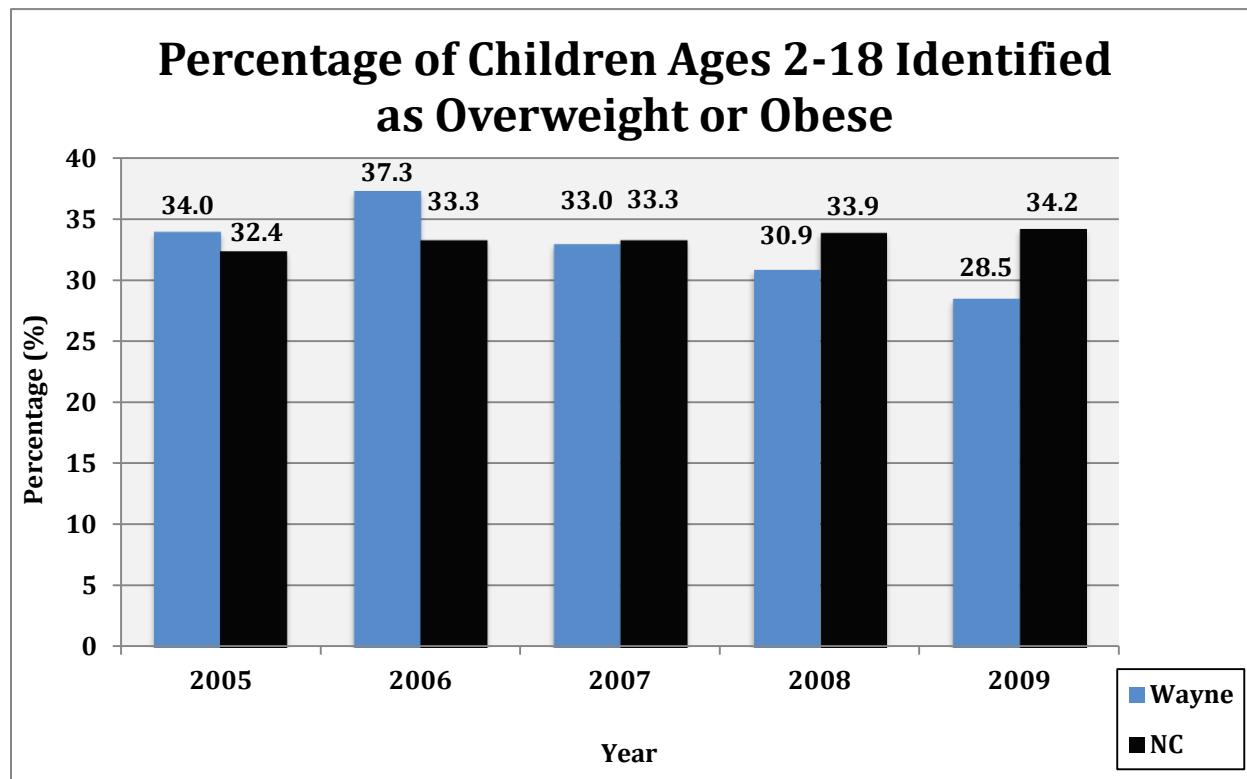
Location (2007-2011)	Total	Cause of Death								Age				
		Birth Defects	Perinatal Conditions	SIDS	Illness	Motor Vehicle	Homicide	Suicide	Other	Under 1	1-4	5-9	10-14	15-17
Wayne	122	12	52	11	22	9	3	3	10	85	12	8	7	10
NC	7,331	1,082	2,527	435	1,449	577	240	129	892	4,899	713	428	472	819

### Childhood Obesity:

The following graph portrays the percentage of children ages 2-18 identified as overweight or obese in Wayne County and North Carolina from 2005 to 2009. This percentage for Wayne County has steadily declined from 2005 to 2009. As of 2009, the percentage of obese children in Wayne County was 5.7 percent less than the state.<sup>61</sup> One important program in place has been the partnership between the Goldsboro YMCA and Goldsboro Pediatrics, to educate at-risk children through the CHANGE For CHILDREN program, a 10-week physical activity and nutrition program for overweight children ages 6-15 years old. CHANGE runs Monday through Thursday afternoons “to help children raise their self-esteem and confidence, and improve their health through fun physical activity”

<sup>61</sup> Eat Smart Move More NC. Available at: <http://www.eatsmartmovemorenc.com/Data/Texts/>

and exercise", with the goal of bringing about life-changing behaviors that lead to a healthier child.



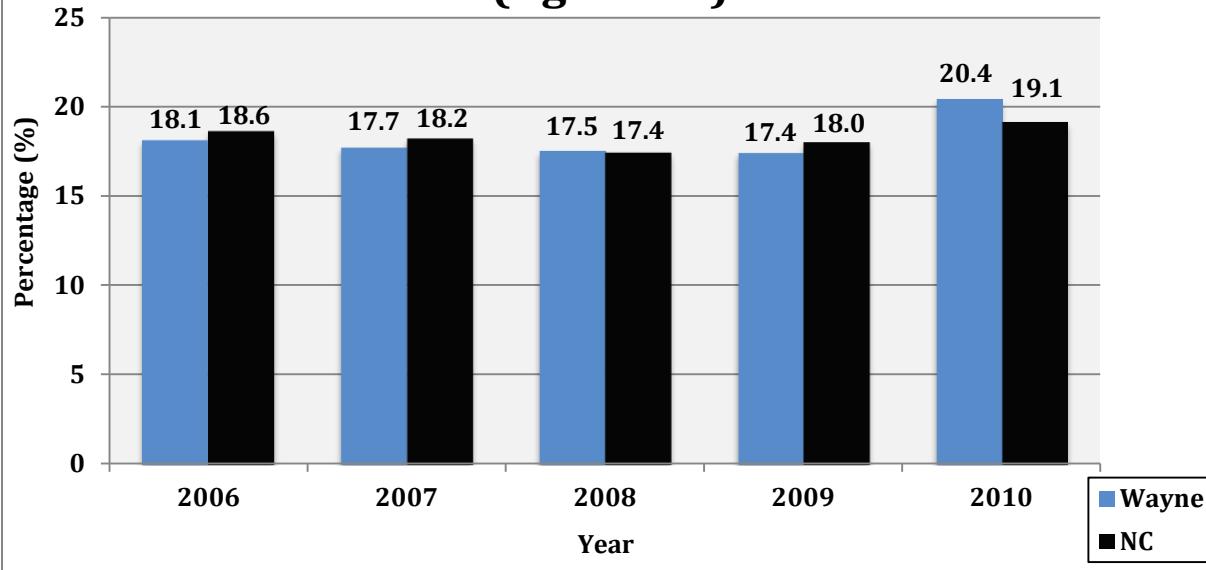
### ***Access to Health Care***

#### *Insured/Uninsured Population*

Access to health care has been identified as a top issue in Wayne County. The following graph depicts the percent of uninsured residents in Wayne County and North Carolina from 2006 to 2010. The percentage of uninsured residents in Wayne County increased 4 percent from 2009 to 2010. As of 2010, the percentage of uninsured residents in Wayne County (20.4 percent) surpassed that of the state (19.1 percent).<sup>62</sup>

<sup>62</sup> US Census Bureau, Small Area Health Insurance Estimates. Available at: <http://www.census.gov/did/www/sahie/>

## Wayne County and North Carolina Percentage of Population Uninsured (Ages <65)



### *Medicare/Medicaid*

The following table reports the Medicaid eligible statistics for Wayne County and North Carolina as of July 2009. The majority of Wayne County and North Carolina Medicaid eligible are between the ages of 0 and 5. In Wayne County, 20 percent of the total population was Medicaid eligible, whereas 17 percent of North Carolina residents were Medicaid eligible.<sup>63</sup>

Medicaid Eligibles by Age or Group for Wayne County and NC for June 2009										
	Health Choice	0-5	6-11	12-20	21+ Non ABD	21+ ABD	Family Planning	Total Medicaid Population	Total Population July 2009	% of Pop.
WC	2,261	6,376	3,976	4,323	4,429	5,690	912	24,794	122,623	20%
NC	143,022	408,023	253,855	274,805	300,954	339,484	57,966	1,577,121	9,543,537	17%

### *Hospital Utilization*

The following table reports the hospital utilization statistics for Wayne County and North Carolina in 2011. The discharge rate in Wayne County was 12.8 per 1,000 population higher than the discharge rate of North Carolina. Additionally, the days stay rate for Wayne

<sup>63</sup> NC Department of Health and Human Services, Statistics and Reports. Available at: <http://www.ncdhhs.gov/dma/pub/index.htm>

County was nearly 100 per 1,000 population higher than North Carolina. However, the average charge per day and the average charge per case were lower in Wayne County than the state.<sup>64</sup>

Location	Total Cases	Discharge Case Rate (Per 1,000)	Avg. Days Stay	Days Stay Rate (Per 1,000)	Total Charges	Avg. Charge per day	Avg. Charge per Case
Wayne	13,988	113.1	5.2	583.7	\$358,701,607	\$4,968	\$25,645
NC	968,063	100.3	4.9	489.8	\$26,779,613,000	\$5,663	\$27,683

### *Healthcare Providers*

One critical statistic in examining health care access is the number of providers within a given county. The following tables report the primary care provider as a ratio of the population and the health professional per 10,000 population in Wayne County and North Carolina. The table below indicates that there are almost 300 more people per primary care provider in Wayne County than the state. Furthermore, there are greater than 500 more people per primary care provider in Wayne County than the national benchmark.<sup>65</sup> In the second table, Wayne County has a lower rate of every type of health professional per 10,000 population than the state. The most notable difference in rates between Wayne County and the state are for total physicians and registered nurses (RN's).<sup>66</sup>

Primary Care Provider as a Ratio of the Population (2012)	
Wayne	1,554:1
NC	1,135:1
National Benchmark	631:1

2010 Health Professionals per 10,000 Population								
Location	Total Physicians	Total Primary Care	Dentists	Pharmacists	RN's	Nurse Practitioners	Certified Nurse Midwives	Physician Assistants
Wayne	14.4	6.3	3.7	7.2	90.2	2.8	0.0	3.2
NC	21.7	9.4	4.4	9.1	97.3	3.8	1.2	3.8

<sup>64</sup> NC Division of Public Health, State Center for Health Statistics, County Health Data Book. Available at: <http://www.schs.state.nc.us/schs/data/databook/>

<sup>65</sup> County Health Rankings and Roadmaps. Available at: <http://www.countyhealthrankings.org/app/north-carolina/2012/measures/factors/4/map>

<sup>66</sup> Cecil G. Sheps Center for Health Services Research, NC Health Professions Data System. Available at: <http://www.shepscenter.unc.edu/hp/prof2010.htm>

## ***Environmental Health***

### ***Air Quality***

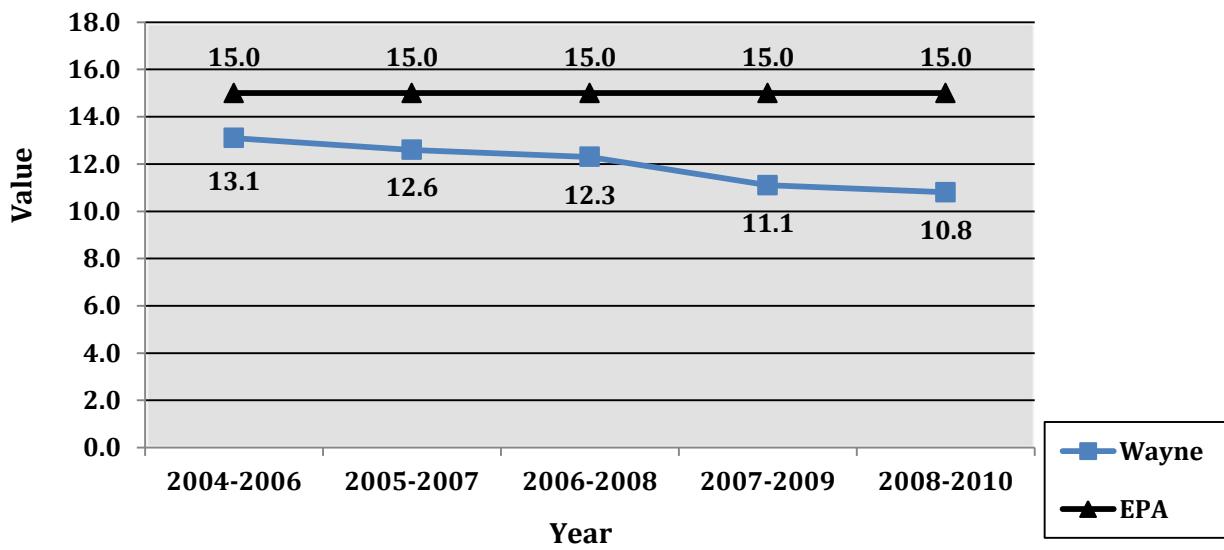
The NC Division of Air Quality utilizes the Air Quality Color Code Guide (see table below) to alert the public of air quality issues related to ozone and fine particles. Air pollution levels within the range of orange, red, purple or maroon are considered exceeding the Environmental Protection Agency (EPA) standard. Furthermore, the American Lung Association provides county-level grades for air quality based on EPA standards. In 2010, Wayne County received a letter grade of "B" for daily particle pollution, having only one "orange" particle day. Additionally annual average levels of air pollution are calculated by the EPA based on air pollution levels. The chart below depicts the 3-year averages from 2004 to 2010 in annual average air quality for Wayne County.<sup>67</sup>

<b>Air Quality Index Levels of Health Concern</b>	<b>Numerical Value</b>	<b>Meaning</b>
Green/Good	0-50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Yellow/Moderate	51-100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Orange/Unhealthy for Sensitive Groups	101-150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Red/Unhealthy	151-200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Purple/Very Unhealthy	201-300	Health alert: everyone may experience more serious health effects.
Maroon/Hazardous	>300	Health warnings of emergency conditions. The entire population is more likely to be affected.

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<sup>67</sup> American Lung Association, State of the Air. Available at:  
<http://www.stateoftheair.org/2012/states/north-carolina/wayne-37191.html>

## Wayne County Average Annual Concentration Compared to the EPA Standard



*Water Quality (EPA measures watershed quality using 15 indicators)*

Based on EPA measures of watershed quality using 15 different indicators, Sperling's Best Places has created a rating system on a 100 point scale, with 100 being the highest possible water quality. According to this 2010 report, Wayne County scored 70 out of 100, compared to 74 out of 100 for the state, and 55 out of 100 for the US.<sup>68</sup>

### 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.

<sup>68</sup> Sperling's Best Places. Available at: [http://www.bestplaces.net/health/county/north\\_carolina/wayne](http://www.bestplaces.net/health/county/north_carolina/wayne)

Please find below a listing of common priority areas for Wayne County's peer counties.

Alamance:

- Access to healthcare
- Obesity
- Mental health
- Substance abuse
- Education
- Poverty

Gaston:

- Obesity
- Cardiovascular disease/high blood pressure
- Cancer
- HIV/STDs
- Mental health
- Substance abuse
- Access to healthcare

Pitt:

- Chronic disease
- STD
- Access to healthcare
- Healthy weight
- Violence

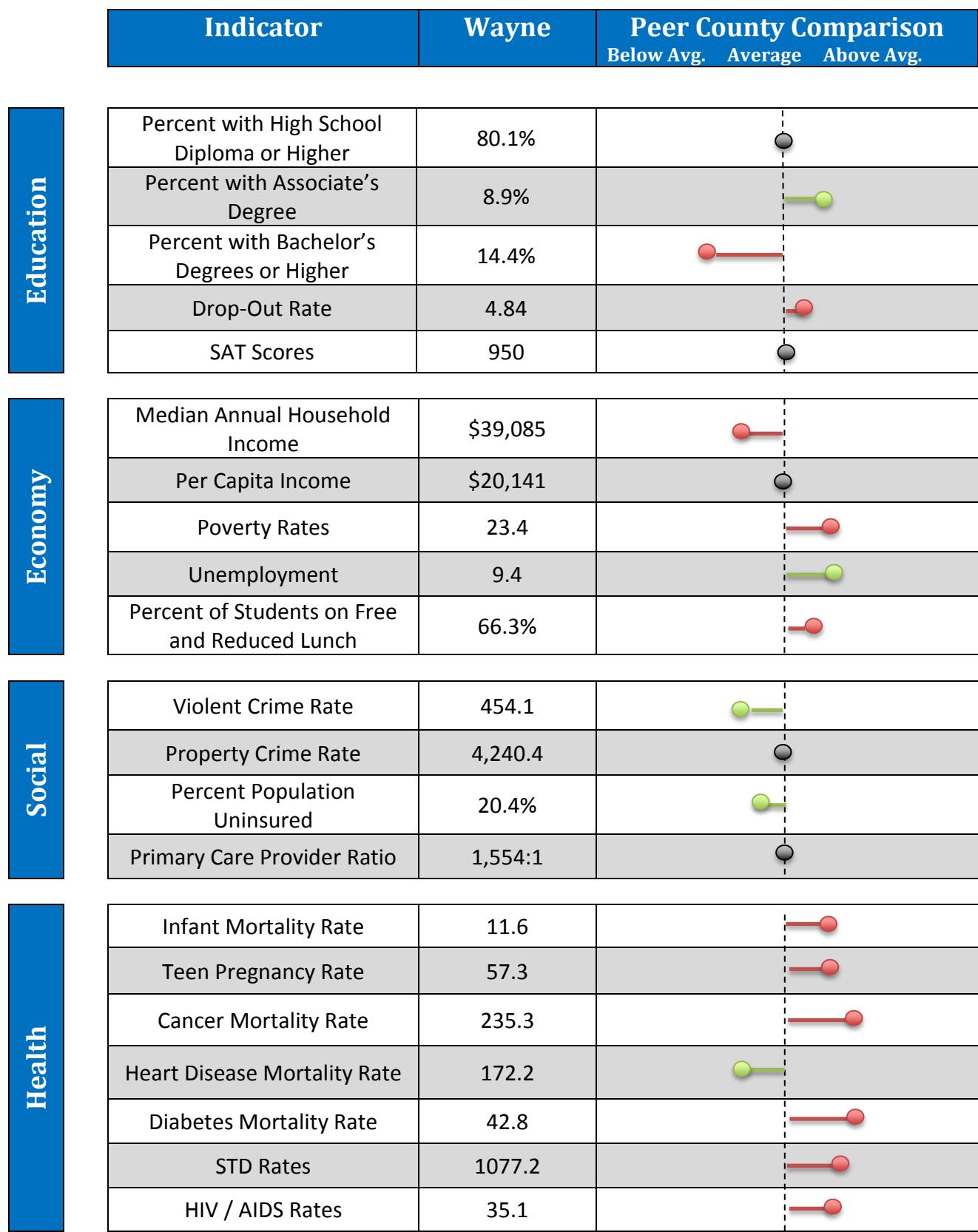
Robeson:

- Obesity
- Substance abuse

Rowan:

- Obesity
- Access to healthcare

The following table reports whether Wayne County is below average, average, or above average with regards to peer counties in four data domains including: (1) education, (2) economy, (3) social, and (4) health. Wayne County needs most improvement in the health domain, followed by economy and education. Regarding the social domain, Wayne County is doing better than its peer counties.



## ***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
- 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 Pediatrics
- Salvation Army
  - Provides food, clothing, medicine, and other necessities to low income families
- The Shelter of Wayne County
  - Emergency shelter for abused women and children
- Soup Kitchen
  - Provides meals Monday through Saturday to needy people in downtown Goldsboro
- 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

## ***Review of Primary Data***

The review that follows summarizes data collected from stakeholders, focus groups and the community survey. The leadership team compared the primary data to secondary data as well as contextual information, not included in this section, about Wayne County to determine the focus areas of this Community Health Assessment. These data are meant to portray a snapshot of community perceptions during the assessment period.

### ***Stakeholders***

The leadership team compiled a list of key stakeholders representing multiple sectors including municipal, health, education, philanthropy, and faith-based organizations. A community meeting with 43 stakeholders convened to gain support for the community health assessment and to gather opinions about community health best practices. A group of up to 10 stakeholders sat at each of seven tables. Each table was assigned one of the following categories: church, family, government/health department, hospital/physicians, neighborhood, schools and other. Stakeholders were asked to answer the question, "What would a healthy County look like?" Responses were recorded and organized according to the categories.

Themes included access to care, healthy eating, physical activity, community safety, and mental health. In relation to access to care, stakeholders discussed strategies such as screening, health education and outreach. Barriers to access included the high cost of health care and lack of health insurance as well as cultural and language differences. In relation to healthy eating and physical activity, most participants expressed an understanding of the link between unhealthy food choices and lack of physical activity on particular health outcomes, such as obesity and diabetes. In relation to community safety, stakeholders wanted the "ability to walk everywhere safely." Mental health was discussed in terms of prevention. Stakeholders approached health care from a proactive perspective, with emphasis on prevention, such as access to lighted sidewalks, walking trails and bicycle lanes. For multiple stakeholders, prevention also included more school nurses, primary care and mental health services.

A meeting was conducted with providers in a local clinic that targets uninsured and low income residents. This group noted that some patients with poor family health history were resigned to having high blood pressure, or diabetes, as per: "It runs in my family; that's just the way it is". This group suggested that increasing the understanding of how changes in diet and exercise and/or treatment with medications could often help delay or correct health conditions would be a good strategy to consider.

### ***Focus Groups***

Focus groups (N = 86) with community members were conducted to solicit feedback regarding the health needs in the community. Three focus groups were comprised of

primarily under-represented populations. The other seven met in strategic geographic locations throughout the county. A number of first responders, due to location, were asked to participate in the seven focus groups along with the general public that lived in or in close proximity to the area or region. Although efforts were made to have under-represented populations present at the seven focus groups, the participants were predominantly White. There was an equal gender representation in the ten focus groups. Two team members conducted each session by asking a series of questions. Results were transcribed and analyzed for themes.

**Focus Group Summary Table (34 females, 32 males)**

Location	Date	Attendance
Community Soup Kitchen	2/8/12	1 female, 6 males
WATCH free clinic	2/15/12	3 females, 3 males
Latino Market	2/15/12	3 females, 4 males
Grantham Fire Department	5/21/12	9 females, 3 males
Wayne County Public Library	5/22/12	4 females, 5 males
Pinewood Fire Department	5/31/12	4 females, 3 males
Fremont Fire Department	6/4/12	3 females, 5 males
Seymour Johnson Air Force Base	6/14/12	7 females, 8 males
Dudley Fire Department	6/19/12	4 females, 5 males
Seven Springs Fire Department	6/21/12	3 females, 3 males

When asked about the **best thing about living in their community**, the majority of participants agreed on characteristics such as community support, friendliness, a feeling of connectedness and both size and location. People primarily walk, ride bikes, participate in youth sports and go to the YMCA to **stay healthy**. Participants also discussed involvement in personal gardening as well as community gardens as a way to stay healthy.

**Health information** was received actively from doctors, the WATCH van and health fairs. Multiple dissemination sources were also discussed, such as newspaper articles, the hospital newsletter, churches, schools, the health department and word of mouth.

Participants cited obesity, cancer, mental health issues, diabetes, high blood pressure, heart disease and drugs/alcohol as serious **community health problems**. The **common causes** were listed as poor diet, lack of exercise, smoking, and a busy lifestyle. Moreover, participants frequently discussed the inability to pay for healthcare, lack of insurance and lack of access to and ability to afford healthy foods as causes for the aforementioned health problems.

Common **barriers to healthy community members** were lack of information, education and time, costs associated with eating healthy, transportation issues, and lack of access to healthy foods. Other barriers included lack of exercise for children due to technology and decreased time spent outdoors. Additionally, poverty, culture and a shortage of doctors were discussed.

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.

### *Community Survey*

A community survey was developed and implemented to compliment and reinforce secondary data collected from a variety of sources. The purpose of the survey was to collect the varying opinions of community members regarding a variety of community health topics.

The community survey ( $N = 1369$ ) was administered in both online and paper format, in order to capture the opinions of individuals with and without Internet access. Research team members made community members aware of the survey at the focus group sessions. Focus group attendants were also given information cards, which included an Internet link to the online survey, to distribute to additional community members. Paper-format surveys were strategically placed at select locations around the county. The survey took approximately 30 minutes to complete and consisted of fixed-answer and open-answer question types. As an incentive for participation, a free two-week membership to the local YMCA was offered.

The majority of survey respondents were women (83.2 percent) and approximately half (49.4 percent) were between the ages of 35 and 54. The racial distribution of respondents primarily consisted of 66.8 percent White, 27.2 percent Black, and 3.4 percent Hispanic/Latino. Educational attainment was high among respondents with 65 percent reporting that they had an Associate's degree or higher. Half of survey respondents (50.1 percent) had an annual household income of at least \$50,000.

Population calibration or "data weighting" was conducted to compensate for discrepancies between the survey population demographic profile and that of the county.

Weighting procedures were conducted on demographic variables age, sex, race, income, and education. The weighting process allows underrepresented demographic groups to have equivalent opinions as those who are overrepresented. All data presented below has been weighted to the demographics of Wayne County.

Respondents were asked to rate the quality of life in Wayne County. The majority of respondents agreed or strongly agreed that Wayne County has clean air and water (79 percent), is a good place to grow old (69 percent) and raise children (67 percent), has good healthcare (65 percent), and that they are able to receive help from other community members in time of need (60 percent). In contrast, more than half of respondents (66 percent) did not agree that there was plenty of economic opportunity in Wayne County.

### **Quality of Life Survey Results**

<b>Indicators</b>	<b>Percent who agree or strongly agree</b>
Clean air and water	79
Good place to grow old	69
Good place to raise children	67
Good healthcare	65
Help for people in time of need	60
Safe place to live	57
Plenty of economic opportunity	34

From a list of 18 possible choices, respondents identified the health condition(s) that they had been diagnosed with by a doctor or health care professional. The most frequently reported diseases are listed below. At 38 percent, the top health condition selected was overweight/obesity. Closely related, high blood pressure (31 percent) and high cholesterol (25 percent) trailed overweight/obesity as the second and third health conditions selected, respectively.

### **Self-Reported Chronic Disease**

<b>Disease</b>	<b>Percent reporting diagnosis</b>
Overweight/obesity	38
High blood pressure	31
High cholesterol	25
Depression/anxiety	24
Asthma	17
Diabetes	11

Respondents selected five top issues for Wayne County out of 54 options. The table below includes the most frequently reported social issues. The top three social issues selected include job availability (45 percent), poverty/low income (36 percent) and drug abuse (36 percent).

### **Social issues**

<b>Social Issues (selected 5)</b>	<b>Percent respondents (sums to &gt;100%)</b>
Job availability	45
Poverty/low income	36
Drug abuse	36
Violent crime	24
Gang activity	24
Recreation opportunities	18
Discrimination/racism	16

The table below includes the most frequently reported health issues, out of the 54 options for top issues in Wayne County. The top three health issues selected included alcohol use (21 percent), overweight children (19 percent) and overweight adults (19 percent).

### **Health issues**

<b>Health Issues (selected 5)</b>	<b>Percent respondents (sums to &lt;100%)</b>
Alcohol use	21
Overweight children	19
Overweight adults	19
Cancer	13
Allergies	9
Heart disease	4
Chronic diseases	4

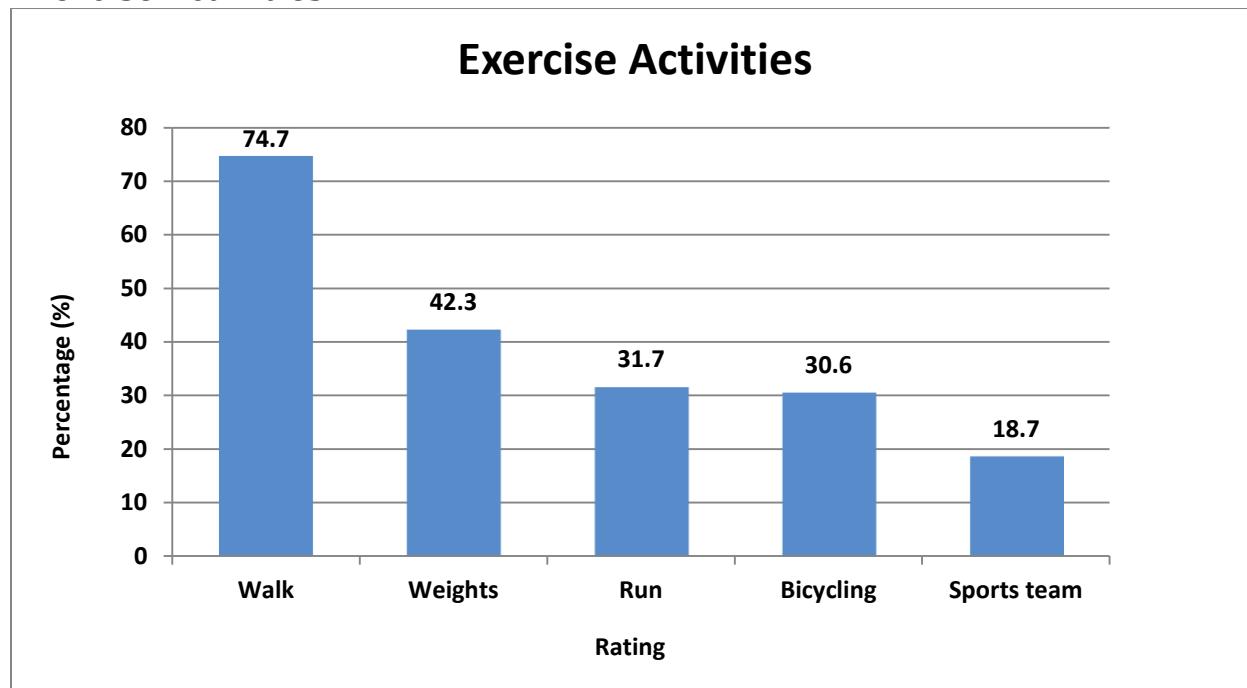
Survey respondents indicated if they participated, during a normal week, in any physical activity or exercise that lasts at least a half an hour. More than two-thirds of respondents (69 percent) indicated that they did engage in exercise.

### **Exercise behaviors of community members**

<b>Engage in Exercise</b>	<b>Percent respondents</b>
Yes	69
No	31

The graph below indicates the type of exercise activities in which survey respondents engaged. Three-fourths (74.7 percent) indicated they engaged in walking as an exercise. Less than half of respondents indicated weight training (42.3 percent), running (31.7 percent), bicycling (30.6 percent) and sports team participation (18.7 percent) as a form of physical activity in which they engaged.

## Exercise Activities



The table below indicates the locations in Wayne County where survey respondents participated in physical activity. Half of respondents (49 percent) indicated that they exercised at home. Following, a quarter of respondents (26 percent) indicated that they used the sidewalks and roads in their neighborhoods to exercise.

## Exercise locations

Location	Percent respondents (sums to >100%)
Home	49
Neighborhood sidewalks/roads	26
YMCA	9
Private gym	7
Herman Park	6
Stoney Creek Park	5
Public recreation center	3
Cliffs of the Neuse State Park	3
Waynesborough Park Trails	1

Respondents identified the services within the community that they believed needed the most improvement. Services indicated as needing the most improvement by at least 10 percent of survey respondents included recreational facilities (18 percent), higher paying employment (14 percent), positive teen activities (11 percent) and availability of employment (10 percent).

### **Services needing most improvement**

<b>Service (selected 1)</b>	<b>Percent respondents (sums to &lt;100%)</b>
Recreational facilities	18
Higher paying employment	14
Positive teen activities	11
Availability of employment	10
Affordable health services	6
Healthier food choices	5
Road maintenance	4

Respondents identified health behavior topics for which they believed people needed the most information about in Wayne County. Health topics that at least 10 percent of survey respondents indicated their community needed more information about included eating well/nutrition (13 percent), crime prevention (11 percent), stress management (10 percent) and preventing pregnancy and STDs (10 percent).

### **Top information needed**

<b>Topic (selected 1)</b>	<b>Percent respondents (sums to &lt;100%)</b>
Eating well/nutrition	13
Crime prevention	11
Stress Management	10
Preventing pregnancy and STDs	10
Managing weight	8
Substance abuse prevention	8
Exercising/fitness	6

Similarly, respondents identified health behavior topics for which they believed the children needed more information about in Wayne County. The top three health topics selected were nutrition (13 percent), drug abuse (10 percent) and sexually transmitted diseases (9 percent).

### **Top information needed for children**

<b>Topic</b>	<b>Percent respondents (sums to &lt;100%)</b>
Nutrition	13
Drug abuse	10
Sexually transmitted diseases	9
Sexual intercourse	8
Reckless driving/speeding	8
Alcohol	7
Tobacco	4

When respondents were asked about their personal tobacco use, a large portion (88 percent) indicated that they did not smoke. Furthermore, nearly the entire survey population (99 percent) indicated that they did not chew tobacco products.

### **Drug use**

<b>Drug Use</b>	<b>Percent respondents</b>
Do not smoke	88
Do not chew tobacco	99

Respondents who indicated that they currently used tobacco products were asked about their intentions to cease their usage. A large portion of tobacco users (72 percent) indicated that they had intentions to quit using tobacco products and nearly half (46 percent) had attempted to quit using.

### **Intentions to quit using tobacco products**

<b>Intention</b>	<b>Percent respondents</b>
Want to stop using tobacco	72
Tried to stop using	46

Over half (58 percent) of the survey population indicated that they did not consume alcohol. The majority of remaining respondents indicated that they consumed less than or equal to 1-2 drinks per week at 21 and 12 percent, respectively.

### **Alcohol consumption**

<b>Frequency</b>	<b>Percent respondents</b>
I do not consume alcohol	58
Less than 1-2 drinks per week	21
Consume 1-2 drinks per week	12
Consume 1-2 drinks per day	5
Consume 3 or more drinks per sitting	4

Self-reported drug use was extremely low among survey respondents. A combined 8 percent indicated that they were either confused about their prescription drug use or believed that they may abuse their prescription drugs. Additionally, only 2 percent of the survey population self-reported illegal drug use.

### **Self-reported drug abuse**

<b>Drug Use</b>	<b>Percent respondents</b>
I am confused about my prescription drug use	1
I think I may abuse prescription drugs	7
I use illegal drugs	2

Over half of survey respondents (54 percent) indicated that they had been exposed to secondhand smoke within the last year. The most frequently selected locations in which they were exposed to secondhand smoke included the home (31 percent) and workplace (25 percent). Furthermore, a portion of respondents (34 percent) indicated that they were exposed in other locations than were provided to them as choices on the survey. The other locations provided by participants were primarily outdoors.

### **Secondhand smoke exposure within the last year**

<b>Exposure in the past year</b>	<b>Percent respondents</b>
Yes	54
No	46

### Location of secondhand smoke exposure

Location	Percent respondents
Home	31
Workplace	25
Restaurants	8
School	1
Hospitals	1
Other (primarily outdoors)	34

Survey respondents were asked the extent to which they agreed with a set of potential solutions to health problems. All presented solutions received strong support. Notably, health education (74 percent), parenting education (73 percent) and providing alternatives for teens (71 percent) received large amounts of respondents who agreed or strongly agreed with them as solutions.

### Solutions to health problems

Solution	Percent who agree or strongly agree
Health education	74
Parenting education	73
Providing alternatives for teens	71
Dealing with stress	68
Education about eating right	65
Classes to stop smoking	58
Reminders to exercise	53

Respondents were asked the where they receive most of their health-related information. The top two sources of health information included a doctor/nurse and the Internet, each with 32 percent.

### Source of health information

Source of health information	Percent respondents (sums to <100%)
Doctor/nurse	32
Internet	32
Health department	9
Hospital	8
Friends and family	8
Books/magazines	5

In addition to indicating agreement with possible solutions to health problems, respondents were asked about the importance of additional solutions. The majority of

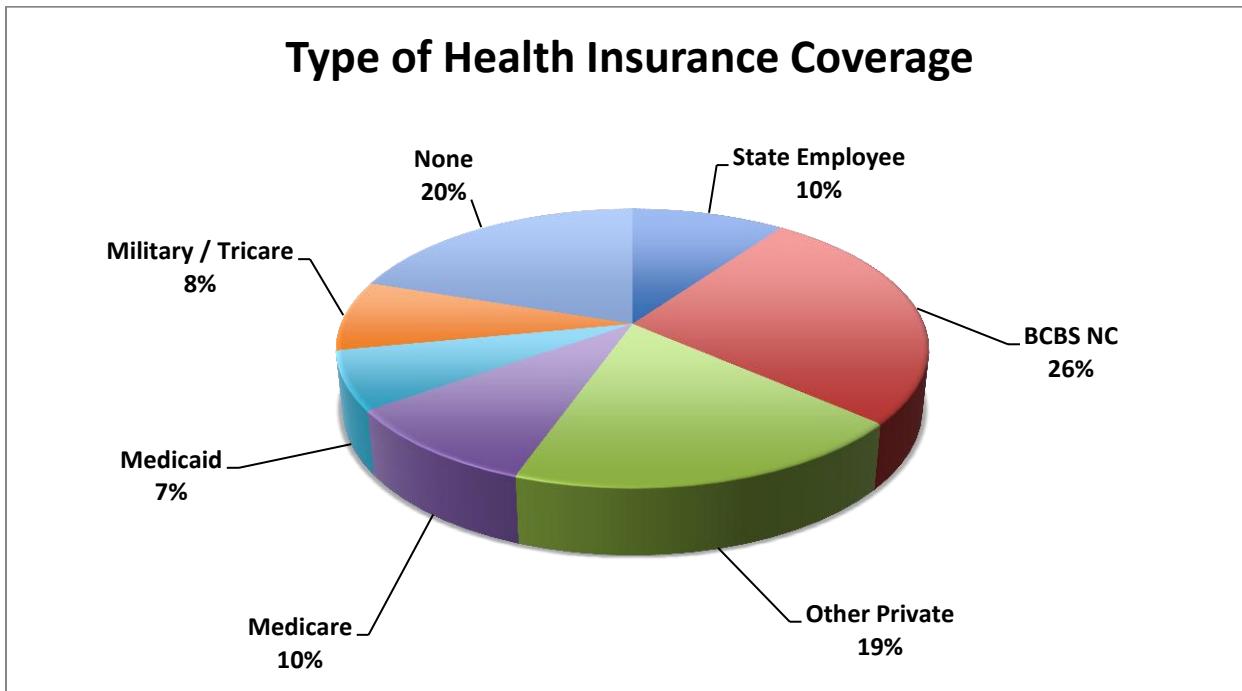
survey respondents rated all possible solutions as very or extremely important. The two solutions that were selected as most important included that individuals take personal responsibility of their health (93 percent) and that schools provide more health education (88 percent).

### **Importance of possible solutions**

<b>Solution</b>	<b>Percent very or extremely important</b>
Individuals take personal responsibility of their health	93
Schools provide more health education	88
Hospitals recruit more health providers	78
Employers take an active role in health promotion	75
Restaurants provide healthier choices	71
Government provide more exercise facilities	60
Churches take an active role in health promotion	59

The graph below demonstrates the breakdown of type of health insurance among survey respondents. Top insurance options included Blue Cross Blue Shield NC (26 percent), other private insurance (19 percent) and state employee coverage (10 percent). Additionally, 20 percent of survey respondents indicated that they did not have any insurance coverage. The final portion of respondents indicated that they had Medicare (10 percent), Medicaid (7 percent) or Military/Tricare (8 percent) coverage.

## Type of Health Insurance Coverage



When asked where survey respondents went to receive healthcare, 59 percent indicated that they went to a private physician's office. Furthermore, a combined 42 percent of respondents received their care at either urgent care or the hospital/emergency department.

## Location where community members receive healthcare

Location	Percent respondents (sums to >100%)
Private physician	59
Urgent care	24
Hospital/emergency department	18
Private dentist	18
GOSHEN Medical Center	6
Health department	6
Seymour Johnson AFB	5

Survey respondents were asked when they had last visited a health care professional. The majority of respondents (81 percent) had seen a health care professional within the last year.

#### **Last visit to a doctor**

Last visit	Percent respondents
Less than 1 year ago	81
1-2 years ago	9
2-3 years ago	2
3 or more years ago	8

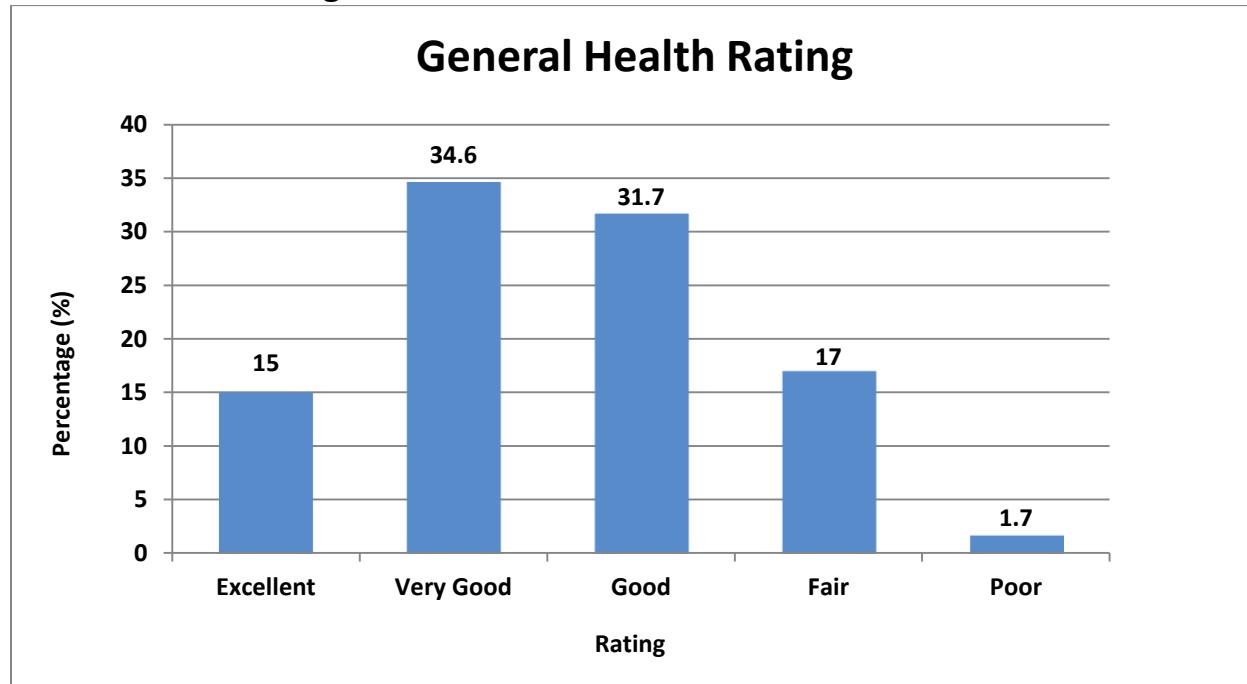
If survey respondents indicated that they were unable to receive access to the healthcare they needed, they were asked to cite the barrier to care. The top barrier to healthcare was a lack of health insurance (9 percent), followed by limited coverage (5 percent) and costly deductible (4 percent).

#### **Barriers to healthcare**

Barrier	Percent respondents (sums to <100%)
No health insurance	9
Limited coverage	5
Costly deductible	4
Too long of a wait	2
Could not get an appointment	1
Doctor wouldn't accept form of insurance	1
Dentist wouldn't accept form of insurance	1

Respondents were asked to rate, in general, their personal health. The largest percentage of respondents rated their health as very good (34.6 percent), followed closely by good (31.7 percent). Nearly equal portions believed their health was either excellent (15 percent) or fair (17 percent). A small percentage rated their health as poor (1.7 percent).

## General health rating



Respondents indicated whether they had undergone a preventative screening for a variety of health conditions within the last 3 years. Over half of all respondents (57 percent) indicated that they had been screened for high blood pressure. A similar percentage of females (53 percent) reported that they had been screened for breast cancer. Fewer respondents reported undergoing screenings for diabetes (46 percent) and less than a quarter of respondents indicated undergoing screenings for colon cancer (24 percent) and HIV/AIDS (21 percent).

## Health screening behavior

Screening	Yes	No
High blood pressure	57%	43%
Breast cancer (F)	53%	47%
Diabetes	46%	54%
Prostate cancer (M)	34%	66%
Uterine cancer (F)	27%	73%
Colon cancer	24%	76%
HIV/AIDS	21%	79%

Respondents were asked if they participated in an assortment of health promoting behaviors. The top three healthy behaviors included practicing safe sex (80 percent), relaxing daily (74 percent) and getting adequate sleep (61 percent). The remaining

behaviors also received high levels of participation, ranging from eating fast food less than twice a week (57 percent) to getting an annual flu shot (31 percent).

### **Health promoting behaviors**

<b>Health Behavior</b>	<b>Yes</b>	<b>No</b>
Safe sex	80%	20%
Relax daily	74%	26%
7+ hours of sleep	61%	39%
Fast food (<2/week)	57%	43%
Take vitamins daily	57%	43%
Worry about needs	40%	60%
Flu Shot	31%	69%

### **Emergency Preparedness**

The emergency preparedness of survey respondents was assessed with multiple questions. Basic preparedness was questioned by asking respondents if they had working smoke and carbon monoxide detectors and a basic emergency kit in their home. 58 percent of respondents indicated that their home was equipped with only smoke detectors, whereas 29 percent indicating having both smoke and carbon monoxide detectors. Half of respondents reported having an emergency supply kit in their home. Regarding disaster response, 51 percent of respondents reported using the television as their main source of information during a large-scale disaster. 83 percent reported that they would leave their home if they were instructed to do so by public authorities during an evacuation. If participants were unwilling to evacuate if instructed to do so, the top reasons they would not leave included concerns about family safety (22 percent), leaving property (20 percent), leaving pets (14 percent) and personal safety (13 percent). Finally, 54 percent of households had at least one family member who was trained in CPR, 85 percent of households consisted of members who were all trained in turning off household utilities and 64 percent of adults were aware of their workplaces' disaster plan.

<b>Working smoke and carbon monoxide detectors in the home</b>	<b>Percent respondents (sums to &lt;100%)</b>
Yes, smoke detectors only	58
Yes, carbon monoxide detectors only	1
Yes, both	29
No	8

<b>Basic emergency supply kit in the home</b>	<b>Percent respondents</b>
Yes	49
No	51

<b>Main source of information during a large-scale disaster</b>	<b>Percent respondents</b>
Television	51
Radio	21
Text message (emergency alert system)	11
Internet	9
Social networking site	4
Neighbors	3
Newspaper	1

<b>Would you leave your home if public authorities announced a mandatory evacuation?</b>	<b>Percent respondents</b>
Yes	83
No	3
Don't know/not sure	14

Main reason you would not evacuate	Percent respondents (sums to <100%)
Concern about family safety	22
Concern about leaving property	20
Concern about leaving pets	14
Concern about personal safety	13
Lack of trust in public officials	7
Concern about traffic jams	3
Lack of transportation	3

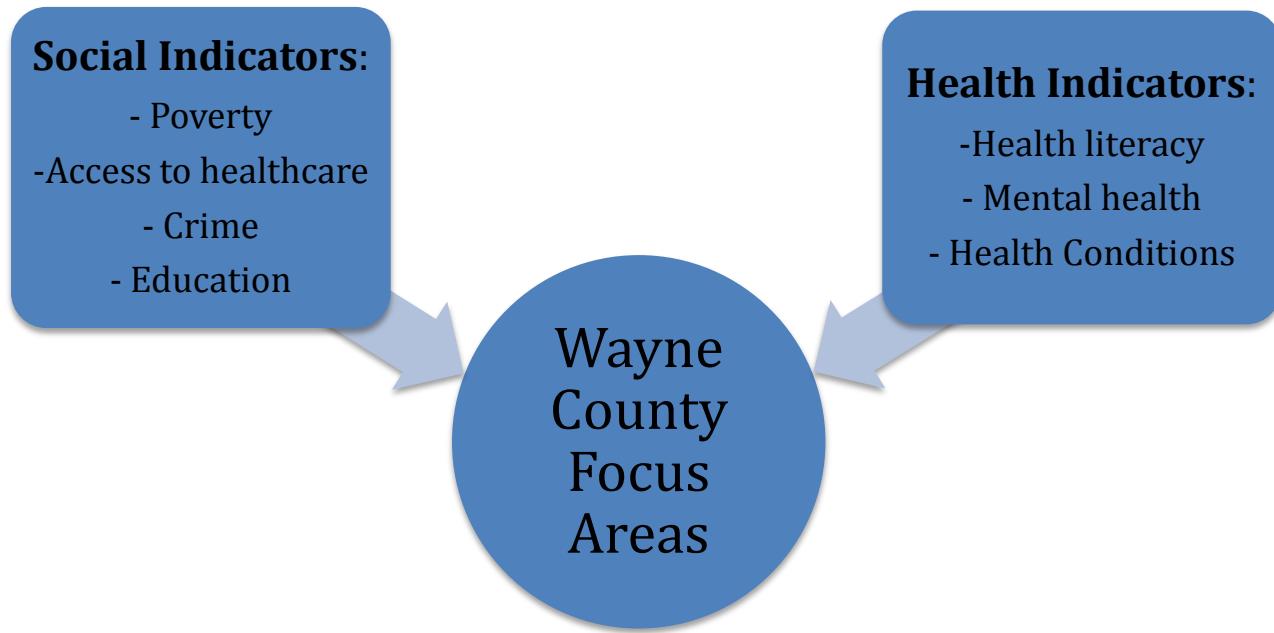
Member in your household trained in CPR	Percent respondents
Yes	54
No	46

All family members trained to turn off all household utilities	Percent respondents
Yes	85
No	15

Do you know the disaster plan for the following areas?	Percent respondents		
	Yes	No	N/A
Your workplace	64	18	18
Your child's school	22	21	57
Your child's daycare center	10	14	76

## **Summary and Next Steps**

As mentioned previously, this comprehensive community health needs assessment identified the following focus areas for 2013 – 2016. Moreover, without addressing both social and health together, significant health improvements will not be accomplished.



As seen in the table below, there was significant overlap between the current health findings and those from 2008. Teen pregnancy and infant mortality did not arise as focus areas in the current assessment and the rates for these indicators are improving. However, these areas continue to need attention as Wayne County's infant mortality and teen pregnancy rates are worse than those of North Carolina. In 2012, health literacy and mental health were cited as key areas needing attention.

<b>2008 Health Focus Areas</b>	<b>2012 Health Focus Areas</b>
Obesity	Obesity
Chronic Disease (Cancer, Heart Disease, Diabetes)	Chronic Disease (Cancer, Heart Disease, Diabetes)
STDs (Sexually Transmitted Diseases)	STDs (Sexually Transmitted Diseases)
Teen Pregnancy	Health Literacy
Infant Mortality	Mental Health

From January – May 2013 committees will be formed around the focus areas for the purpose of developing action plans. These action plans will be used to guide initiatives for the next four years and serve as a basis for reporting status annually toward addressing the areas identified in this community health assessment process.

## ***Appendix A – Community Survey***

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

## Wayne County Community Health Needs Assessment

We are conducting a survey of our county to learn about the health and quality of life in Wayne County. The results of the survey will be used to help address the major health and community issues in our county.

If you are at least 18 years old and live in Wayne County, please complete the following survey (*limit one per household*). All survey responses will remain anonymous.

To thank you for your participation, the Goldsboro Family YMCA is granting a free two-week membership to all who complete the survey (*limit one per household*). You will receive more information on how to claim this upon completion of the survey.

### Part 1: Quality of Life Statements

Please indicate your level of agreement with the following statements.

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

### Part 2: Community Improvement

Please look at the following list of community issues on the next page. In your opinion, which are the TOP FIVE issues that most affect the quality of life in Wayne County?

- Alcohol use
- Allergies
- Asbestos Exposure
- Asthma and other respiratory disorders
- Bio-terrorism
- Bulimia or Anorexia
- Cancer
- Child care (safe, affordable, available)
- Child abuse
- Chronic diseases
- Discrimination/racism
- Domestic violence
- Drug abuse
- Education (K-12) - Dropout rate
- Elder abuse
- Elder care (safe, affordable, available)
- Farming safety
- Firearms
- Fire protection
- Gambling
- Gang activity
- Health care availability
- Health care affordability
- Heart disease
- Homelessness
- Hopelessness
- Infant health
- Infectious diseases (hepatitis, meningitis, TB)
- Job availability
- Job security
- Lack of parenting skills
- Lack of/inadequate health insurance
- Land use/development
- Law enforcement
- Lead paint
- Loneliness
- Mental illness
- Mosquitoes
- Nursing home care (safe, affordable, available)
- Overweight adults
- Overweight children
- Pollution (air, water, land)
- Poverty/low income
- Prenatal health
- Radioactive materials (contamination)
- Rape/sexual assault
- Recreation opportunities
- Recycling availability
- Roads
- Secondhand smoke
- School violence
- Services for the disabled
- Theft
- Violent crime (murder, assault)

**Please indicate your level of agreement with the following statements as good solutions to many of the problems in the previous question.**

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Education about eating right</b>	<input type="radio"/>				
<b>Classes to stop smoking</b>	<input type="radio"/>				
<b>Reminders to exercise</b>	<input type="radio"/>				
<b>Dealing with stress</b>	<input type="radio"/>				
<b>Providing alternatives for teens</b>	<input type="radio"/>				
<b>Parenting education</b>	<input type="radio"/>				
<b>Health education</b>	<input type="radio"/>				

**Please indicate any other possible solutions you believe can address the problems in Wayne County.  
(Please indicate which problem(s) you are addressing)**

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**In your opinion, which ONE of the following services needs the most improvement in your neighborhood or community? If there is a service that you think needs improvement that is not on this list, please write it in.**

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

### Part 3: Health Information

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

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

**Where do you get most of your health-related information?**

- Friends and family
- Doctor/nurse
- Pharmacist
- Church
- Internet
- My child's school
- Hospital
- Health department
- Help lines
- Books/magazines
- Other: \_\_\_\_\_

**What health topic(s)/disease(s) would you like to learn more about?**

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**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

***ONLY ANSWER the next question IF you do have children between the ages of 9 and 19 for which you are the caretaker:***

**Which of the following health topics do you think your child/children need(s) more information about? Please check all that apply.**

- Dental hygiene
- Nutrition
- Eating disorders
- Asthma management
- Diabetes management
- Tobacco
- Sexually transmitted diseases (STDs)
- Sexual intercourse
- Alcohol
- Drug abuse
- Reckless driving/speeding
- Mental health issues
- Suicide prevention
- Other: \_\_\_\_\_

Part 4: Personal Health

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

- Excellent
- Very good
- Good
- Fair
- Poor

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

	Yes	No	Not Sure
<b>Asthma</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Depression or anxiety</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>High blood pressure</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>High cholesterol</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Diabetes (not during pregnancy)</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Osteoporosis</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Overweight/obesity</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Angina/heart disease</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Breast cancer</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Colon cancer</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Prostate cancer</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Skin cancer</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Uterine cancer</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>HIV</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Sickle cell anemia</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>COPD or emphysema</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Tuberculosis</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Chronic back pain</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Diabetes affects 1 in 10 Wayne County adults. Please indicate your status or awareness of the following items.

	Yes	No	Not Sure
Have you ever been tested for diabetes?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are you pre-diabetic (screening test)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you have knowledge of the symptoms of diabetes?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you have knowledge of the health consequences of diabetes?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are healthy foods available to you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you have knowledge of the impact exercise can have on diabetes?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***ANSWER the next table ONLY IF you have ever been told by a doctor, nurse or other health care professional that you have diabetes (not during pregnancy).***

Please indicate your status on the following items.

	Yes	No	Not Sure
Do you currently receive routine care for diabetes?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are you a part of a diabetes support group?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have you had success in healing wounds, which may be hindered by diabetes?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have you undergone any treatment for your eyes due to a diabetes induced condition?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are your diabetic needs met?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have you been to WADEC (Wayne Area Diabetes Education Center) on Williams Street?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Have you undergone any preventive screenings for the following conditions (in the last 3 years)?**

	Yes	No	Not Sure
<b>High Blood Pressure</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Breast cancer</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Colon cancer</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Prostate cancer</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Uterine cancer</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>HIV</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Diabetes - blood sugar</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Sickle cell anemia</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>COPD or emphysema</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Tuberculosis- skin test</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Dental exam</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Asthma</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Depression or anxiety</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Skin cancer</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate if you participate in any of the following.

	Yes	No	Not Sure
Get the one-time pneumonia vaccination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Take vitamins daily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wash your hands before eating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eat fast food less than 2 times per week	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Get 7+ hours of sleep each night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Practice safe sex (condoms, other barriers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use sunscreen outside	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Routinely wear a seat belt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Find time to relax daily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talk to friends daily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feel safe in your neighborhood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worry about basic necessities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spend money on gambling more than once a month	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attend religious services routinely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Volunteer in your community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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

- Yes
- 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
- 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
- No

If you said YES about exercising, how many times do you exercise or engage in physical activity during a normal week?

Please write in a number: \_\_\_\_\_

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

- Home
- Private gym
- YMCA
- Sidewalks/roads in your own neighborhood
- Stoney Creek Park
- Public recreation center
- Herman Park
- Cliffs of the Neuse State Park
- Waynesborough Park (trails)
- Seymour Johnson AFB facilities
- Other: \_\_\_\_\_

**If you said YES about exercising, please indicate your participation in any of the following activities as part of your exercise routine (at least 3 times per week).**

	Yes	No
Neighborhood walk	○	○
Neighborhood run	○	○
Weights	○	○
Sports team participation	○	○
Bicycling	○	○

**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.**

- My job is physical or hard labor.
- Exercise is not important to me.
- I don't have access to a facility that has the things I need, like a pool, golf course or a track.
- I don't have enough time to exercise.
- I would need child care and I don't have it.
- I don't know how to find exercise partners.
- I don't like to exercise.
- It costs too much to exercise.
- There is no safe place to exercise.
- Not enough bike trails
- I'm too tired to exercise.
- I'm physically disabled.
- I don't know.
- 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? 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 \_\_\_\_\_

**Please indicate how frequently you consume alcohol.**

- I do not consume alcohol
- Less than 1 - 2 drinks per week
- Consume 1 - 2 alcoholic drinks per week
- Consume 1 - 2 alcoholic drinks per day
- Consume 3 or more drinks in one sitting

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

- Yes
- No

**If you said YES about secondhand smoke, where do you think you are exposed to secondhand smoke most often?**

- Home
- Workplace
- Hospitals
- Restaurants
- School
- Other: \_\_\_\_\_
- I am not exposed to secondhand smoke.

**Please indicate your status on the following items.**

	Yes	No
<b>Do you smoke?</b>	<input type="radio"/>	<input type="radio"/>
<b>Do you chew tobacco?</b>	<input type="radio"/>	<input type="radio"/>

**If you said YES to either of the previous items, please indicate your status on the following items.**

	Yes	No
<b>Do you want to stop using tobacco products?</b>	<input type="radio"/>	<input type="radio"/>
<b>Have you tried to stop in the last year?</b>	<input type="radio"/>	<input type="radio"/>
<b>Have you tried medication to stop?</b>	<input type="radio"/>	<input type="radio"/>
<b>Would you attend smoking cessation classes?</b>	<input type="radio"/>	<input type="radio"/>

**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.

**Please indicate your status on the following items.**

	Yes	No	Not Sure
I use less than 3 prescriptions currently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use more than 3 prescriptions currently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confused about my prescription drugs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think I may abuse prescription drugs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Do you use illegal drugs?**

- Never
- Occasionally
- Routinely

**An influenza/flu vaccine can be a "flu shot" injected into your arm or spray like "FluMist" which is sprayed into your nose. During the past 12 months, have you had a seasonal flu vaccine?**

- Yes, flu shot
- Yes, flu spray
- Yes, both
- No

Part 5: Access to Care/Family Health

**Where do you go when you are sick? (Please select all that apply)**

- Health Department
- SJAFB
- Private physician office
- Private dentist office
- WATCH van
- WATCH clinic at YMCA
- Hospital Emergency Dept.
- Goshen Medical Clinic
- Urgent Care Center
- Provider outside Wayne County
- Other, please specify: \_\_\_\_\_

**Is your primary health care provider outside of Wayne County?**

- Yes
- No

**If you said YES above, please indicate the reasons why your primary health provider is located outside of Wayne County. (Please select all that apply)**

- Specialty not available in Wayne County
- History with provider
- Cannot get appointment in Wayne County
- Reputation of provider
- Other, please specify: \_\_\_\_\_

**If your provider is outside of Wayne County, in which county is your primary health care provider located?**

- Pitt County
- Wake County
- Other, please specify: \_\_\_\_\_

**When was your last visit to a doctor?**

- Less than 1 year ago
- 1 - 2 years ago
- 2 - 3 years ago
- 3 or more years ago

**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 or 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

**In your opinion, is your employer provided medical health insurance affordable?**

- Yes
- No
- N/A

**In the past 12 months, did you have a problem getting the health care you needed for you personally or for a family member from any type of health care provider, dentist, pharmacy or other facility?**

- Yes
- No

**If you had trouble getting the care you needed, what type of provider or facility did you or your family member have trouble getting health care from? Please choose all that apply and write in any that are not listed here.**

- Dentist
- General practitioner
- Eye care/optometrist/ophthalmologist
- Pharmacy/prescriptions
- Pediatrician
- OB/GYN
- Health department
- Hospital
- Urgent Care Center
- Medical Clinic
- Specialist: \_\_\_\_\_
- Specialist: \_\_\_\_\_

**If you had a problem, which of these problems prevented you or your family member from getting the necessary health care? Please choose all that apply and write in any that are not listed here.**

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

**If a friend or family member needed counseling for a mental health or a drug/alcohol abuse problem, who is the first person you would tell them to talk to?**

- Private counselor or therapist
- Support group (e.g., AA, Al-Anon)
- School counselor
- Doctor
- Minister/religious official
- Other: \_\_\_\_\_
- Don't Know

**Please indicate which of the following dental care facilities that you routinely visit. (Please select all that apply)**

- Health Department
- Private dentist
- Other, please specify: \_\_\_\_\_

**What is your dental health insurance status?**

- TRICARE (Military)
- Medicaid
- Other insurance, please specify: \_\_\_\_\_
- No insurance

**Is dental health insurance available by your employer?**

- Yes
- No

**If it is available, in your opinion, is your employer provided dental health insurance affordable?**

- Yes
- No

**Was there a teenage pregnancy in your home in 2011?**

- Yes
- No

**If there was a teenage pregnancy in your home in 2011, please indicate the status of the pregnant teenager in your home regarding the following items. Did she...**

	Yes	No
Receive sufficient education about prevention?	<input type="radio"/>	<input type="radio"/>
Receive prenatal care in the 1st trimester?	<input type="radio"/>	<input type="radio"/>
Take parenting classes?	<input type="radio"/>	<input type="radio"/>
Complete high school?	<input type="radio"/>	<input type="radio"/>

**If there was a teenage pregnancy, where did she receive your prenatal care in the 1st trimester?  
(Please choose all that apply)**

- Health Department
- Private obstetrician
- Other, please specify: \_\_\_\_\_

**Do you provide care for an elderly person?**

- Yes
- No

**If YES, please indicate your level of agreement with the following statements.**

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have sufficient access to physicians	<input type="radio"/>				
My adult day care needs are met	<input type="radio"/>				
There are sufficient resources for caregivers	<input type="radio"/>				
There are sufficient options for dementia	<input type="radio"/>				

**Please indicate the importance of the following items.**

	Not at all Important	Very Unimportant	Neither Important nor Unimportant	Very Important	Extremely Important
Individuals take more personal responsibility for their health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hospitals recruit more health providers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Government provide more exercise facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restaurants provide more healthy choices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schools provide more health education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Churches take active role in promoting health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employers take active role in promoting health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part 6: Emergency Preparedness

**Does your household have working smoke and carbon monoxide detectors?**

- Yes, smoke detectors only
- Yes, carbon monoxide detectors only
- Yes, both
- No
- Don't know/not sure

**Does your family have a basic emergency supply kit? (This kit includes water, non-perishable food, any necessary prescriptions, first aid supplies, flashlight and batteries, non-electric can opener, blanket, etc.)**

- Yes
- No

**If YES, how many days do you have supplies for?**

Write in the number of days \_\_\_\_\_

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

- Television
- Radio
- Internet
- Print media (ex: newspaper)
- Social networking site
- Neighbors
- Text message (emergency alert system)
- Other, please describe: \_\_\_\_\_

**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 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, please describe: \_\_\_\_\_

**Are you or anyone in your household current in CPR?**

- Yes
- No

**Do all responsible family members know when and how to turn off all utilities to the house?**

- Yes
- No

**Do you know what the disaster plan is for the following areas? your workplace? For your children's school and/or daycare center?**

	Yes	No	Not Sure
Your workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your child's school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your child's daycare center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**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 (please specify): \_\_\_\_\_

**What is your race? Please check 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
- No

**If YES, what language do you speak at home?** \_\_\_\_\_

**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

**How many people does this income support? (If you are paying child support but your child is not living with you, this still counts as someone living on your income.)**

\_\_\_\_\_ people

**What is your employment status? Please check 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

**If you chose ARMED FORCES, what is your current Military status?**

- Active
- Retired

**Do you have access to the Internet?**

- Yes
- No

**Please enter your zip code:**

Your 5 digit zip code (home) \_\_\_\_\_

Your 5 digit zip code (work) \_\_\_\_\_

**What are the best ways to communicate upcoming Wayne County events related to health to you?  
(Please select all that apply)**

- Newspaper
- Radio
- Church bulletin
- E-mail
- Twitter
- Facebook
- TV cable channel 10

**Thank you for your participation!**

## ***Appendix B – Focus Group Questions***

1. What is the best thing about living in this community?
2. What do people in this community do to stay healthy?
3. How do people get information about health?
4. What are the serious health problems in your community? What are the causes of these problems?
5. What keeps people in your community from being healthy?
6. What could be done to solve these problems?
7. Is there anyone you know not receiving enough health care? If so, why?

## **Appendix C – Community Context**

### **Access to Healthcare**

Hospital emergency visits are an extremely expensive alternative to a visit compared to a doctor's office, or even an urgent care center, due to the expensive equipment and services required to support true emergencies (such as MRI, CT, pharmacy and 24-hour coverage). The incentive for some patients to use Emergency Departments (without an emergency) is the obligation of the hospital, under federal law, to triage a patient, without regard to payment status. At Wayne Memorial, about 25 percent of all charges in the Emergency department are incurred without any payment source. The WATCH mobile van and office at the Goldsboro YMCA provide a low-cost (no charge) venue for some uninsured patients to visit, which keeps even higher numbers of ED visits from occurring, and provides continuity of care to patients. Ideally, more doctors' offices would have late hours, and provide a lower-cost alternative to ED visits, similar to the extended evening and weekend hours provided by Goldsboro Pediatrics at their offices around the county.

The WATCH Healthcare Program provides a medical home to the uninsured population of Wayne County. The WATCH mobile unit travels to predetermined locations throughout the county on a monthly basis to provide continuity of care. A second clinic, which is stationary, is located at the Goldsboro Family YMCA. WATCH is open one Saturday each month because 50 percent of their patient population is employed and this offers these patients an alternative to missing work hours for healthcare provision. WATCH provides free acute and primary healthcare to the uninsured. Free labs are provided by Quest Diagnostics and they value +\$445,000 each year. Qualified patients with chronic diseases are enrolled in the prescription assistance program which provides in excess of \$2 million in free medications annually. Health education and an obesity program are offered to patients as indicated. The WATCH Healthcare Program keeps even higher numbers of ED visits from occurring, and provides continuity of care to patients. Ideally, more doctors' offices would have late hours, and provide a lower-cost alternative to ED visits, similar to the extended evening and weekend hours provided by Goldsboro Pediatrics at their offices around the county. WATCH employs a professional clinical team at each site which includes a family nurse practitioner, medical assistant and medical office assistant. WATCH also utilizes volunteer physicians from the community for specialty clinics. Referrals are made for patients with advanced disease states (i.e. cancer). In 2012, Wayne Memorial's Emergency Department provided more than 60,000 visits, and WATCH provided 10,000 visits. While it is difficult to measure the impact of WATCH on disease rates, the downward direction of smoking and heart disease in Wayne County (through increased access to providers and health education) may be partly attributable to efforts in this arena since 2000.

Another location where patients under 18 (not included in the survey) receive care is through a partnership between the State of North Carolina, the Wayne County school

system, Goldsboro Pediatrics (which provides access to their electronic medical records) and Wayne Memorial Hospital. Wayne County Public Schools employs school nurses through Wayne Memorial Hospital, which provides employee benefits, including continuing education and supervision. There are a total of 19 full time school nurses. Two of these school nurses serve Edgewood Developmental School full time and the others cover several schools. Ten school nurses are funded by the State of North Carolina, five of which are through the School Nurse Funding Initiative. Five are Child and Family Support Team (CFST) Nurses. The CFST Nurses are teamed with Social Workers to identify students at risk of academic failure and out of home placement. Each team serves one school. The remaining schools have a school nurse available to provide services to students up to three days per week. All school nurses must become nationally certified within three years of employment. The school nurses will assess any student for any reason free of charge and without an appointment. The program's main purpose is to ensure that students with health problems are able to attend school and that staff members are able to safely manage their care. In addition to student assessment, school nurses provide a variety of trainings for employees including medication, blood borne pathogen, CPR/First Aid and diabetes trainings. Asthma is the most frequent health problem of students; however, the number of students with diabetes and other chronic health conditions requiring invasive procedures (ex. EpiPens, tube feedings, catheterizations, injections) increases each school year.

WISH is a more intensive school-based health clinic started in 1997 to address five specific health problems; asthma, mental health, lack of well care/ dental care, teen pregnancy and attention deficit disorders. WISH, with parental permission, provides easy access for children to a medical provider who is a physician extender (can prescribe medications, etc). WISH centers are based in four middle schools: Goldsboro Intermediate, Mt. Olive Middle, Brogden Middle, Dillard Middle, and two high schools: Goldsboro High School and Southern Wayne High School. The rate of emergency room visits and the number of school suspensions have declined in the schools housing WISH centers. Each center has a part time mid-level provider (PA or FNP) and a full time RN. The Health Department contributes registered dieticians and health educators. Mental health services are provided as needed. The goal of the WISH Health Centers is to help students succeed in school by promoting healthy lifestyles and providing comprehensive health care services.

Despite the statistical shortage of physicians in Wayne County solid, innovative programs like WATCH, WISH and school nursing have provided access to many citizens who otherwise may have fallen through the cracks. There are appointments available for adults who need a primary care physician, and for children who need to be seen by a doctor. In addition, an endocrinologist (a specialist in diabetes treatment) is accepting new patients. The hospital has also opened an outpatient wound care center, staffed by a full-time doctor, to help with healing of diabetic sores, preventing amputations. Routine care is the key to healing diabetic wounds.

## ***Crime***

### **City, police, community target crime**

By John Joyce

Published in News Argus on December 9, 2012 1:50 AM (direct excerpts)

The Goldsboro Police Department and the city of Goldsboro are uniting with the community in a program they hope will significantly reduce violent crime in and around the city.

Police hope those who attended an organizational meeting Thursday will choose to become part of Goldsboro Partners Against Crime -- an initiative designed to engage the citizenry in not only catching criminals, but encouraging them to change their lives.

GPAC will work with police, members of the judicial system and the city administration to target violent offenders in the city and engage them in efforts to deter them from continuing in a life of crime.

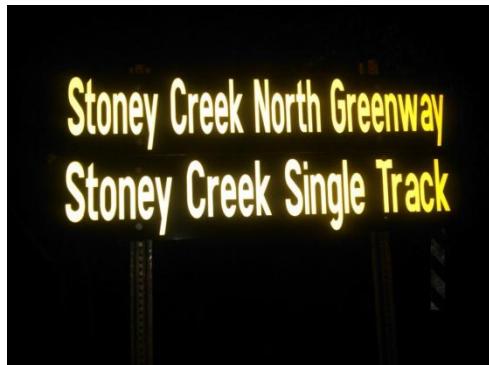
Their methods will include individually targeted investigations, pressure from within their own neighborhoods and stiffer prison sentences -- all moves that law enforcement officers hope will compel offenders to either cut out their illicit activities, to take them elsewhere or to suffer the consequences.

The number of murders in the city this year, 12, exceeds those in any year so far this millennium. Of those 12, only three remain unsolved.

Assaults and armed robberies, sexual assaults and breaking and entering reports have escalated as well.

## ***Natural Recreation***

Herman Park, the city's oldest park (but without any specific exercise trails or equipment) was most often cited as a place respondents exercised (6%), followed by Stoney Creek Park (5%), Cliffs of the Neuse State Park (3%), and Waynesborough Park Trails (1%). Stoney Creek Park was developed over the last several years, as a result of a joint venture between WATCH and the City of Goldsboro with funds from the North Carolina Trails Program. The 32-acre park includes improvements to Stoney Creek itself, a disk golf course which is attracting state-wide attention, and a dogpark to encourage outside play. A trail along Stoney Creek is in progress to encourage more walking, running, and biking. The city and volunteers have built a three-mile single-track bicycle trail across Ash Street from Stoney Creek Park, along the greenway, and signage has just been added to increase its visibility; it's open. More trails are planned in the woods owned by the City in that area, adjacent to the greenway.



In May, 2012, the City of Goldsboro reclassified all city-owned sanitary sewer easements (to protect in case of hurricane/floods) as greenways. The City and Wayne County governments have applied for funds from the North Carolina Trails Program, to complete a paved trail along Stoney Creek through the heart of Goldsboro, eventually linking the Neuse River with Wayne Community College. In addition, the State has included Wayne County in its plan for the North Carolina Mountains-to-Sea Trail, which will connect the western border of North Carolina at Clingman's Dome to Jockey's Ridge on the Outer Banks. Both a paddling trail (which exists in the Neuse River) and pedestrian and biking trails are being considered along the Neuse River which would connect the Cliffs of the Neuse State Park, 892 acres, featuring a unique geological cliff in an otherwise fairly flat part of eastern NC, with Goldsboro, Smithfield and Kinston.

## ***Tobacco Use***

Survey respondents said they do not smoke (88 percent) or chew tobacco (99 percent) which is likely not representative of Wayne County's greater population. Smoking by Wayne County residents has, according to the BRFSS in 2011, declined from 28 percent in 2007 to about 22 percent. It is encouraging that more people in Wayne County have quit smoking (28 percent) than are currently smoking (22 percent) and that half never started.

Smoking trends in Wayne County are closer to the average for North Carolina than ever before, which is surprising, given Wayne County's historical association with growing tobacco. In 2010, Wayne County was still the fourth largest producer of tobacco with \$31 million in receipts (after Sampson, Johnston and Wilson), but was also the 8<sup>th</sup> largest producer of vegetables and fruits, with \$16 million in receipts. In the future, it is possible that vegetables (including sweet potatoes and corn) will overtake tobacco and even more of these locally grown vegetables will become available to local consumers. This may inspire more farm to table opportunities.