# 2015-2016 COMMUNITY HEALTH ASSESSMENT GUILFORD COUNTY

# PIEDMONT HEALTH COUNTS



Working Together for a Healthy and Happy Guilford County













United Way of Greater Greensboro



United Way of Greater High Point



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The **Guilford Assessment Team** includes representatives from the following agencies. These representatives formed the core team which, through financial support and in-kind contributions of time and expertise, completed the County Health Assessment Survey, developed the Piedmont Health Counts website, analyzed available data and produced this assessment (See Appendix A):

- Alcohol & Drug Services of Guilford, Inc. (ADS)
- Cone Health
- Cone Health Foundation
- Foundation for a Healthy High Point
- Guilford Adult Health
- High Point Regional Health
- Public Health Division of the Guilford County Department of Health and Human Services
- United Way of Greater Greensboro
- United Way of Greater High Point
- The University of North Carolina at Greensboro, Department of Public Health Education

Leaders from the following agencies served as members of the **Guilford Assessment Steering Committee**. Their valuable input and feedback guided the work of the Guilford Assessment Team.

- Advanced Home Care
- Alcohol & Drug Services of Guilford, Inc.
- Center for New North Carolinians at the University of North Carolina at Greensboro
- City of Greensboro
- City of High Point
- Cone Health
- Cone Health Foundation
- Cone Health Medical Group
- Family Service of the Piedmont
- Foundation for a Healthy High Point
- Greensboro Chamber of Commerce
- Guilford Adult Health
- Guilford County Department of Health and Human Services
- Guilford County Schools

- Guilford Nonprofit Consortium
- High Point Chamber of Commerce
- High Point Food Alliance
- High Point Regional Health
- High Point University
- Interactive Resource Center
- Mt. Zion Baptist Church (Greensboro)
- NC A&T State University
- Ready for School, Ready for Life
- Senior Resources of Guilford
- UNC Regional Physicians
- United Way of Greater Greensboro
- United Way of Greater High Point
- The University of North Carolina at Greensboro

## **Executive Summary**

#### Background

Every three years Guilford County health, social, educational and other community organizations collaborate to conduct an assessment of the health of county residents. This effort collects and assesses data on county health needs and strengths. These data inform the identification of priority health issues and subsequent action plan development to address these priorities.

#### **Data Collection**

Assessing community health involved collection and analysis of a wide range of health and health-related measures, including data on morbidity and mortality, health behaviors, clinical care, social and economic factors and environmental factors. In addition to the assessment of secondary quantitative health data, a community health survey was conducted to collect data on community health status, health behaviors, access to health care and neighborhood needs.

#### Community Engagement

To gauge public opinion regarding the priority health issues facing Guilford County, public assessment meetings took place in Greensboro and High Point during April and May. Facilitators at these meetings shared recent county data based on the indicators in the population health model. Attendees shared their views about health issues and health needs in their communities. Data were collected from meeting participants on the priority health issues facing the county. In addition to community meetings, community input was obtained through an online webinar in which community data were presented and webinar participants identified priority health issues through an online survey.

#### Community Ranking of Health Issues

The Assessment Team representing assessment partners convened to prioritize data using the Hanlon prioritization method, which objectively takes into consideration explicitly defined criteria including the magnitude of the problem, the severity or seriousness of the problem and effectiveness of potential interventions. Based on the priority scores calculated, ranks are assigned to health problems. The Assessment Team reviewed the priority health issues identified by the survey participants and those attending the community meetings and webinar and then assigned Hanlon priority scores.

The priority health issues identified were:

- #1 <u>Healthy Eating/Active Living</u>: Chronic diseases, especially cancer and heart disease, are the leading causes of mortality and drivers of health care costs in Guilford County. About two-thirds of all deaths in Guilford County are due to chronic diseases. Modifiable risk factors for chronic disease include obesity, physical inactivity, diet and nutrition, and tobacco use. Promoting healthy eating and active living can improve rates of morbidity and mortality.
- #2 <u>Social Determinants of Health:</u> Social conditions such as income, employment and crime have a significant impact on the health of individuals, families and communities. Assessment data showed very strong relationships between educational attainment and income with life expectancy, chronic disease mortality and other health conditions. Differences in the social determinants of health result in large racial and geographic disparities in health outcomes.
- #3 <u>Behavioral Health</u>: About a quarter of community health survey participants reported that they have issues with depression and anxiety, with many reporting a significant number of mental health days. Mental health providers are not as plentiful in Guilford as in some peer counties.
- #4 <u>Maternal and Child Health:</u> Poor birth outcomes are a significant problem for Guilford County, with rates of infant mortality and low birth weight considerably higher than national benchmarks and objectives. African-Americans experience preterm birth, low and very low birth weight and infant mortality at substantially higher rates than Whites. Low birth weight and preterm births as well as teen pregnancies occur at higher rates in areas of the county characterized by higher rates of poverty and unemployment, and low educational attainment.

Access to Care is an issue that is interwoven throughout these priorities and will be addressed in the action plans.

## **Background & Introduction**

#### Why Do We Do This Assessment?

Many individuals and organizations in Guilford County want to improve the quality of life in our community. To do so, we must objectively consider our needs, assets, strengths, resources and challenges, and we must do this together. The Guilford County Community Health Assessment analyzes existing data on health outcomes and conditions, and the factors that drive these statistics: our behaviors and decisions, access to high quality medical care, social and economic issues, and the environments in which we live, work, worship, play and grow.

#### The findings in this document lead us to action.

Action plans to improve the following priorities will be posted on our website, <u>www.piedmonthealthcounts.org</u> in 2017, and we will work together to put these plans into practice:

- Healthy Eating/Active Living,
- Social Determinants of Health,
- Behavioral Health and
- Maternal and Child Health.

## The Importance of Community Health Assessment

#### Community health assessment:

- Provides valuable information on the health needs and assets within Guilford County.
- Identifies priority health issues.
- Informs the development of action plans that address community health concerns.

The Public Health Division of the Guilford County Department of Health and Human Services and local hospitals (Cone Health and High Point Regional Health) are accountable to the NC Local Health Department Accreditation Board and the Internal Revenue Service, respectively, for successful completion of the Community Health Assessment/Community Health Needs Assessment (CHA/CHNA) and strategic plans to address the priority areas identified herein. The next assessment will be completed in 2018-2019.

#### A Collaborative Effort

The Guilford Assessment Team (GAT) and Steering Committee includes representation from agencies that include education and academia, local government, business, health care, public health, philanthropy and human services (see *Acknowledgements* section for a detailed listing). Such wide representation assures that Guilford County residents of all backgrounds and interests are thoughtfully considered and included in this assessment. The GAT formed a core nucleus that provided the planning, data collection and analysis for the assessment and produced this document. The Steering Committee met with the GAT at key points throughout the process to provide feedback, perspective and suggestions for important changes.

#### What We Have Accomplished So Far

The GAT completed 408 door-to-door surveys, collected data from countless publications, held two community meetings, one webinar, compiled community input on priorities and created this document. In order to keep local health data current and monitor progress on priorities until the next assessment, we are launching the Piedmont Health Counts website. For more information and updates on our progress, go to: <a href="https://www.piedmonthealthcounts.org">www.piedmonthealthcounts.org</a> (See Appendix B).

## **Description of Guilford County**

*Geography:* According to the 2010 census, Guilford County was the third most populous county in North Carolina. Located in the north central area of North Carolina, often called the Piedmont Triad, Guilford County is primarily made up of three cities - Greensboro, Winston Salem and High Point, two of which are located in Guilford County (Greensboro and High Point). This area has historically served as one of the major manufacturing and transportation hubs of the Southeast. Greensboro is centrally located in Guilford County, Winston Salem is in Forsyth County and High Point is spread across Guilford, Forsyth, Davidson and Randolph counties. The Piedmont Triad has now grown to include three Metropolitan Statistical Areas (MSAs) -



Greensboro-High Point, Winston-Salem and Burlington - and two Micropolitan Areas, Thomasville-Lexington and Mount Airy. The 2015-2016 CHA/CHNA focused on the health of those who live in Guilford County and the service areas of Cone Health and High Point Regional Health.

History: Guilford County is named after Francis North, the first Earl of Guilford and British Prime Minister from 1770 to 1782. Guilford County has been the site of significant historical events, home to industrial development, most notably textiles and furniture, in addition to having a rich history in academia. The Piedmont area and Guilford County specifically are noted to be a stop on the historic Underground Railroad, with ties to Quakers who settled in the area. Greensboro is also home to a notable event in the Civil Rights Era, the Woolworth lunch sit-in, when students protested segregation through sit-ins at the Woolworth store in downtown Greensboro. The former Woolworth store location in Greensboro is now the site of the International Civil Rights Center and Museum.

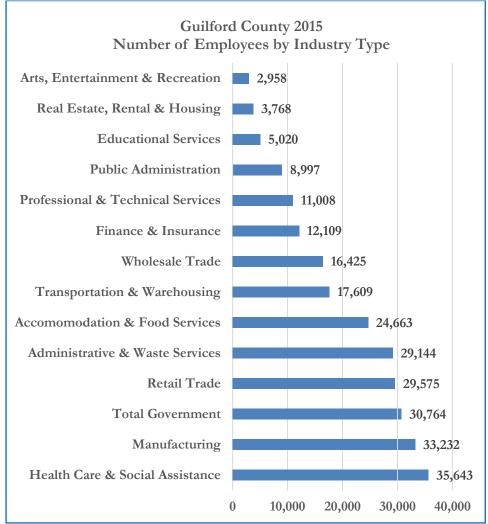
**Economy:** Centered on textile manufacturing, the establishment of Greensboro's economy began in the early 1800s when Henry Humphrey built the first steam powered cotton mill in Greensboro. This innovation laid the groundwork for Moses and Caesar Cone, who built one of the first Southern textile finishing plants: Southern Finishing & Warehouse Company in 1893 as well as the denim manufacturing plant, Proximity Cotton Mills, in 1895. This legacy continues with manufacturing among the industry leaders for employment in Guilford County and the presence of the VF Corporation, the largest denim jeans producer in the nation. The chart on the following page highlights other major industries in Guilford County.

Education: Academia also has a long history in Guilford County. The Welsh Quakers settled the western part of Guilford County, establishing a boarding school in 1837, which grew into Guilford College, the first Southern coeducational academic institution. The following year, the Methodist Church founded Greensboro College. Numerous other colleges and universities were established here including the University of North Carolina at Greensboro, which derived from the state's first and only institution of higher learning for women, and North Carolina Agricultural & Technical University which is the largest publicly funded historically black college/university in the state. The diverse education opportunities offered by the county both for primary and secondary learning are the inheritance of the work done to support and grow education.

#### Guilford County Demographic Characteristics [1]

- The estimated 2014 population for Guilford County was 512,119, as compared to 488,406 in 2010.
- Guilford County's percentage growth from 2010 to 2014 is an estimated 4.86%, with a higher percentage growth in the more rural areas of the county.
- Of those over age 5 living in Guilford County in 2014, an estimated 13% spoke a language other than English at home.
- Based on the Census Bureau population estimates, 7.6% of Guilford County population identified as Hispanic.
- For more demographic information, please see Appendix C.

Source: American Community Survey.



Source: AccessNC, North Carolina Economic Data and Site Information [2-2].

## Data Collection and Priority Setting Process

#### **Data Collection**

Assessing health needs involved collection and assessment of a wide range of data on measures of health and health-related factors including morbidity and mortality, health behaviors, clinical care, social and economic factors and environmental factors. In addition to secondary data sources, primary data were collected through a randomized in-person household survey of Guilford County residents. Community input was obtained through community meetings and an online webinar. Data were collected and assessed at the county-level and sub-county geographic level of census tract.

Data collection was guided by a research based model of population health developed by the University of Wisconsin Population Health Institute that considers health outcomes, such as length of life and quality of life, to be the result of health factors that include health behaviors, access to and experience with clinical care, social and economic factors and the physical environment in which people live, work and play [3-1]. Local, state and federal policies and programs can also influence health outcomes through impact on health factors. Data on indicators in each of these health factor areas were collected and assessed.

#### Secondary Data

Mortality, Birth and Reportable Disease Data: Secondary data for mortality, birth outcomes, communicable disease and health risk factors were obtained from the County Health Data Book published by the NC State Center for Health Statistics. Data reported for leading causes of death and birth outcomes are compiled from birth certificates and death certificates collected by individual counties and reported to the State Center for Health Statistics (SCHS). Legally reportable communicable disease data are collected from county health departments, hospitals and testing labs through the NC Electronic Disease Surveillance System (NCEDSS) and compiled for the County Health Databook by the SCHS [3-2].

Data limitations: mortality, birth and reportable disease data in North Carolina are generally complete and reliable due to statutory reporting requirements and uniform collection and reporting methods.

American Community Survey: Data on social and economic determinants of health were drawn from the American Community Survey, a nationwide, continuous telephone

Mortality (length of life) 50% Morbidity (quality of life) 50% Tobacco use Diet & exercise Health behaviors (30%) Alcohol use Sexual activity Access to care Clinical care Quality of care Health Factors Education Employment economic factors Income (40%) Family & social support Community safety Environmental quality Physical environment (10%) Built environment

County Health Rankings model ©2012 UWPHI

survey administered by the US Bureau of the Census. Data limitations: Because the American Community Survey employs population sampling methods, it is subject to sampling error and should therefore be considered population estimates [3-3].

Behavioral Risk Factor Surveillance System Survey (BRFSS). In previous assessments, data on health risk factors were drawn from the Behavioral Risk Factor Surveillance System (BRFSS), a survey sponsored by the Centers for Disease Control and Prevention (CDC). Due to declining numbers of landline telephones in households, BRFSS estimates are no longer available at the county level. For this assessment, BRFSS data were utilized for statewide comparisons to survey data [3-4].

#### Primary Data Collection - 2016 Community Health Survey

Guilford County assessment partners collaborated with staff of the NC Institute of Public Health and community volunteers to conduct a randomized in-person survey with Guilford County residents. The North Carolina Institute for Public Health (NCIPH) assisted with the development of a two-stage cluster sampling design based on the Centers for Disease Control and Prevention's Community Assessment for Public Health Emergency Response (CASPER) sampling methodology [3-5]. Sampling was carried out for the Greensboro and High Point regions with each serving as a separate sampling frame. The two sampling frames were combined for the Guilford County analysis. In each region, 30 census blocks were randomly selected from all known census blocks in U.S. Census Bureau data to serve as clusters. The probability of a census block being chosen to serve as a cluster was proportional to the number of housing units in the census block. In the second stage of CASPER sampling, seven housing units were randomly selected for interviews in each cluster. A total of 408 households were surveyed. The community health survey was conducted during March and April 2016, by GCDHHS, Public Health Division staff, student volunteers from UNC Greensboro, High Point University and other community volunteers. The Community Assessment Survey included questions on social and demographic characteristics, access to care, health status, health behaviors such as exercise, nutrition and tobacco use, height and weight and social determinants of health such as access to grocery stores (See Appendix D - Guilford County Community Health Assessment Survey 2016 for detailed report). To supplement this information and gain more insight into the needs and challenges immigrant and refugee communities face, additional information was collected from leaders and providers from these communities (See Appendix E - Findings from Outreach with Immigrant and Refugee Communities).

#### **Priority Setting Process Data Collection**

#### **Community Meetings and Webinar**

In order to gauge public opinion regarding the priority health issues facing Guilford County, two public meetings were scheduled during April and May, 2016. Facilitators at these meetings shared recent county data based on the indicators in the population health model. Attendees shared their views about health issues and health needs in their communities. Data on priority health issues facing the county were collected from meeting participants. In addition to community meetings, community input was obtained through an online webinar in which the same data were presented and webinar participants identified priority health issues through an online survey. Meetings and webinar were publicized through a press release to all print and electronic media. Assessment partners assisted in publicizing these meetings. Assessment data were also presented to the CHA Steering Committee and staff of the Guilford County Department of Health and Human Services.

#### **Hanlon Prioritization Meeting**

In addition to community assessment of health-related data, an Assessment Team representing the assessment partners was assembled on June 3, 2016 to prioritize data using the Hanlon prioritization method. Developed by J.J. Hanlon, the *Hanlon Method for Prioritizing Health Problems* is a well-respected technique which objectively takes into consideration explicitly defined criteria and feasibility factors. The Hanlon Method is advantageous when the desired outcome is an objective list of health priorities based on baseline data and numerical values. The Hanlon approach compares health indicators against specified criteria. Participants are asked to rank, on a scale of from 0 through 10, each health problem or issue on the criteria of 1) size of problem, 2) magnitude of health problem and 3) effectiveness of potential interventions. Based on the priority scores calculated, ranks are assigned to health problems. The Assessment Team reviewed the priority health issues identified by the survey participants and those attending the community meetings and webinar and then assigned Hanlon priority scores [3-6].

The priority health issues identified were:

#1: Healthy Eating/Active Living

#2: Social Determinants of Health

#3: Behavioral Health

#4: Maternal and Child Health

## Guilford County Priority Health Concerns

The goal of each community assessment is to determine which health issues to prioritize for improvement. Using both scientific methods and community input, the 2016 Guilford County assessment has identified four priorities: Healthy Eating and Active Living; Social Determinants of Health; Behavioral Health; and Maternal and Child Health. We examine each priority health concern in detail in this chapter, asking "Why Is This Issue Important?", "How Does Guilford County Trend Over Time?" and "How Does Guilford County Compare to Others?"

#### Healthy Eating and Active Living

Why Is This Issue Important? Chronic diseases, such as heart disease, diabetes and high blood pressure can often be prevented by a healthy lifestyle, which includes diets rich in fruits and vegetables, lean proteins and whole grains

Figure 1: Percentage of Residents Reporting Select Chronic Health Conditions, 2016						
	Guilford County	High Point	Greensboro			
High Blood Pressure	38.6	41.0	36.4			
High Cholesterol	31.6	35.7	27.9			
Diabetes	17.7	22.1	13.5			
Osteoporosis	7.6	6.9	8.2			
Overweight/Obesity	36.2	34.1	38.2			
Angina/Heart Disease	10.5	10.8	10.2			
Cancer	10.4	8.5	12.1			
Asthma	15.1	14.1	16.0			
Depression or Anxiety	23.97	26.3	21.7			
Source: 2016 Guilford County Con	munity Health Survey (GCC)					

and at least 150 minutes of moderate physical activity each week. Lack of physical activity and an unhealthy diet contribute to the three leading causes of death in Guilford County: cancer, heart disease and stroke. Two-thirds of all deaths in Guilford County are due to all chronic diseases. Figure 1 shows the prevalence of chronic health concerns; these are complex issues that may be prevented or made less

severe with healthy nutrition and physical activity. Healthy Eating and Active Living has both an individual and societal component, involving on the one hand, personal motivation and support for developing healthy habits, and on the other hand, improving environmental conditions so that more residents have convenient access to full-service groceries and produce outlets, parks, sidewalks and other opportunities for exercise and recreation. Individual, family and neighborhood resources also play a role.

#### How Does Guilford County Trend Over Time?

There are serious data limitations to answering that question with complete confidence. Much of our data about health behaviors and lifestyle are derived from the NC Behavioral Risk Factor

Figure 2: Percentage of Guilford County Residents				
Who Report that They	2011	2012	2013	2016
Eat five or more Servings of Fruit or Vegetables Daily	15.0	*	13.7	12.4
Are Overweight or Obese	62.6	63.3	67.9	60.3
Engaged in Physical Activity in the Previous Month	76.6	76.9	71.3	81.9
Ever Had Diabetes	8.6	10.9	10.3	17.7
Sources: 2016 GCCHS, 2011-2013 NC BRFSS.* indicates this question was not as	sked in 2012 N	IC BRFSS. /-	4-17	

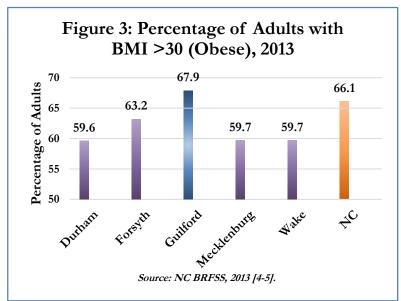
Surveillance System (BRFSS), which, because of sample size limitations, has not reported survey results at the county-level since 2013. Figure 2 represents our best attempt to gather trend data, despite missing years and some differences in the methodologies in the surveys. Even while evaluating Figure 2 with those caveats, some consistent trends are evident: residents of Guilford County find it difficult to meet nutritional recommendations for fruit and vegetable consumption; most engage in some form of physical activity; and a majority of adults are overweight or obese. More research is needed to determine the true diabetes rate.

Data from a Food Research Action Center (FRAC) survey shows a worrying increase in "food hardship", also called "food insecurity" in Guilford County. [4-2]. In 2014, 27.9% of survey respondents in Greensboro, High Point and the surrounding communities reported not having enough money to buy food that their families needed

at least once in the past year. This dismal ratio placed Greensboro-High Point in the #1 ranking for food hardship among all metropolitan areas in the United States. This rate is a considerable increase from the rate of 23% in the 2011-2012 survey [4-3]. In 2016, researchers at High Point University's Survey Research Center conducted a study of food insecurity in High Point that largely validated the FRAC study findings, and also pointed out the disparities experienced within the city. Almost half (48%) of the residents in High Point's 27260 zip code indicated experiences of food insecurity (south central High Point), while only 14% of residents in the 27265 (north High Point) zip code did so. Guilford County also has 24 "food deserts," i.e., census tracts with a low density of grocery stores and high rates of poverty, where both income and geography are barriers to accessing healthy food [4-4]. The most commonly cited reason for not maintaining a healthy diet in the 2016 Guilford Community Health Survey

(GCCHS) was the cost of healthy food (24.7%). Food insecurity is a risk factor for obesity; low income residents are more likely to live in a food desert, and to spend limited food dollars on cheaper, lower-nutrient meals.

Data on trends in physical activity are more limited. Health care providers report anecdotally that few of their patients achieve the recommended 150 minutes per week of moderate physical activity. In the 2016 GCCHS, respondents cited time, fatigue, lack of motivation, disability and lack of sidewalks in their neighborhoods as the leading reasons why they are less physically active than is recommended. There are no current county-level data on children's nutrition, physical activity, rate of diabetes or obesity.

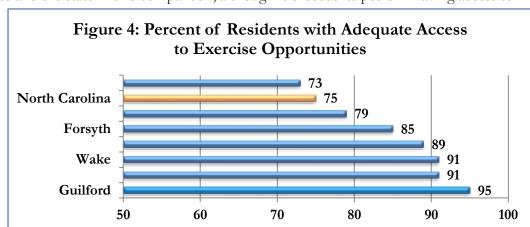


How Does Guilford County Compare to Others? Figure 3 compares the adult obesity rates for Guilford and a neighboring county (Forsyth) and its demographically-similar peer counties (Forsyth, Durham, Wake and Mecklenburg) according to the 2013 BRFSS data.

Guilford exceeds these counties and the state in this comparison, although it exceeds its peers in having access to

opportunities for physical activity, as seen in Figure 4. Adequate access to opportunities for physical activity is defined as residing in a census block within a half mile of a park, or residing within one mile (urban) or three miles (rural) of a recreation center.

Moving Forward: As the Guilford Assessment Team and others prepare action plans for Healthy Eating and Active Living, our data



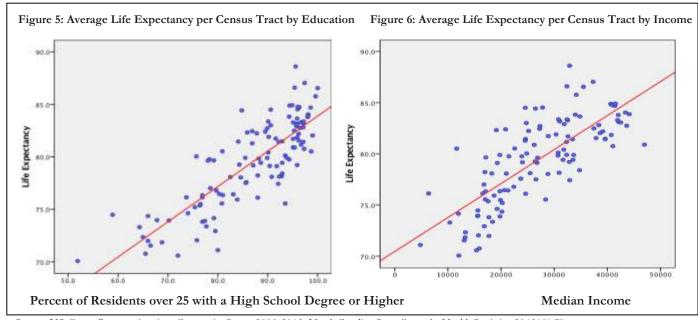
Source: University of Wisconsin Population Health Institute, 4-6.

support a focus on the alleviation of food insecurity and its consequences, and a careful examination of the areas of Guilford County that experience inequality of access to healthy food and convenient exercise opportunities. Even though the access to exercise opportunities appears high, there may be inequities related to available time, neighborhood sidewalks and/or safety and other factors that are not shown in these statistics.

#### Social Determinants of Health

Why Is This Issue Important? The University of Wisconsin's Population Health Institute has developed a model of health that considers the many contributors to quality of life and life expectancy. The model reflects a large body of research that finds that social and economic factors contribute at least as much or even more to quality of life and life expectancy at the population level than do factors such as health behaviors and health care availability and quality. In this view of health, an individual's income, education and community characteristics contribute relatively more to life expectancy and quality of life than do an individual's own tobacco use, diet and exercise, and sexual activity. The findings below, shown in Figures 5 and 6, support this model and show the strong effects of education and income, respectively, on life expectancy for each census tract in Guilford County.

There is a clear linear relationship – as education and income rise, so does life expectancy. For example, Guilford County residents who live in a census tract with a median income of \$12,000 have a life expectancy that is on average nine years shorter than residents in a census tract with a median income of \$42,000. Similarly, Guilford County residents who live in a census tract where fewer adults have a high school diploma, say 65%, have an average life expectancy almost seven years shorter than residents in a census tract where 85% of adults have a high school diploma.



Sources: US Census Bureau, American Community Survey 2009-2013; North Carolina State Center for Health Statistics, 2013\*[4-7].

Education and income drive health outcomes, but are not the only social concerns that affect health. Other "upstream" health issues are housing (can exacerbate asthma, make people vulnerable to falls, violence and environmental pathogens), violence (emotional trauma leads to a host of health issues and shortens lives), and social support (strong social ties promote health behavior change and resilience).

How Does Guilford County Trend Over Time? A Brookings Institution report from July 2014 paints a dismal picture of the growth and concentration of poverty in the Greensboro-High Point metropolitan area from 2000 to 2008-2012 [4-8]. The number of persons below the poverty level grew from 65,798 in 2000 to 116,501 in the 2008-2012 years, an increase of 77%. In 2000, about a quarter of people living in poverty lived in neighborhoods with a concentration of the poor (a poverty rate greater than 20%). In 2008-2012, over half, 56% of poor people lived in neighborhoods where over one in five people was also living in poverty.

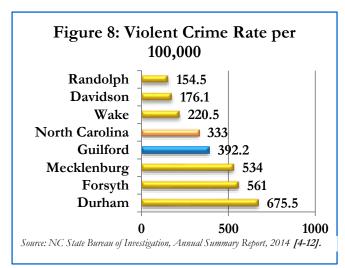
Poverty disproportionately affects women and children. According to Guilford County Schools, the student poverty rate in 2015-16 was 67% [4-9]. While Figure 7 reflects a relatively steady overall poverty rate, that rate is much higher for families headed by women, over half (52.5%) of the single mothers raising children under five years old are living in poverty, an increase of 3% from 2012-2014. The overall median income has declined by over \$1000 in a short time though there are some increases in the median income for women and foreign born residents.

Figure 7 shows an unemployment rate that is greatly improved since the Great Recession. Still, many cannot afford basic needs. Almost half of renters have unaffordable housing [4-10]. According to the United Way of Greater Greensboro, a person earning minimum wage (\$7.25/hour) must work 75 hours a week in order to be able to afford (pay less than 30% of income) a two-bedroom apartment at the fair market rate of \$709/month [4-11]. For more information on the consequences of poverty, see Appendix F. High school graduation rates are increasing, and we would expect the impact of the new college promotion program, *Say Yes to Education*, to continue and accelerate that trend.

Figure 7. Guilford County Residents, Select S	Figure 7. Guilford County Residents, Select Social Characteristics			
Income	Guilford County Median Income	\$46,223	\$45,431	\$45,050
	Male Median Earnings	\$44,393	\$44,854	\$44,199
	Female Median Earnings	\$35,193	\$35,377	\$36,036
	Foreign Born Median Income	\$39,589	\$39,592	\$40,412
	Total Percentage Below the Poverty Rate			
	Percentage of Single Mothers with Children Under		50.8	52.5
	Age 5 Below the Poverty Rate	49.3	30.6	32.3
Percent Less Than High School Graduate	Guilford County Total	12.5	12.1	11.8
	Foreign Born	32.9	31.9	32.3
Percent Unemployed	Guilford County Total	6.9	7.0	6.6
Percent with Unaffordable Housing	Owner-Occupied	72.4	73.2	74.0
(Paying >30% of Income)	Renter-Occupied	53.3	52.3	52.2
Source: American Community Survey [4-9].				

How Does Guilford County Compare to Others? On

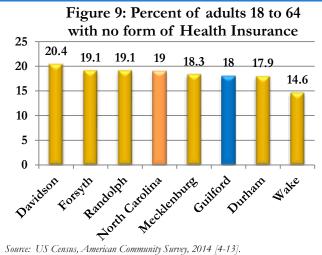
many key social determinants of health, such as child poverty and educational attainment, Guilford County is roughly comparable with its peers. Such is also true of two additional dimensions of health that involve the physical and policy environments in which we live. Figure 8 describes the former, depicting violent crime rate per 100,000 people for Guilford County, neighbors and peers. Guilford's rate is higher than the state rate, but lower than all of its peer counties, with the exception of Wake County [4-12]. In addition to physical environment, Figure 9 reflects the policy environment in North Carolina at this time, in which the legislature has chosen not to implement an expansion of eligibility for Medicaid allowed under the Affordable Care Act. While these policies have resulted in an as much as a



50% reduction in rates of uninsured adults in other states, there is currently no legislative momentum to change the status quo. This results in 18% of working age adults in Guilford County going without health coverage [4-13]. A recent study estimates an annual loss of over \$1million in county tax revenue and over \$28 million in uncompensated hospital and mental health savings for Guilford County because of the lack of expansion of

Medicaid. For more information, see Appendix G.

**Moving Forward:** Health organizations seeking to improve outcomes by addressing social determinants of health will find justification for this challenging approach in this assessment. Attention to poverty, income, education and insurance may come to be seen as necessary to true health change as traditional public health programs such as smokefree environments and early prenatal care.



#### Behavioral Health

Why Is This Issue Important? The World Health Organization (WHO) statement on mental health puts it succinctly: "Indeed, there is no health without mental health." The WHO defines mental health as "a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community" [4-14]. Such definitions underscore the importance of mental health and its relationship to a fundamental sense of well-being and meaning. The term "Behavioral Health" is often used to describe the connection between our behaviors and this fundamental sense of well-being. Practitioners working in Behavioral Health offer therapies designed to help individuals cope with issues such as depression, anxiety and addiction to alcohol or illegal drugs.

Behavioral health issues are widespread in our community. About 24% of respondents reported having depression and/or anxiety; 26%

Figure 10: Percentage of Guilford County Residents Reporting on How Often They Receive the Social and Emotional Support that They Need									
Always Usually Sometimes Rarely Never									
Guilford County	<b>Guilford County</b> 63.0 19.5 9.8 3.3 3.2								
Greater Greensboro         61.9         22.9         9.5         1.9         3.3									
Greater High Point         64.2         15.9         10.1         4.8         6.1									
Source: 2016 GCCHS.									

report knowing someone who regularly uses illegal drugs. Rates of post-partum mood disorders (such as depression and anxiety) are not measured locally, but are estimated nationally to affect from 14-20% of mothers, making it the most common complication of pregnancy [4-15].

While many issues contribute to behavioral health outcomes – everything from an individual's genetic predisposition to family function and community support, to policies like alcohol taxation and rates of available behavioral health care providers—the stigma around mental health disorders often involves blaming individuals for their behavioral health problems or viewing behavioral health diagnoses as evidence of character weakness. This

Figure 11. Percentage of Guilford County Residents Who Report that They	2011	2012	2013	2016	
Have Been Diagnosed with Depression	14.2	19.2	17.2	23.97	
Drink at Least One Alcoholic Beverage 8 or more Days per Month	20.6	20.3	17.2	18.9	
Have 8 or more Bad Mental Health Days per Month	14.6	20.7	9.2	17.2	
Sources: 2016 GCCHS, 2011-2013 NC BRFSS. [4-2]					

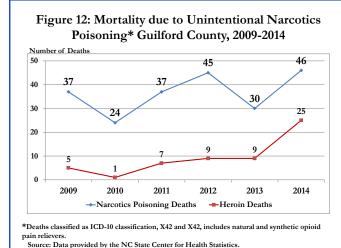
stigma derives from a false understanding of the causes of behavioral health issues, and it is dangerous. Stigma can keep many people from seeking help in the early stages of illness or at all.

Strong social ties and support from family, friends and community are protective factors for mental well-being.

Almost two-thirds (63%) of Guilford County residents report that they "always" (as opposed to usually, sometimes, rarely, or never) get the social and emotional support that they need. Unfortunately, over 10% of respondents in High Point report getting this support only rarely or never as detailed in Figure 10. Healthy Eating and Active Living can also support behavioral health.

#### How Does Guilford County Trend Over Time?

Guilford County residents are more likely to report that they have depression now than they did several years ago, but it is impossible to ascertain whether this is because of an increase in prevalence or greater comfort in talking about behavioral health issues. Figure 11 indicates a downward trend in alcohol consumption, and year-to-year



ental health days. Respondents in the 2016 GCCHS

variability (no clear trend) in reports of eight or more bad mental health days. Respondents in the 2016 GCCHS reported an average of four bad mental health days per month.

One area that shows a strong trend in a troubling direction is the rate of heroin and opioid prescription drug use, if unintentional narcotic deaths are used as an indicator of use. Figure 12 depicts the dramatic increase in heroin deaths in 2014, with 25 of the 46 deaths due to unintentional narcotics poisonings that year.

#### How Does Guilford County Compare to Others?

Extensive data on behavioral health issues are sorely lacking, but existing information indicates a mixed picture for Guilford County in relationship to its peers and neighbors. Figure 13 indicates that Guilford has a better ratio of mental health providers to its population than its neighbors (Randolph, Davidson and Forsyth), but equal to or worse than its peers. Figure 14 maps the prevalence of depression in the population receiving Medicare (typically age 65 and older); Guilford

County's rate of 19% puts it among the worst in North Carolina – much worse than its peer counties Wake and Mecklenburg and very similar to its peers Forsyth and Durham [4-17].

In 2012, the NC BRFSS asked a series of questions meant to elicit the prevalence of Adverse Childhood Experiences (ACEs) among NC adults. While they have not repeated the question in surveys since, it helps to inform the emerging field of "toxic stress" and the study of how

Guilford 388.3 1.319 Mecklenburg 385.1 2.629 Randolph 149 958.2 Wake 2,806 355.9 North Carolina 22,370 444.5 Source: University of Wisconsin Population Health Institute, 2016 [4-16]. Figure 14: Prevalence of Depression Among Medicare Beneficiaries, 2014 Source: Center for Medicare and Medicaid Services, PiedmonthHealthCounts.org [4-17].

in-between @ > 18.0

Figure 13: Number of Mental Health Providers per Population for

Ratio of Mental Health

**Providers to Population** 

(1 Provider per x Persons)

1,233.7

189.9

390.3

Number of

Mental Health

**Providers** 

133

1,551

936

**Selected Counties** 

Davidson

Durham

Forsyth

- +× 15.8

Source: NC State Center for Health Statistics [4-15].

prolonged trauma experienced in childhood can have discernable effects much later in adulthood.

As a result of recent research on ACEs, some service providers have worked to become "trauma-informed" so that they can effectively respond to clients who suffer from the effects of trauma such as violence in the home, a substance-abusing or incarcerated parent and/or child sexual abuse. The prevalence of ACEs is similar across peer counties (Figure 15). The percentage of ACEs is remarkably similar across peer counties as demonstrated in Figure 15 (Durham has an elevated prevalence relative to peers.)

Figure 15: Prevalence of Adverse Childhood Experiences Among Adults in Select Counties in NC, 2012, (Percentages)							
No ACEs 1-2 ACEs 3-8 ACEs							
Durham	36.3	37.8	25.9				
Forsyth	42.7	35.9	21.4				
Guilford	43.2	36.0	20.8				
Mecklenburg	42.4	36.9	20.7				
Wake	41.5	37.8	20.7				
Source: NC BRFSS, 2012 [4-18].							

Data Unavailable

**Moving Forward:** Rates of depression and anxiety in Guilford County make these among the most prevalent chronic illnesses in our community. Improvement in the number of trained mental health providers and assurance of access to care regardless of income or insurance status should be priority concerns for Behavioral Health leaders and organizations. The alarming increase in heroin and opioid use indicates the need for a multi-sector, multi-disciplinary approach that involves education, treatment and policy.

#### Maternal and Child Health

Why Is This Issue Important? Preparing children for a great start in life starts long before birth. Women and their children (if they choose to have them) benefit from healthy nutrition and daily physical activity, close family and friends, effective coping strategies, trusted health care providers, access to effective birth control and supportive neighborhoods and communities with a variety of resources and policies that support women and

children. Deficits or disadvantages in these areas may lead to poor birth outcomes. Pre-term birth (before 37 weeks of gestation), low birth weight (under 5.5 pounds), and infant mortality (death of a child before the first birthday) are areas of concern for organizations devoted to improving maternal and infant health for women in Guilford County, as pre-term birth often co-occurs with low birth weight, which is a risk factor for infant mortality.

Poor birth outcomes are a significant problem for Guilford County, with rates of infant mortality and low birth weight considerably higher than national benchmarks and objectives. African-Americans experience preterm birth, low and very low birth weight and infant mortality at substantially higher rates than Whites. Low birth weight and preterm births as well as teen pregnancies occur at higher rates in areas of the county characterized by higher rates of poverty and unemployment, and low educational attainment.

For older children, reports of school nurses serving Guilford County School students offer a snapshot of child health in our community. The total school student population is approximately 72,000 students; end-of-year reports on the numbers of students in 2014-15 with selected health conditions are in Figure 16. For example, the rate of asthma is one in 20 Guilford County School children. While the percentages of these disorders, in some cases are small, it is likely that only most severe cases are identified. In addition, NC Child, an organization that advances public policies that improve the lives of NC's children, compiles an annual Child Health report for the state and counties; the 2014 version is included in Appendix H.

#### How Does Guilford County Trend Over

**Time?** Many organizations have come together in Guilford County to coordinate services to women and families to assure better health outcomes for infants. Figure 17 demonstrates both the success of those efforts, and the necessity to approach this work with a long-term commitment. The percent of preterm birth to White mothers has decreased slightly in the last two decades from 9.8% to 8.5%; the rates for other races

Figure 16: Identified Student Health Concerns, Guilford County Schools, 2014-15						
Condition	Percent of Student Population					
Asthma	3605	5%				
Allergies (Severe)	1830	2.5%				
ADD/ADHD	1825	2.5%				
Autistic Disorders	612	0.8%				
Emotional/Behavioral	207	0.2%				
Seizure Disorder/Epilepsy	338	0.47%				
Diabetes Type I	196	0.27%				
Migraine Headaches	276	0.38%				
Cardiac Conditions	113	0.16%				
Source: Guilford County Schools School Nu	rse End of Year Repor	rt, 2014-2015 [4-19].				

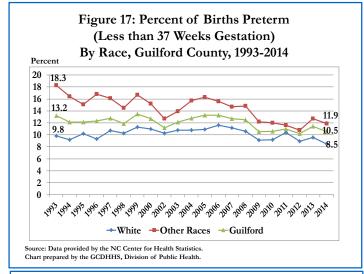


Figure 18: Pregnancy Rate per 1,000 Females
Ages 15-19, By Race
Guilford County, 1992-2014

Rate per 1,000

160
140
120
130.2
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(predominately African-American) remain elevated in comparison to Whites but have dropped more dramatically, from 18.3% to 11.9%. However, preterm birth rates have remained relatively stable over the last five years, evidence of the stubborn nature of these complex issues [4-20].

On the other hand, teen pregnancy rates demonstrate a sustained downward trend, with dramatic improvement for adolescent women of all races. Nonetheless, a significant and troubling disparity remains, as demonstrated in Figure 18, between outcomes for White teens and teens of other races (predominately African-American) [4-21]. The trend towards lower rates of teen pregnancy has a positive cascading effect on individuals, families and societies, allowing more young women to achieve higher education, financial stability and maturity before beginning the critically important work of raising young children. Teen pregnancy rates are likely decreasing because of a variety of factors, including increased focus on post-secondary education for girls, improved access to contraception, and changing cultural attitudes that promote the concept of late adolescence as a time of education, workforce preparation and self-discovery, with youngest people delaying initiation of partnership, marriage and child-rearing until their 20s. More stable and prepared parents improve the health prospects of the next generation.

Figure 19 reports both the numbers and rates of infant mortality for the most recent three years available. There are approximately 6,100 live births annually in Guilford County, and approximately 50 infant deaths, making infant mortality a relatively infrequent occurrence. Nonetheless,

rates of infant mortality in the southeastern United States are far higher than in other parts of the country, and as we see in Figure 19, a significant disparity persists between African-American and White rates.

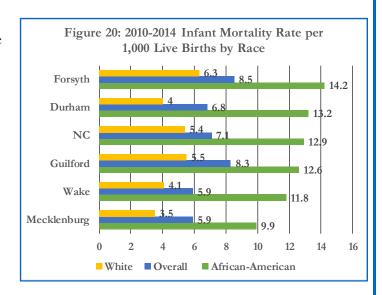
#### How Does Guilford County Compare to Others?

Infant mortality is an important issue in many communities, but as Figure 20 suggests, Guilford County has a heavy overall burden (rate of 8.3) and a significant challenge in overcoming racial inequality in infant outcomes [4-23]. Infant mortality is also an important indicator because it is considered a "pithy measure of population health" that reflects the structural factors within societies that affect the health of all populations. A country, or a county, with high infant mortality rates relative to its peers, is assumed to have poorer health outcomes in other areas as

well [4-24].

Figure 21 reflects several of the structural factors that affect children's health in Guilford, neighboring and peer counties. High rates of child poverty and food insecurity throughout our region reflect the challenging conditions in

Figure 19: Infant Mortality in Guilford County by Race and Ethnicity, 2012-2014							
2012 2013 2014						14	
# Rate # Rate # Ra					Rate		
Total	Overall	49	7.9	53	8.6	48	7.9
Number and	White	16	6.5	20	7.1	9	3.8
Rate per 1000	African-American	26	10.7	32	12.9	33	13.6
Live Births	Hispanic Ethnicity	5	6.3	3	3.8	4	5.2
Source: State Center for	r Health Statistics, Detailed Pregn	ancy Files, 2	2012-2014	[4-22].			



Source: State Center for Health Statistics, County Data Book [4-23].

Figure 21: 2014 Child Health Structural Indicators and Life Expectancy							
	% Children	% Children	% Children	% Births with Late or	Life		
	in Poverty	Uninsured	Food Insecure	No Prenatal Care	Expectancy		
Wake	14.2	7.3	19.6	6.6	81.4		
Mecklenburg	21.2	7.8	22.2	5.7	80.4		
Durham	25.6	8.3	21.7	23.1	79.9		
Guilford	29.8	8.1	24	7.4	79.1		
Forsyth	28.4	7.3	24.5	5.4	78.1		
Randolph	26.4	8.9	27.1	7.7	77.1		
Davidson	25.5	5.5	26.5	4.1	76.6		
Source: NC Child,	2014 Child Healt	h Report Card Cou	nty Data Cards [4-25].				

which many families are raising children. While we often assume that the family unit itself is responsible for its children's successes and failures, the differences in life expectancy by county in Figure 21 reflect the impact of structural factors on important outcomes. That children in Wake County born today will live, on average, five years

longer than children born in Randolph County, is not because all the parents in Wake County have superior parenting skills. Infant and child health outcomes are a reflection of larger system inputs. Healthy school systems, accessible and high quality medical care, a rich network of child and family enrichment resources, cultural appreciation of diversity and adequate family income in a thriving economy are critical ingredients for children's health. System-level initiatives in Guilford County, such as *Ready for School, Ready for Life* are efforts to create a stronger early childhood system to support families. These investments in early childhood education aim to lay a firm foundation in a child's brain architecture in the first years of life so that they enter kindergarten ready for school, are on track to meet reading and math milestones along the way and graduate high school prepared for higher education and the workforce.

**Moving Forward:** Guilford County faces important challenges in reducing overall rates of infant mortality and racial inequality in those rates. Maternal and child health indicators are deeply influenced by the social determinants of health and our strategies to improve these outcomes must endeavor to affect the economic, racial and educational inequalities that drive outcomes, and intervene at the earliest stages of life.

A Final Word: For the next three years, our local hospitals, health systems, health department and many human service agencies will work together to implement action plans intended to address these priority concerns. As these pages' attest, the challenges are daunting. Our community has communicated clearly that these are the areas in need of our most critical attention; improvement in Healthy Eating and Active Living; Social Determinants of Health; Behavioral Health and Maternal and Child Health requires sustained commitment over years and lifetimes. The authors of this document are committed to this purpose and ask for your support and engagement with our community action planning and implementation. The next assessment in 2019 will, we hope, attest to the success of our collaborative efforts.

## Data on the Health and Well-being in Guilford County

#### **Mortality**

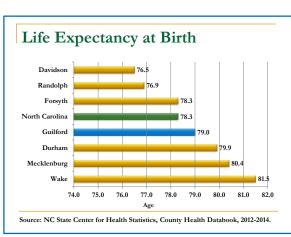
## Leading Causes of Death and Years of Potential Life Lost

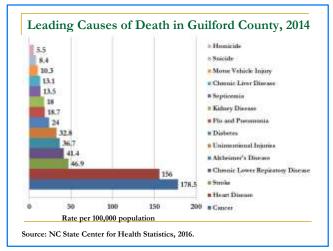
Leading causes of death and Years of Potential Life Lost (YPLL) are measures that help us understand how specific causes of death impact Guilford County's health. Of the 4,193 deaths in Guilford County in 2014, over half were due to chronic diseases such as cancer, heart disease, stroke and others. While the leading cause of death in the United States and North Carolina was heart disease in 2014, cancer has been the leading cause of death in Guilford County since 2008, followed by heart disease.

When considering mortality, disparities exist for race, gender and age. African-Americans had higher age-adjusted death rates than Whites for heart disease, cancer, stroke, diabetes, septicemia, kidney disease, homicide and HIV infection. Whites had higher age-adjusted death rates than African-Americans for chronic lower respiratory disease, non-motor vehicle-related unintentional injuries and suicide. There are also gender differences in rates. Men had higher mortality rates than women for heart disease, cancer, diabetes, motor vehicle and other unintentional injuries, while women had higher death rates than men for stroke and Alzheimer's disease. In 2014, the leading causes of death among children ages 1-19 were motor vehicle crashes and suicide, while among young adults ages 20-39, the leading causes of death were non-motor vehicle injuries and suicide. Chronic diseases such as cancer, heart disease, chronic lower respiratory disease and Alzheimer's disease were the leading causes of death for those over 60 years of age (also see Appendix I, 2016 Leading Causes of Death Data Brief).

YPLL estimates the number of years lost because of premature deaths prior to the age of life expectancy. YPLL shows the impact of mortality that adversely impact younger age groups,

such as intentional and unintentional injury. Cancer and heart disease mortality dominate the years of potential life lost, but non-motor vehicle unintentional injuries, including falls and unintentional poisonings, motor vehicle-related injuries rank higher in YPLL than when looking at mortality rates.

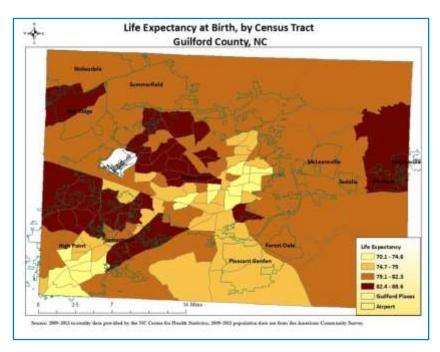




Years of Potential Life Lost, 2010	2014
Cause of Death	YPLL
1. Cancer (All Types)	14,067
Colon, Rectum and Anus	1,091
Trachea, Bronchus and Lung	3,823
Breast (female only)	1,381
Prostate	488
2. Diseases of the Heart	11,007
3. Non-Motor Vehicle Unintentional	3,621
4. Stroke	2,772
5. Chronic Lower Respiratory Disease	2,608
6. Motor Vehicle-related Injuries	1,894
7. Suicide	1,779
8. Diabetes	1,566
9. Alzheimer's Disease	1,504
10. Homicide	1,408
11. Nephritis, Kidney Disease	1,154
12. Chronic Liver Disease	1,130
13. Pneumonia and Influenza	1,085
14. Septicemia	971
15. Hypertension	564
16. HIV Infection	526
All Other Remaining Causes	16,566
Total YPLL—All Causes	64,247

#### Life Expectancy

Life expectancy is a measure of overall population health, summarizing death patterns across all age groups. Life expectancy at birth in Guilford County is 79.0 years, higher than North Carolina as a whole, at 78.3 years. The average county life expectancy of 79 years obscures a wide range of variation, however. Life expectancy varies geographically by census tract, ranging from a low of 70.1 years to a high of 88.6 years. Census tracts with high rates of poverty and low rates of educational attainment tend to have lower life expectancy. Babies born in some census tracts in northwest Greensboro can be expected to live to the age of 89, while babies born in southeast Greensboro and south High Point have life expectancies that are 15-18 years less.



Top Five Leading Causes of Death by Age Group, 2014

Cause of Death	Number of Deaths	Rate per 100,000
	Ages 1-19	
Motor Vehicle Injuries	5	3.9
Suicide	4	3.1
Injuries (Non-Motor Vehicle)	3	2.4
Acute Respiratory Distress Syndrome	2	1.6
Epilepsy	2	1.6
	Ages 20-39	
Injuries (Non-Motor Vehicle)	34	24.2
Suicide	16	11.4
Homicide	15	10.7
Heart Disease	14	10.0
Motor Vehicle Injury	13	9.2
	Ages 40-59	
Cancer	170	123.0
Heart Disease	111	80.3
Injuries (Non-Motor Vehicle)	36	26.0
Cerebrovascular Disease (Stroke)	30	21.7
Chronic Liver Disease and Cirrhosis	24	17.4
	Ages 60-79	
Cancer	461	566.5
Heart Disease	285	350.2
Chronic Lower Respiratory Disease	108	132.7
Cerebrovascular Disease (Stroke)	84	103.2
Nephritis, Chronic Kidney Disease	32	39.3
	Ages 80 and Older	
Heart Disease	387	2,121.8
Cancer	270	1,480.0
Alzheimer's Disease	162	888.2
Cerebrovascular Disease (Stroke)	122	668.9
Chronic Lower Respiratory Disease	84	460.6

Source: NC Mortality File, Center for Health Statistics, 2014.

#### Health Status/Morbidity

Health status and morbidity (or diseases) are also important measures of the health of the county.

#### Self-Rated Health

While a subjective indicator, persons' perceptions of their health often correlates to more objective measures. Participants in the Guilford County Community Health Assessment Survey were asked to rate their physical and mental health. About 80% of respondents surveyed described their health status as good, very good or excellent, with the remaining 20% describing their health as fair or poor. These rates are similar to North Carolina rates.

#### **Self-Reported Health Conditions**

Survey respondents were asked if they had ever been told by a health care provider that they had one of a number of listed health conditions. Of these conditions, high blood pressure (38.6%), overweight/obesity (36.2%) and high cholesterol (31.6%) were the most common. Some of these prevalence numbers may be underestimated due to self-reporting. In 2014, 70.7% of adults in the United States were overweight/obese. A higher percentage of Guilford County residents compared to all US residents reported high blood pressure (39% vs. 29%) and asthma (15% vs 8%). A tenth of Guilford respondents reported heart disease/angina or cancer and 7.6% reported being diagnosed with osteoporosis. A higher

#### Fair or Poor Self-Rated Health, 2016 Percent reporting Fair or Poor Greater Greensboro North Carolina **Guilford County** 20.1 Greater High Point 21.2 20 25 Very Geography Excellent Good Poor Good **Guilford County** 16.9 30.5 32.3 16.1 4.0 Greater Greensboro 34.9 3.3 17.2 31.6 12.9 Greater High Point 29.3 16.5 29.3 16.5 4.7 North Carolina 19 31.7 30.4 13.5 Percentage of survey respondents who reported their health as fair or poor when asked: "Would you say that your health is Excellent, Very Good, Good, Fair or Poor?"

## Percentage of Reported Mental and Physical Health Conditions, 2016

Source: Guilford County Community Health Assessment Survey, NC data from 2014 BRFSS.

Geography	High Blood Pressure	Overweight/ Obesity	High Cholesterol	Depression/ Anxiety	Diabetes
Guilford County	38.6	36.2	31.6	24.0	17.7
Greater Greensboro	36.4	38.2	27.9	21.7	13.5
Greater High					
Point	41	34.1	35.7	26.3	22.1

Geography	Asthma	Angina/ Heart Disease	Cancer	Osteoporosis
Guilford County	15.1	10.5	10.4	7.6
Greater Greensboro	16	10.2	12.1	8.3
Greater High Point	14.1	10.8	8.5	6.9

Source: Guilford County Community Health Survey, 2016.

percentage of High Point respondents reported being told by a health care provider that they had high blood pressure, high cholesterol and/or diabetes than did Greensboro residents.

Leading Inpatient Hospitalizations and Charges by Principal Diagnosis, Guilford County, 2014  Diagnostic Category	Total Cases	Average Days Stay	Total Charges	Average Charge per Case
Cardiovascular and Circulatory Diseases (Includes Heart Disease and Stroke)	7,751	4.8	\$267,018,544	\$34,450
Injuries and Poisoning	3,701	5.5	\$140,687,778	\$38,013
Musculoskeletal System Diseases	3,292	3.2	\$127,198,033	\$38,639
Other Diagnoses (Includes Mental Disorders)	5,265	6.9	\$80,372,514	\$15,265
Digestive System Diseases (Includes Chronic Liver Disease and Cirrhosis)	4,663	4.9	112,344,955	\$24,093
Respiratory Diseases (Includes COPD and Pneumonia/Influenza)	4,433	5.2	\$104,188,865	\$23,503
Infectious and Parasitic Diseases (Includes Septicemia and AIDS)	2,877	6.6	\$91,549,380	\$31,821
Pregnancy and Childbirth	6,869	2.7	\$84,412,800	\$12,241
Malignant Neoplasms	1,453	6.4	\$63,812,391	\$43,987
Genitourinary Diseases (Includes Nephritis)	2,238	4.3	\$42,928,984	\$19,182
Endocrine, Metabolic and Nutrition Diseases (Includes Diabetes)	2,072	4.0	\$42,180,746	\$20,358
Source: County Health Databook, NC State Center for Health Statistics.				

#### Inpatient Hospitalizations

Hospital utilization data, such as the number of cases by diagnosis, length of time in care, the total charges and the average charge per case can show how illness impacts health. In 2014, the diagnostic category with the highest number of inpatient hospitalizations in Guilford County was cardiovascular and circulatory diseases, followed by pregnancy and childbirth. Categories with the longest average days' stay were infectious and parasitic diseases (6.6 days), malignant neoplasms (6.4 days) and other diagnoses (including mental disorders) (6.9 days). Hospital stays for cardiovascular and circulatory diseases resulted in by far the largest total costs at over \$267 million.

#### Child Health

Children are impacted by a number of physical and mental health conditions even though mortality rates for children are very low, as seen in the mortality section. One important source of child health data are reports of school nurses serving public elementary, middle and high schools in Guilford County. The following chart presents data on leading identified health conditions, which are conditions which require some degree of action at school, including medications, developing individual health care plans or other health related accommodations. The leading health issues resulting in either a Nursing Care Plan (NCP), an Individualized Health Plan (IHP) or an Emergency Action Plan (EAP), are asthma, allergies, seizure disorders, Type I diabetes, migraine headaches and cardiac conditions.

Number of Students with Identified Health Conditions, Guilford County Schools, Academic Year 14-15											
Condition	Elementary	Middle School	High School	Number of related plans of care (NCP, IHP, EAP)							
Asthma	2,346	777	482	3,091							
Allergies (severe)	1,127	405	298	1,476							
ADD/ADHD	1,011	470	344	31							
Seizure Disorder/ Epilepsy	165	82	91	298							
Diabetes Type I	49	50	97	192							
Migraine headaches	63	107	106	161							
Cardiac conditions	61	28	24	75							
Autistic disorders	317	132	163	15							
Emotional/behavioral	72	45	90	20							

Source: School Nurse End of Year Report, 2014-2015.

Note: NCP = Nursing Care Plan; IHP = Individualized Health Plan; EAP = Emergency Action Plan

#### Disability

In North Carolina, 13.8% of non-institutionalized civilians were living with disability compared to 10.9% in Guilford County. Among peer counties, Davidson County had the highest percentage of civilians living with disability (17.2%) and Wake had the lowest percentage (8.1%). In Guilford County, it was estimated that 4.15% of those under the age of 18 were disabled, as compared to 8.3% of those ages 18 to 64 and 34.5% of those age 65 and over.

Disability Status, Civilian Noninstitutionalized Population										
	Total		Under	18	18-0	64	65+			
Residence	Number	%	Number	0/0	Number	%	Number	0/0		
North Carolina	1,344,569	13.8%	102,150	4.5%	715,508	12%	526,911	37%		
Davidson	27,811	17.2%	2,065	5.5%	16,715	17%	9,031	34.6%		
Durham	30,493	10.6%	2,452	3.8%	16,311	85%	11,730	37.9%		
Forsyth	40,189	11.1%	2,665	3.1%	19,987	89%	17,537	34.4%		
Guilford	55,160	10.9%	4,725	4.1%	26,847	8.3%	23,588	34.5%		
Mecklenburg	96,582	9.6%	7,539	3.0%	54,043	8.2%	3,500	35.2%		
Randolph	20,843	14.7%	1,274	3.7%	10,965	12.9%	8,604	38.1%		
Wake	80,321	8.1%	7,817	3.1%	43,259	6.7%	29,245	30.1%		

Source: American Community Survey, 2014.

#### **Chronic Disease**

Chronic diseases are health conditions that develop over a long period of time and are characterized by progressive impairment, degeneration or loss of function. They often have multiple causal factors and are not typically amenable to straightforward medical "cures" and are thus considered "chronic." As the mortality data show, cancer, heart disease and stroke are the most common causes of death. Risk factors for chronic disease include obesity, tobacco use, physical inactivity, diet and nutrition. The Centers for Disease Control and Prevention recommend behavioral changes to reduce these risk factors, including healthy eating, increasing physical activity, reducing sun exposure, as well as avoiding smoking and exposure to secondhand smoke.

Age-Adjusted Cancer Incidence Rates per 100,000 Population, North Carolina and Select Counties 2009-2013

County	Colon/Rectum		Lung/Bronchus		Female Breast		Prostate		All Cancers	
County	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
North Carolina	20,240	38.5	37,831	70.9	43,146	157.9	33,115	130.6	256,989	483.4
Davidson	417	42.3	849	84.6	805	155.2	597	126.6	4,912	500.4
Durham	442	35.4	738	61.1	1,339	186.4	733	125.9	6,096	474.7
Forsyth	708	36.0	1,385	70.3	1,847	171.4	1,424	155.0	10,012	506.9
Guilford	955	36.5	1,838	70.3	2,601	180.4	2,046	166.6	13,813	524.4
Mecklenburg	1,428	35.0	2,259	59.3	4,010	169.4	2,726	144.9	19,607	472.7
Randolph	330	40.0	737	86.3	698	156.1	561	140.4	4,412	527.2
Wake	1,331	33.6	2,034	55.8	3,991	171.9	2,632	137.8	19,183	471.2

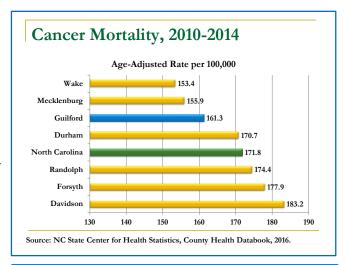
Source: NC Central Cancer Registry, NC State Center for Health Statistics.

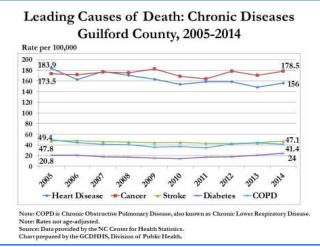
Incidence rates refer to new cases of cancer. The five-year age-adjusted cancer incidence rates for all cancers in Guilford County exceed both the North Carolina rate and the rates of all comparison counties other than Randolph at 524.4 per 100,000 population. Female breast cancer in Guilford cancer is higher than all comparison counties except Durham, with a rate at 179.2 per 100,000. Prostate cancer incidence is higher in Guilford County than the state and all comparison counties, with an incidence rate of 166.6 per 100,000 population.

Cancer is defined as the growth and spread of abnormal cells. While cancer is the leading killer in Guilford County, death rates here are lower than in the state as a whole or in Durham, Forsyth, Davidson and Randolph. Mecklenburg and Wake Counties have lower cancer mortality rates than Guilford, showing that there is room for improvement. Lung cancer continues to be the leading cause of cancer mortality in Guilford County, followed by breast cancer, prostate cancer and colorectal cancer.

#### **Chronic Disease Mortality**

Heart disease is a category of conditions that affect the heart, including coronary artery disease, which can cause angina or heart attack due to plaque buildup on the walls of the arteries, also known as atherosclerosis. Other heart conditions include aortic aneurysm and dissection, atrial fibrillation, cardiomyopathy and heart failure. Guilford





County, with a cardiovascular disease mortality rate of 145.2 per 100,000 population, has met and exceeded the Healthy North Carolina 2020 objective of reducing the cardiovascular disease mortality rate to the target of 161.5.

These changes represent a 37% decline in the death rate due to cardiovascular disease in the last 20 years (1993-2014). Despite these improvements, heart disease runs a close second to cancer as a leading cause of death, and far exceeds cancer as a cause of hospitalizations and a driver of hospital costs. Not everyone has seen the same improvements in heart disease mortality and there are disparities between groups of people. African-Americans experience heart disease mortality at substantially higher rates in Guilford County, as is also the case in many communities across North Carolina.

Stroke or cerebrovascular disease is a condition that occurs when the flow of blood to the brain is blocked or a

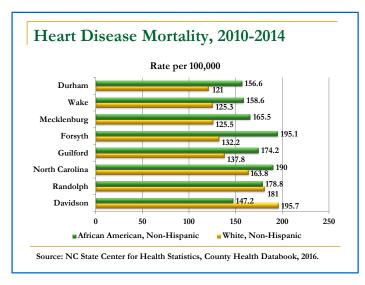
blood vessel near the brain bursts. The Guilford County stroke death rate from 2010-2014 was 41.8 per 100,000 population, as compared to 43.7 for NC as a whole. As the map below shows, heart disease mortality rates differ by census tract. These rates mirror the geographic patterns seen for life expectancy with very high rates seen in some areas.

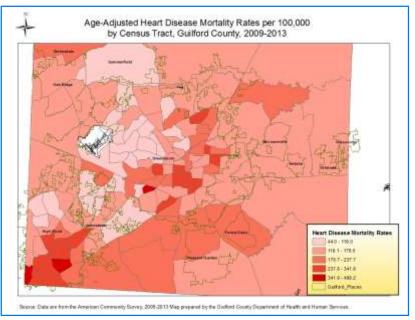
Racial and gender disparities in death rates still persist for cancer, heart disease and other chronic conditions as the mortality data below highlight. African-American residents tend to have higher age-adjusted death rates for heart disease, strokes, diabetes and all cancers except lung cancer than do Whites. There were especially large disparities in mortality due to diabetes and prostate cancer. African-Americans in Guilford

County have almost twice the death rates as Whites for these conditions. Whites had higher rates of chronic lower respiratory disease death rates.

Over the last 10 years, while cancer mortality rates fluctuated without showing a clear trend, heart disease mortality rates showed a downward trend, declining 15%, 183.0 per 100,000 in 2005 to 150.0 in 2014. Chronic lower respiratory disease mortality rates declined from 49.0 to 42.4 over the same period.

Chronic lower respiratory diseases are a group of chronic conditions that impact the airways and other lung structures, including asthma, chronic obstructive pulmonary





disease, occupational lung diseases and pulmonary hypertension. Chronic lower respiratory disease was the 7<sup>th</sup> leading cause of death in Guilford County in 2014, accounting for 212 deaths that year, with a five-year age-adjusted mortality rate of 38.9 per 100,000 population, lower than the state as a whole. Alzheimer's Disease, the most common cause of dementia in older adults, was the 8<sup>th</sup> leading cause of death in 2014, followed by diabetes, a group of conditions that cause high levels of glucose or blood sugar in the body. The Guilford County five -year age-adjusted mortality rate for Alzheimer's Disease was slightly higher than the state while the diabetes death rate was lower. As described in the Self-Reported Health Conditions section, high blood pressure, overweight/obesity and high cholesterol were other commonly reported chronic conditions from the survey, followed by diabetes and asthma (See Appendix J, 2016 Chronic Diseases Data Brief).

Age-Adjusted Mortality Rates per 100,000, by Race/Ethnicity, 2010-2014

Chronic Disease Death Rate per 100,000 Population	North Carolina	Guilford County	White, non- Hispanic	African American, non- Hispanic	Males	Females
Coronary Heart Disease Death Rate	170.0	145.2	137.8	174.2	189.4	113.9
Total Cancer Death Rate	173.3	161.3	158.5	180.7	200.0	135.0
Lung Cancer Death Rate (Includes Trachea, Bronchus and Lung)	51.6	45.5	46.7	45.4	58.5	35.6
Prostate Cancer Death Rate (Males Only)	22.1	21.0	17.3	39.1	21.0	NA
Breast Cancer Death Rate (Females Only)	21.7	22.1	20.3	28.3	NA	22.1
Colorectal Cancer Death Rate	14.5	12.5	11.3	17.2	15.4	10.3
Stroke Death Rate	43.7	41.8	38.5	51.2	40.0	42.0
Chronic Lower Respiratory Disease Death Rate	46.1	38.9	44.2	23.7	43.4	36.6
Alzheimer's Disease Death Rate	29.2	33.9	34.0	35.7	27.8	37.0
Diabetes Death Rate	21.7	17.8	14.1	31.5	18.9	13.1

Source: County Health Databook, 2016; NC State Center for Health Statistics.

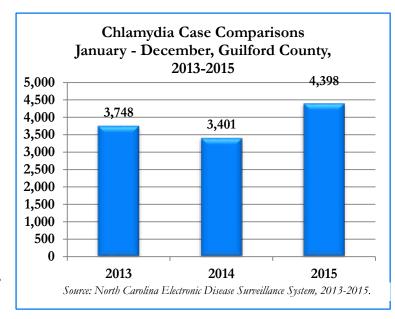
#### Communicable Disease

The most commonly-occurring reportable communicable diseases in Guilford County are consistently sexually transmitted infections (STIs), presenting significant issues for the health of Guilford County residents. Guilford County rates of chlamydia, gonorrhea, syphilis and HIV disease are consistently higher than the state as a whole. Large racial disparities exist for STIs, with African Americans experiencing rates as much as ten times that among Whites. The problem of STIs is also concentrated among teens and young adults. STIs are generally associated with significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, pelvic inflammatory disease, involuntary infertility and premature death. [5-1] The Centers for Disease Control and Prevention recommend the following strategies to reduce the STI risk:

- Abstinence
- Vaccinations for Hepatitis B and for Human Papilloma Virus (all three doses) prior to becoming sexually active or for girls/women through age 26 and teen boys/men through age 21 if they did not receive it when they were younger
- Mutual monogamy
- Reducing the number of sexual partners
- Using condoms consistently and correctly

#### Chlamydia

Chlamydia, the most common bacterial STI in Guilford County (4,398 cases in 2015) and the nation, is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease and chronic pelvic pain. [5-2] with chlamydia



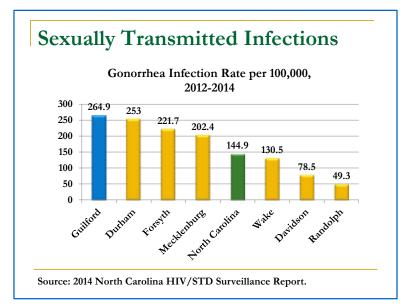
contributing the largest number of cases. Chlamydia incidence rates for 2014-15 varied by race/ethnicity and age. Rates for African Americans were 1,161.6 cases per 100,000 population compared to 281.6 for Hispanics and 130.6 for whites. The age groups with the highest rates of chlamydia were ages 20-24, followed by ages 15-19 and ages

25-29. Two-thirds of chlamydia cases were diagnosed in females; these diagnoses occur largely as a result of screening, and women are more likely to have screening tests than men.

#### Gonorrhea

Gonorrhea is the second most common STI in Guilford County, with 1,533 cases in 2015. Unfortunately, Guilford County's gonorrhea 2012-2014 infection rate exceeds North Carolina's rate as well as all the comparison counties, with a rate of 264.9 per 100,000 population.

Although, incidence rates for chlamydia and gonorrhea declined substantially from 2011 to 2014, they increased significantly in 2015. In Guilford County, the 2015 chlamydia rate was 851.8 per 100,000 population compared to the 2014 rate of 602.7. Gonorrhea rates increased from 2014 (225.1 per 100,000 population) to 2015 (295.9).



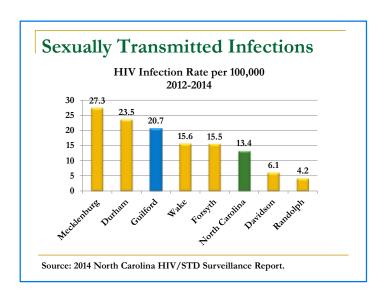
	Gonorrhea and Chlamydia Cases and Rates per 100,000 by Geography, Race and Ethnicity, 2014 - 2015											
	2014											
	North Carolina		Guilford	County	White		African American		H	Hispanic		
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate		
Gonorrhea	14,000	140.6	1,154	225.1	89	29.9	842	491.7	22	57.9		
Chlamydia	46,594	468.0	3,094	602.7	389	130.6	1,989	1,161.6	107	281.6		
					2	015						
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate		
Gonorrhea	16,960	168.7	1,533	296.9	167	56.2	1,111	624.9	N/A	N/A		
Chlamydia	57,995	576.8	4,398	851.8	535	180	2,835	1,592	N/A	N/A		

Source: NC DHHS; Office of Epidemiology, Communicable Disease Branch.

#### Human Immunodeficiency Virus (HIV)

HIV or Human Immunodeficiency Virus is a virus that attacks and weakens the body's immune system by slowly reducing a person's T cells, or CD4 cells, the cells that help the immune system fight off infections. As a result, opportunistic infections take advantage of this, causing illness.

Guilford County's HIV infection rate was higher than the state rate during this period but was lower than the rates experienced in Durham and Mecklenburg counties. Higher rates of HIV infections are concentrated in census tracts in southeast Greensboro. Rates are highest for African-Americans, Hispanics, males and young adults ages 20-29.



#### **Syphilis**

After declining from a high of 115 cases in 2011 to 51 cases in 2013, cases of primary, secondary and early latent syphilis increased again to 87 in 2014. A total of 183 cases were reported in 2015. Syphilis rates are higher in tracts in southeast and west Greensboro and areas of central High Point. Syphilis rate increases in Guilford are part of large rate increases seen across North Carolina.

#### Tuberculosis (TB)

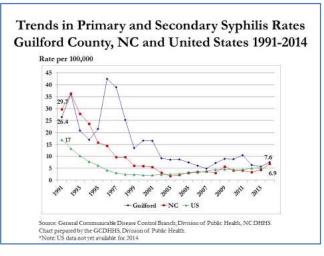
Tuberculosis (TB) is a lung infection caused by a bacterium that can spread from an infected person when that person coughs, sneezes or breathes. In 2015, Guilford County reported 20 cases of TB, for a rate of 3.9 per 100,000 population, unchanged from the 2014 rate. The overall state rate for 2014 was 2.0 per 100,000. Two-thirds of the 2015 cases were males and the age-group most affected by TB was adults ages 25-44.

#### Other Reportable Diseases

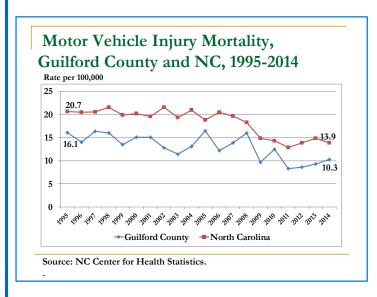
For more information on other reportable diseases, see Appendix K, 2016 Communicable Diseases Data Brief.

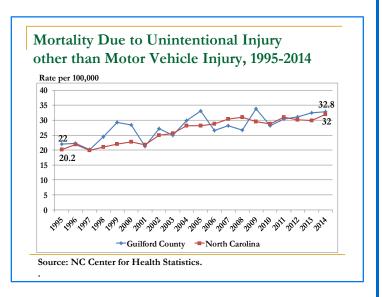
#### **Injuries**

Injuries include both unintentional and intentional harm to the body. The most common unintentional injuries include those that result from falls, motor vehicle crashes, unintentional poisoning, fire or drowning. Intentional injuries



include those that result from self-inflicted injury, suicide, and homicide or injury inflicted on another person. Over the last 20 years, Guilford County and North Carolina have both seen a slow decline in deaths due to due to motor vehicle crashes. However, deaths due to non-motor vehicle injuries have increased in Guilford County and the state as a whole during that same time period.





In 2014, the overall leading cause of injury deaths in Guilford County was deaths due to falls (74), followed by motor vehicle crash deaths (53), unintentional poisoning (51), suicide (43) and homicide (28), respectively. Though all age groups are impacted, adults ages 40-49 are at greatest risk for motor vehicle injury deaths. Non-motor vehicle injury mortality which heavily impacts those over the age of 70 were predominately due to falls. Poisoning deaths

due primarily to adverse reactions to prescription and non-prescription use of opioid drugs. Homicide deaths declined in Guilford County from 12.4 per 100,000 in 1995 to 5.5 per 100,000 in 2014. Those most at risk of homicide were young adults. Suicide death rates are lower in Guilford County than in the state as a whole, and have declined between 2012 and 2014. Suicide affects a wide range of age groups, with young adults at greatest risk. Firearms were used in the majority of suicide and homicide deaths Appendix L, 2016 Injury Data Brief.

Leading Causes of Injury Mortality, Guilford County 2010-										
2014										
Injury Type	2010	2011	2012	2013	2014					
Motor Vehicle Injury	61	41	43	47	53					
Unintentional Falls	74	77	70	83	74					
Suicide and Self-Inflicted	42	49	59	52	43					
Injury										
Homicide and Injury	27	34	32	33	28					
Purposely Inflicted on Other										
Persons										
Unintentional Poisoning	33	44	50	37	51					
Unintentional Death by Fire	5	4	3	5	4					

#### Oral Health

Availability of dental health professionals in Guilford County is better than in neighboring Davidson and Randolph counties, as measured by the number of dentists per capita, but not as available as some comparison counties. Three low-income census tracts in Guilford County are designated by the Health Resources and Services Administration as Dental Health Professionals Shortage Area (HPSA), which are based on a dentist to population ratio of 1:5,000. In other words, when there are 5,000 or more people per dentist, an area is eligible to be designated as a dental HPSA (<a href="www.hrsa.gov/shortage">www.hrsa.gov/shortage</a>).

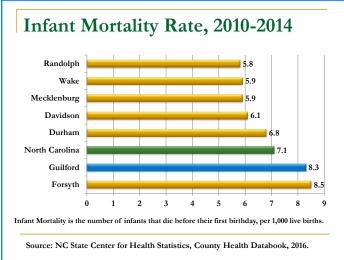
Birth outcomes describe health at birth and entail both maternal exposure to health risks and outcomes including preterm birth, low birth weight and infant mortality. Preconception health and healthy lifestyles during pregnancy are key factors influencing birth outcomes.

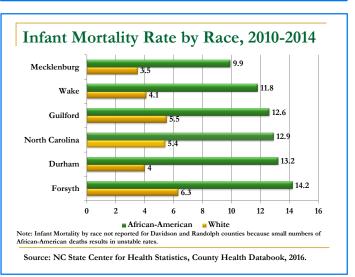
Despite significant gains in the past two decades, poor birth outcomes continue to be a significant problem for Guilford County. Rates of infant mortality and low birth weight are both considerably higher than national benchmarks and objectives. Further, African-Americans experience preterm birth, low and very low birth weight and infant mortality at substantially higher rates than Whites.

#### **Infant Mortality**

The Guilford County infant mortality rate is higher than the state rate and there are large ethnic and racial disparities that need to be addressed. After increasing to 8.6 infant deaths per 1,000 live births in 2013, the infant mortality rate declined in 2014 to 7.9. The rate for Whites declined to a historically low rate of 3.8, while the rate for African-Americans increased to 13.6 and the rate for other races increased to from 2 to 4.2. The rate for Hispanics was 5.2 infant deaths per 1,000 live births.

	Dentists per Capita, 2012			
Davidson	1:6,290			
Durham	1:1,463			
Forsyth	1:1,914			
Guilford	1:1,834			
Mecklenburg	1:1,545			
Randolph	1:3,558			
Wake	1:1,450			
Source: UNC, Cecil G Sheps Center, 2012.				



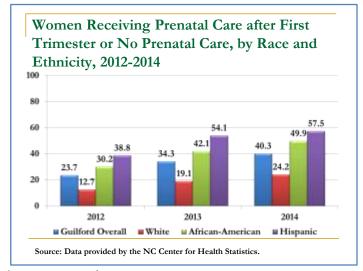


The leading causes of infant death in 2014 were maternal complications of pregnancy, disorders related to short gestation and low birth weight, congenital malformations, deformations and chromosomal abnormalities, and respiratory and cardiovascular disorders originating in, the period immediately before and after birth (also see Appendix M, 2016 Maternal and Child Health Data Brief).

#### **Prenatal Care**

Prenatal visits are important for the health of both infant and mother and mothers who receive no prenatal care are more likely to give birth to low birthweight and preterm babies. In prenatal visits, health care providers can educate mothers on important health issues, such as their diet and nutrition, exercise, immunizations, weight gain and abstaining from tobacco, alcohol and other drugs.

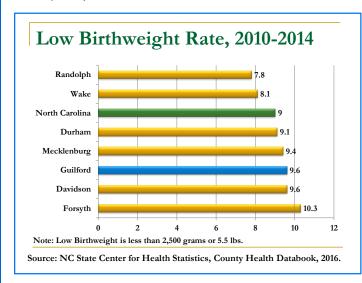
Late entry into prenatal care is defined as beginning prenatal care after the first three months of pregnancy. In Guilford County, the percentage of women entering late into prenatal care or not receiving care increased across all race and ethnic groups from 2012 to 2014 and racial and ethnic disparities persist, with African American and

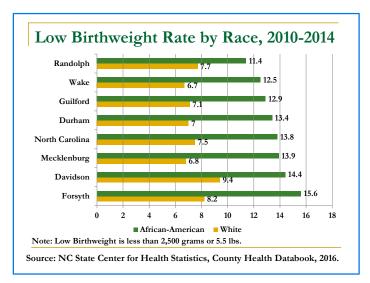


Hispanic women much more likely to enter care late or receive no prenatal care.

#### Birth Outcomes: Low Birth Weight and Preterm Birth

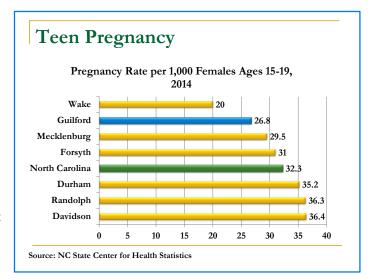
Children born preterm and/or with low birth weight are at risk for developmental problems, neurological impairments, higher risk of heart problems and respiratory problems later in life as well as educational and social impairments [5-3 through 5-6]. Birth weights less than 2,500 grams are classified as low birth weight. From 2010-2014, 9.6% of babies in Guilford County were less than 2,500 at birth, a higher percentage than in the state or than in Mecklenburg, Durham, Wake and Randolph counties. For Guilford County, North Carolina and comparison counties, percentages of low birth weight were about twice as high for African American births (12.9%) as for White births (7.1%).





#### **Teen Pregnancy**

Teen pregnancy involves behaviors that can impact the risk of poor birth outcomes as well as the risk of contracting sexually transmitted infection. Studies have shown, for example, that nearly one-third of pregnant teenagers were infected with one or more STIs, and because of unprotected sex during and after pregnancy are at risk for repeat pregnancies as well as additional STIs [5-7]. Pregnant teens are more likely than older mothers to enter into prenatal care late or not at all, experience pregnancy related conditions such as hypertension and anemia and fail to gain adequate weight during pregnancy [5-8]. Pregnant teens are also more likely to deliver a low-birth weight baby preterm, increasing risk of child developmental issues and illness



[5-9]. Additionally, being a teen parent can adversely impact subsequent educational attainment and decreased employment earnings [5-10].

The 2014 overall teen pregnancy rate met the local objective with a rate of 26.8 per 1,000 females ages 15-19, however the five-year rate was 37.8 and significant disparities persist for African Americans, other races and Hispanics.

#### Mental Health

#### Mental Health Status

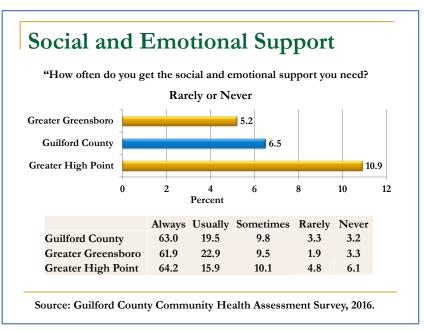
Community Health Assessment Survey respondents were asked about their mental health, which includes stress, depression and problems handling emotions. When asked to consider how many days during the past 30 days their mental health had been not good, survey respondents reported an average of four days of poor mental health per month. Also, almost a fourth of respondents (24.0%) reported they had been told by a health care provider that they have depression or anxiety.

#### Social Support

Community survey respondents reported having strong support systems: 63.0% stated that they always receive the social and emotional support that they need. There was a small percentage of respondents (6.5%) who reported they rarely or never received the social and emotional support they need, with High Point respondents twice as likely to report that as compared to Greensboro respondents.

#### Access to Mental Health Providers

The table below reports the rate of the county population to the number of mental health providers including psychiatrists, psychologists, clinical social workers and counselors that specialize in mental health care. Guilford County's ratio of mental health



providers to the population is better than the state as a whole and comparable to peer comparison counties, with Durham County having the most favorable ratio.

#### Mental Health Care Provider Rate (Per 100,000 Population)

Report Area	Estimated Population	Number of Mental Health Providers	Ratio of Mental Health Providers to Population (1 Provider per x Persons)	Mental Health Care Provider Rate (Per 100,000 Population)
Davidson County, NC	164,076	133	1,233.7	81
Durham County, NC	294,458	1,551	189.9	526.7
Forsyth County, NC	365,297	936	390.3	256.2
Guilford County, NC	512,114	1,319	388.3	257.5
Mecklenburg County, NC	1,012,556	2,629	385.1	259.6
Randolph County, NC	142,775	149	958.2	104.3
Wake County, NC	998,683	2,806	355.9	280.9
North Carolina	9,943,930	22,370	444.5	224.9
United States	317,105,555	643,219	493	202.8

Data Source: University of Wisconsin Population Health Institute, 2014. www.CommunityCommons.org

#### **Health Behaviors**

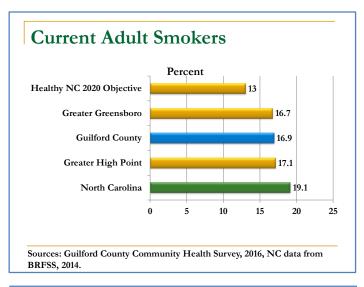
#### Smoking and Tobacco Use

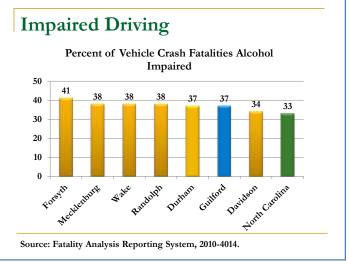
According to the community health survey, about 17% of Guilford County respondents reported currently smoking, with only slight difference between Greensboro and High Point. This is a slightly lower percentage than in NC as a whole, but it does not quite achieve the Healthy NC 2020 objective of 13%. Of current smokers, 12.4% of respondents stopped smoking for one day or more in the past year because they were trying to quit and 14.5% were advised by health professionals to quit. While 18.1% of respondents in Greater Greensboro were advised to quit, 11.3% were advised to quit in High Point.

#### Alcohol and Substance Use/Impaired Driving

Excessive drinking is the percentage of adults that report either binge drinking or excessive drinking in the past 30 days. Binge drinking is defined as consuming more than four alcoholic beverages on a single occasion in the past 30 days for women or two for men.

Almost half or 46.4% of survey respondents reported having no alcoholic drinks in the past 30 days. Of those who did drink alcohol, they had the option to report drinking days per week or per month. They reported having an alcoholic beverage such as beer, wine or liquor an average of 3.2 days per week and an average of 5.0 days per month. These averages are discordant; those who imbibe more frequently may have chosen to report





drinking days per week while those who drink less frequently may have been more inclined to report drinking days per month. Those who drank alcohol at all reported drinking an average of 2.1 alcoholic beverages on the days when they did drink and reported binge drinking an average of 1.2 times in the last month. There were no substantial differences in alcohol use or cessation efforts between Greensboro and High Point residents. According to the National Highways Safety Administration's Fatal Analysis Reporting System, from 2012 to 2014, 37% of vehicle crash fatalities were related to alcohol impairment in Guilford County, slightly higher than North Carolina, which was 33%.

#### Other Substance Use

A little more than a quarter of survey respondents reported knowing someone who regularly uses illegal drugs. The chart to the right shows deaths due to unintentional narcotic poisoning in Guilford County over a five-year period, 2009 - 2014. The chart also displays the number of unintentional narcotics poisoning deaths that were due to adverse effects of heroin ingestion.

#### Physical Activity

Research shows that regular physical activity has important health benefits. It can help control weight, increase life expectancy and reduce the risk of heart disease, Type 2 diabetes and some cancers. Being active also strengthens bones and muscles, improves mood and improve ability to do daily activities and prevent falls, especially for those who are aging [5-11].

Over 80% of the 2016 community survey respondents reported participating in regular physical activity or exercise such as running, walking, golfing and gardening. Most common barriers to getting regular physical activity respondents shared were lack of time, lack of motivation, being too tired, a physical disability or a lack of access to sidewalks.

#### Nutrition

A balanced healthy diet is an important part of a healthy

lifestyle. The CDC's Dietary Guidelines for Americans 2010 recommends a meal plan that accentuates fruits, vegetables, whole grains and fat-free or low-fat milk and milk

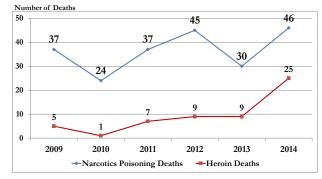
cholesterol, salt (sodium) and added sugars [5-12]. According to the community survey, 12.4% of respondents reported eating five or more fruits and vegetables each day, which is significantly less than the Healthy NC 2020 objective of 29.3%. The most frequently reported barriers to healthy eating were the cost of healthy food (24.7%) and a lack of time to prepare healthy food (20.4%). 28.9%

products, includes lean protein sources, stays within daily caloric needs and limits saturated fats, trans fats,

### Percent Engaged in Non-Work Physical **Activity in Previous Month** During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening or walking for exercise? North Carolina Greater Greensboro Guilford County Greater High Point Source: Guilford County Community Health Survey, 2016, NC data from BRFSS, 2014.

of respondents believed that they were healthy eaters.

#### Mortality due to Unintentional Narcotics Poisoning\* Guilford County, 2009-2014



\*Deaths classified as ICD-10 classification, X42 and X42, includes natural and synthetic opioid

Source: Data provided by the NC State Center for Health Statistics.

#### **Barriers to Physical Activity**

	Guilford County	Greater Greensboro	Greater High Point
Barriers to Exercise	Percent	Percent	Percent
Lack of time	40.1	42.4	37.6
Lack of motivation	30	31.4	28.1
Too tired	21.9	25.7	18
Physical disability	17	16.2	18
Lack of sidewalks	11.7	10.5	13

Source: Guilford County Community Health Assessment Survey, 2016.

#### Barriers to Healthy Eating

	Guilford		
	County	Greensboro	High Point
Barriers to Healthy Eating	Percent	Percent	Percent
Cost of healthy food	24.7	24.8	24.5
Lack of time to prepare			
healthy food	20.4	23.8	16.7
Choosing to eat out			
frequently	19.4	21.4	17.3
Food preferences	16.6	16.7	16.6
Consuming large portions	9.6	14.3	4.5
Don't know how to cook	6.2	4.8	7.8

Source: Guilford County Community Health Assessment Survey, 2016.

#### Overweight/Obesity

Body Mass Index (BMI) is a measure of body fat based on height and weight. If a person's BMI, is greater than 25, they are considered overweight. If it is over 30, they are considered obese. Being overweight or obese is a risk for certain chronic diseases, including coronary heart disease, Type 2 diabetes, cancer, hypertension, stroke and liver disease, as well as other conditions such as sleep apnea, respiratory problems and osteoarthritis [5-13]. An unhealthy diet and a lack of physical activity are both key contributors to rising obesity rates [5-14]. Consuming the proper amount of healthy foods and getting enough exercise is important in reducing the risk of obesity and chronic diseases as well as reducing the burden of health care costs [5-15].

In the community survey, respondents reported their own height and weight and their BMI was calculated based upon that information. More than half or 60.3% of respondents fall in the category of either overweight or obese according to the BMI measurement.

#### Seat Belt Usage

According to the North Carolina's annual seat belt survey conducted each June by Research Triangle Institute, 92.4% of Guilford County drivers and 93.6% of passengers surveyed wore their seat belts, for a combined percentage of 92.5%. Guilford drivers did slightly better than Mecklenburg drivers (89.5%) and similar to drivers in

Percent Eating Five or More Servings of Fruit and Vegetables Daily

Greater Greensboro

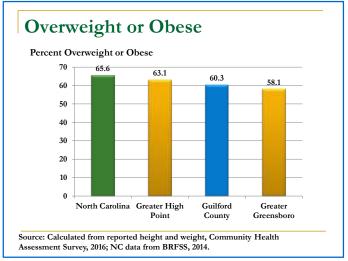
Guilford County

Greater High Point

NC 2020 Objective

29.3

Source: Guilford County Community Health Survey, 2016.



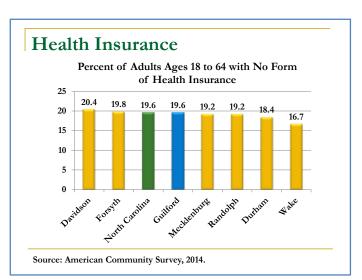
Wake county (93%). Passengers in Guilford County did better than those in Wake County, at 93.6% compared to 88% respectively, but not as well as Mecklenburg passengers (96.6%) [5-16].

#### **Emergency Planning**

It is recommended that all families keep an emergency supply kit with water, non-perishable food, any necessary prescriptions, first aid supplies, a flashlight and batteries, and other basic materials in case of a natural disaster or other emergency. Only 39.7% of community survey respondents reported having a basic emergency supply kit for their family in their home.

#### Clinical Care

According to the County Health Rankings Health Model, access to quality clinical care contributes 20% of the variation in health outcomes. Research suggests that the uninsured are less likely to receive preventive and diagnostic health care services, are more often diagnosed at a later disease stage, tend to receive less treatment for their condition compared to insured individuals, and have higher mortality rates than the insured population [5-17]. Access to effective and timely primary care has the potential to improve the overall quality of care and help reduce costs [5-18] and increases in numbers of primary care physicians has been shown to reduce mortality [5-19].



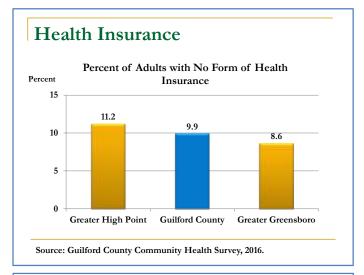
#### Health Insurance

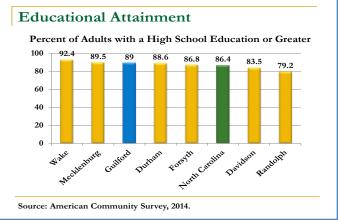
The American Community Survey estimated that about approximately 19.6% of Guilford County adults between the ages of 18 to 64 have no type of health insurance. This percentage is higher than Mecklenburg, Durham, Wake and Randolph counties and the same as the state as a whole. According the community survey, only 89.9% reported having any kind of health care coverage, including health insurance, prepaid plans (including HMOs), government plans such as Medicare or Medicaid, or the Indian Health Service. A higher percentage of High Point area respondents reported having no form of health insurance (11.2%) compared with those in the Greensboro area survey (8.6%).

#### Access to Clinical Care and Barriers to Care

When asked where they go most often when they are sick, 67.4% of respondents to the Community Health Survey reported visiting a doctor's office, 13.1% reported using an urgent care center and 5.1% reported using the emergency room.

Major barriers to health care access were not having health insurance (33.9%), insurance not covering the service (30.5%) and the deductible or copay being too high (23.7%). One out of ten or 10.1% of respondents reported that they or a family member sought care at the





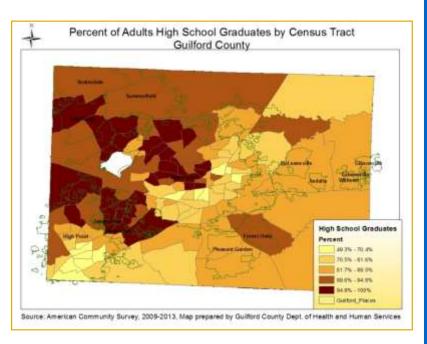
emergency department in the last year because of a lack of insurance or inability to pay for care, while 12.3% reported needing prescription medicines, missing doses or splitting doses in the last year because they could not afford prescriptions.

#### Social and Economic Factors

#### **Educational Attainment**

Guilford County has a higher percentage of the adult population with at least a high school education (89%) than the state as a whole (86.4%) or than other comparison counties with the exception of Wake and Mecklenburg counties.

Within the county however, there is wide variation in educational attainment. The map below shows the percent of adults in each census tract that have a high school diploma or more education, ranging from 49.3%-70.4% (pale yellow) to 94.9%-100% (dark brown). There are still areas of the county where only 49.3%-70.4% of residents have graduated from high school.



Social and economic factors, such as education, income, employment, family and social support account for about 40% of the health outcomes in The University of Wisconsin Population Health Institute model (see Chapter 3 for more explanation). The importance of these factors in relationship to Guilford County's health is illustrated by the data in the figures below. The figures document the effect of education and income, respectively, on life expectancy in Guilford County. There is a clear linear relationship – as education and income rise, so does life expectancy.

#### Life Expectancy and All-Cause Mortality by Education by Census Tract

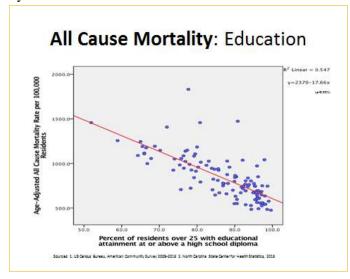
The scatter plot graph to the right, demonstrates the strong relationship between educational attainment and life expectancy. Each blue dot represents the population of one of Guilford County's 118 census tracts. On the X axis is the percent of adults with at least a high school education, ranging from less than 60% to 100%. The Y axis represents Life Expectancy at Birth, ranging from 70 years to almost 89 years. Residents of census tracts with a higher proportion of residents with a high school education tend to have higher life expectancy. Specifically, Guilford County residents who live in a census tract where fewer adults have a high school diploma, say 40%, have an average life expectancy 9 years shorter than residents in a census tract where 70% of adults have a high school diploma.

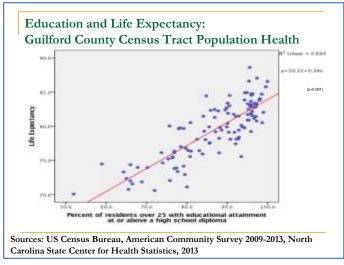
Similarly, education and all-cause mortality are related. For every 10% increase in the percent of residents over 25 who have a high diploma, 176 fewer persons per 100,000 die per year.

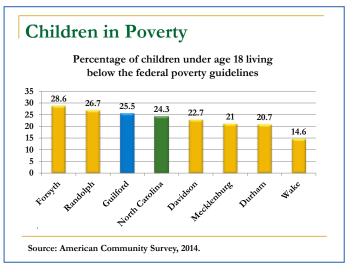
#### Poverty, Income and Employment

According the 2016 Federal Poverty Guidelines, a family of four with an income of \$24,250 or less is defined as living in poverty. Guilford County has a high rate of child poverty, with an estimated 25.5% of children under the age of 18 living below these guidelines. This rate surpasses the percentage of children living in poverty in North Carolina overall and other comparison counties except for Forsyth and Randolph counties. Areas of southeast Greensboro and southern High Point have much higher rates of poverty than other areas of the county.

Guilford County has a higher median family income than the state as whole and neighboring comparison counties, but significantly lower than peer comparison counties. Similarly, per capita income in Guilford is higher than that of the state but lower than peer counties. Median family income and per capita income varies substantially by area of the county where people live, with lower incomes in SE Greensboro and Central and South High Point than other areas of the county.

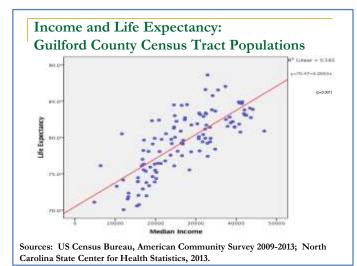


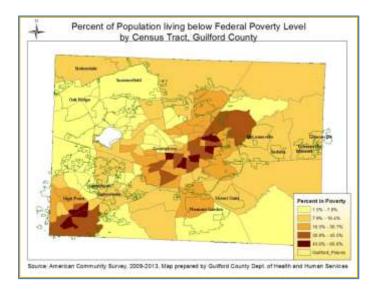




The relationship between income and life expectancy in Guilford County is similar to the one between education and life expectancy. There is a clear linear relationship – as education and income rise, so does life expectancy. Guilford County residents who live in a census tract with a median income of, for example, \$12,000, have a life expectancy that is on average 9 years shorter than residents in a census tract with a median income of \$42,000. Similarly, Guilford County residents who live in a census tract where fewer adults have a high school diploma, say 65%, have an average life expectancy almost 7 years shorter than residents in a census tract where 85% of adults have a high school diploma.

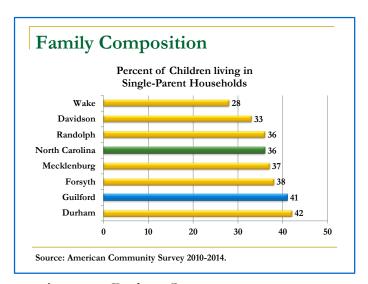
Median Family Income and Per Capita Income by Comparison County						
Median Per Family Capita Income Income						
Randolph	\$49,371	\$21,846				
Davidson	\$54,394	\$22,122				
North Carolina	\$57,380	\$25,774				
Guilford	\$57,683	\$25,616				
Durham	\$64,883	\$29,288				
Mecklenburg	\$72,204	\$33,776				
Forsyth	\$74,553	\$25,486				
Wake	\$84,021	\$34,399				
Source: American Community Survey, 2014						





## **Family Composition**

Adults and children in single-parent households are at risk for adverse health outcomes such as mental health problems (including substance abuse, depression and suicide) and unhealthy behaviors such as smoking and excessive alcohol use [5-20 through 5-22]. Self-reported health has been shown to be worse among lone parents (male and female) than for parents living as couples, even when controlling for socioeconomic characteristics. Mortality risk is also higher among lone parents [5-23]. Children in single-parent households are at greater risk of severe morbidity and all-cause mortality than their peers in two-parent households [5-24, 5-25]. According to the American Community Survey, an estimated 41% of children in Guilford County lived in single parent



households, higher than North Carolina and all comparison counties except Durham County.

Another family composition arrangement involves situations where grandparents assume responsibility for care of grandchildren. In 2014, 46.5% of grandparents were responsible for their grandchildren across the state of North Carolina, Durham presented the highest percentage with 51.9% of grandparents responsible for their grandchildren, Wake had the lowest percentage of 37.7% and Guilford had 44.1%.

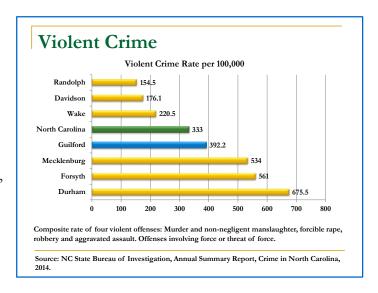
Grandparents Living with Grandchildren under age 18					
Number of Grandparents responsible for Residence Grandphildren Percentage of Grandphildren Responsible for Grandphildren					
North Carolina	98,899	46.5%			
Durham	3,000	51.9			
Forsyth	3,618	45.3			
Guilford	4,065	44.1%			
Mecklenburg	7,227	42.5			
Randolph	1,644	44.3			
Wake	6,201	37.7			

Source: American Community Survey, 2014.

#### Violent Crime and Intentional Injury

High violent crime rates can be a barrier to the pursuit of healthy behaviors such as walking and exercising outdoors. Exposure to crime and violence has been shown to increase stress, which may exacerbate hypertension and other stress-related disorders and may contribute to obesity prevalence. [5-26]

The violent crime rate is a composite rate of violent offenses, including murder, non-negligent manslaughter, forcible rape, robbery and aggravated assault. In 2014, the Guilford County had a rate of 392.2 per 100,000 population, higher than the North Carolina rate of 333 and comparison counties, Randolph, Davidson and Wake.

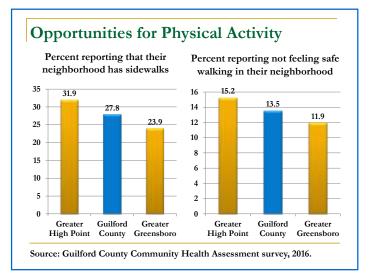


## Physical Environment: Neighborhoods

#### Opportunities for Physical Activity and Recreation

Walking is an important form of leisure time physical activity but lack of safe places to walk can be a barrier to getting enough exercise. In the Community Health Assessment Survey, only 27.8% of respondents stated that the neighborhood in which they live has sidewalks, although 85.6% stated that they felt safe walking in their neighborhood. High Point residents were more likely to have sidewalks in their neighborhoods (31.9% vs. 23.9%). Approximately half (47.1%) of respondents stated that the neighborhood in which they live has easy walking access to public parks and playgrounds.

When asked to identify the best things about their neighborhood, 56.2% stated that it was quiet, 54.2%



stated that they had friendly neighbors and 36.1% stated that it was safe or that there was a lack of crime. When asked to identify the biggest problems in their neighborhoods, respondents often made highly individualized responses (Other -59.3%) or stated that there were no substantial problems in their neighborhood.

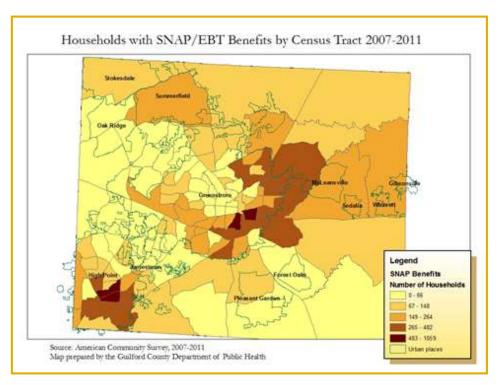
This indicator reports the number per 100,000 population of recreation and fitness facilities as defined by North American Industry Classification System (NAICS) Code 713940. This indicator is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors. The rate of recreation and fitness facilities per 100,000 population is not as great in Guilford County as several comparison counties. However, if proximity to parks and recreation areas are factored in, 95% of county residents are considered to have access to opportunities for physical activity [5-27].

Recreation and Fitness Facilities, Rate (Per 100,000 Population)					
Report Area	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population		
Report Area	3,231,914	463	14.3		
Davidson County, NC	162,878	16	9.82		
Durham County, NC	267,587	37	13.83		
Forsyth County, NC	350,670	47	13.40		
Guilford County, NC	488,406	51	10.44		
Mecklenburg County, NC	919,628	161	17.51		
Randolph County, NC	141,752	15	10.58		
Wake County, NC	900,993	136	15.09		
North Carolina	9,535,483	992	10.4		
United States	312,732,537	30,393	9.7		

Data Source: US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2013. http://www.communitycommons.org/

#### Access to Healthy Food

The Supplemental Nutrition Assistance Program (SNAP) plays a crucial role in providing support for low income families' ability to purchase food. Electronic Benefit Transfer (EBT) cards (which replaced food stamps) are provided to households with incomes below 130 percent of the federal poverty level. For a family of three, the poverty line in federal fiscal year 2014 was \$1,628 a month. For a three-person family 130 percent of the poverty line is \$2,116 a month, or about \$25,400 per year. Seven county census tracts have more than 40% of households receiving SNAP/EBT. It is estimated that over 30.000 households in Guilford County received SNAP benefits in 2014 (ACS, 2014).

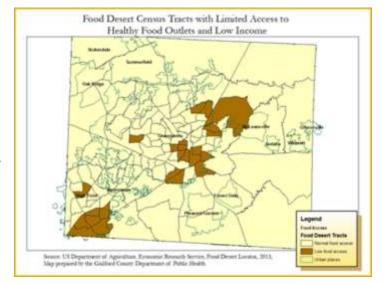


This table reports the number of fast food restaurants per 100,000 population. Fast food restaurants are defined as limited-service establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors. Frequent consumption of food from fast food chain restaurants may contribute to cardiovascular disease, Type 2 diabetes and obesity [5-28].

Access to healthy food is an issue that was first identified in the 2009-2010 Community Health Assessment and further considered during the 2013 assessment. Of Guilford County's 118 populated census tracts, 24 are designated by the US Department of Agriculture as "food deserts." Food deserts are census tracts in which at least 33% of residents live more than a mile from a full-service supermarket and 20% or more of residents live below the federal poverty level. Of all residents, 19% live in food desert census tracts, with over 93,000 individuals and over 36,000 households. While 16.9% of the county residents as a whole below the federal poverty level, 28.8% of food desert residents live below the federal poverty level (American Community Survey, 2007-2011).

Report Area	Number of Establishments	Establishments, Rate per 100,000
Davidson County, NC	94	57.71
Durham County, NC	271	101.28
Forsyth County, NC	276	78.71
Guilford County, NC	424	86.81
Randolph County, NC	77	54.32
Wake County, NC	835	92.68
North Carolina	7,282	76.4
United States	227,486	72.7

Data Source Data Source: US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2013.: US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2013.



#### Housing

#### **Substandard Housing**

The following table reports the number and percentage of owner- and renter-occupied housing units having at least one of the following conditions: 1) lacking complete plumbing facilities, 2) lacking complete kitchen facilities, 3) with 1.01 or more occupants per room, 4) selected monthly owner costs as a percentage of household income greater than 30 percent and 5) gross rent as a percentage of household income greater than 30 percent. Selected conditions provide information in assessing the quality of the housing inventory and its occupants. This data is used to easily identify homes where the quality of living and housing can be considered substandard.

Percent Occupied Housing Units with One or More Substandard Conditions					
Report Area	Total Occupied Housing Units	Occupied Housing Units with One or More Substandard Conditions	Percent Occupied Housing Units with One or More Substandard Conditions		
Davidson County, NC	64,254	18,770	29.21%		
Durham County, NC	113,564	40,068	35.28%		
Forsyth County, NC	141,901	46,175	32.54%		
Guilford County, NC	198,560	69,041	34.77%		
Randolph County, NC	54,254	16,152	29.77%		
Wake County, NC	355,647	107,110	30.12%		
North Carolina	3,742,514	1,219,161	32.58%		
United States	116,211,088	41,333,888	35.57%		

Data Source: US Census Bureau, American Community Survey. 2010-14.

#### Home Purchase Loan Originations

This indicator reports the total number and percentage of home purchase loan originations, grouped by the primary applicant's race and ethnicity. In Guilford County, 17.5% of home mortgage loan originations were by African-American residents, while African-Americans make up 33% of the county population.

Home Purchase Loan Originations by Race/Ethnicity								
Report Area	Non- Hispanic White	Non- Hispanic White	Non- Hispanic Black	Non- Hispanic Black	Non- Hispanic Other	Non- Hispanic Other	Hispanic or Latino	Hispanic or Latino
Davidson County, NC	1,106	90.21%	50	4.08%	18	1.47%	51	4.16%
Durham County, NC	2,413	68.07%	614	17.32%	259	7.31%	240	6.77%
Forsyth County, NC	2,671	80.38%	338	10.17%	83	2.5%	217	6.53%
Guilford County, NC	3,068	71.98%	744	17.46%	237	5.56%	199	4.67%
Randolph County, NC	842	88.91%	22	2.32%	9	0.95%	73	7.71%
Wake County, NC	11,631	75.19%	1,429	9.24%	1,651	10.67%	702	4.54%
North Carolina	81,024	80.5%	9,718	9.66%	4,627	4.6%	4,934	4.9%
United States	2,250,318	77.28%	155,681	5.35%	204,727	7.03%	289,036	9.93%

Home Mortgage Disclosure Act loan files, 2014 http://www.ffiec.gov/hmda/

#### Transportation

#### Households with No Motor Vehicle

This indicator reports the number and percentage of households with no motor vehicle. Guilford's rate of no motor vehicle households is higher than some comparison counties. Households in lower income census tracts in southeast Greensboro and central and south High Point are more likely not to have a motor vehicle.

Percentage of Households with No Motor Vehicle						
Assessment Area	Total Occupied Households	Households with No Motor Vehicle	Percentage of Households with No Motor Vehicle			
Davidson County, NC	64,254	3,611	5.62%			
Durham County, NC	113,564	10,147	8.94%			
Forsyth County, NC	141,901	11,201	7.89%			
Guilford County, NC	198,560	14,830	7.47%			
Mecklenburg County, NC	371,921	25,868	6.96%			
Randolph County, NC	54,254	2,759	5.09%			
Wake County, NC	355,647	16,193	4.55%			
North Carolina	3,742,514	244,937	6.54%			
United States	116,211,088	10,594,153	9.12%			

Data Source: US Census Bureau, American Community Survey. 2010-14.

#### Use of Public Transportation

This indicator reports the percentage of population using public transportation as their primary means of commute to work. Public transportation includes buses or trolley buses, streetcars or trolley cars, subway or elevated rails and ferryboats. Guilford County has a lower percentage of residents using public transit for their commute to work than is the case with comparison counties, Mecklenburg and Durham.

Percent Population Using Public Transit for Commute to Work					
Assessment Area	Total Population Population Using Public Employed Age 16 Population Using Public Transit for Commute to Work		Percent Population Using Public Transit for Commute to Work		
Davidson County, NC	70,127	67	0.1%		
Durham County, NC	136,578	5,198	3.81%		
Forsyth County, NC	158,509	1,685	1.06%		
Guilford County, NC	227,653	3,114	1.37%		
Mecklenburg County, NC	474,551	16,144	3.4%		
Randolph County, NC	60,708	76	0.13%		
Wake County, NC	476,327	5,648	1.19%		
North Carolina	4,280,414	47,796	1.12%		
United States	141,337,152	7,157,671	5.06%		

Data Source: US Census Bureau, American Community Survey. 2010-14.

#### Air Quality - Ozone

This indicator reports the percentage of days per year with Ozone (O3) levels above the National Ambient Air Quality Standard of 75 parts per billion (ppb). Figures are calculated using data collected by monitoring stations and modeled to include census tracts where no monitoring stations exist. This indicator is relevant because poor air quality contributes to respiratory issues and overall poor health. Guilford County had a higher number of days exceeding emissions standards than all comparison counties except for neighboring Davidson County.

Percentage of Days Exceeding Standards, Pop. Adjusted Average							
Assessment Area	Total Population	Average Daily Ambient Ozone Concentration	Number of Days Exceeding Emissions Standards	Percentage of Days Exceeding Standards, Crude Average	Percentage of Days Exceeding Standards, Pop. Adjusted Average		
Davidson County, NC	162,878	42.05	4.59	1.26%	1.27%		
Durham County, NC	267,587	39.11	1.05	0.29%	0.29%		
Forsyth County, NC	350,670	42.09	3.68	1.01%	1.00%		
Guilford County, NC	488,406	41.68	3.94	1.08%	1.08%		
Mecklenburg County,	919,628	41.29	3.76	1.03%	1.04%		
Randolph County, NC	141,752	41.26	2.36	0.65%	0.62%		
Wake County, NC	900,993	38.69	1.72	0.47%	0.50%		
North Carolina	9,535,483	40.68	2.15	0.59%	0.59%		
United States	312,471,327	38.95	4.46	1.22%	1.24%		

Data Source: Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network. 2012. Source geography: Tract

#### Air Quality - Particulate Matter 2.5

Another indicator of air quality measures the amount of particulate matter in the air. This indicator reports the percentage of days with particulate matter 2.5 levels above the National Ambient Air Quality Standard (35 micrograms per cubic meter) per year, calculated using data collected by monitoring stations and modeled to include counties where no monitoring stations occur. Guilford County's average daily ambient particulate matter did not exceed recommended standards.

Percentage of Days Exceeding Standards, Pop. Adjusted Average						
Report Area	Total Population	Average Daily Ambient Particulate Matter 2.5	Percentage of Days Exceeding Standards, Pop. Adjusted Average			
Davidson County, NC	3,231,914	9.61	0%			
Durham County, NC	162,878	9.64	0%			
Forsyth County, NC	267,587	9.22	0%			
Guilford County, NC	350,670	9.34	0%			
Mecklenburg County, NC	488,406	9.31	0%			
Randolph County, NC	919,628	10.23	0%			
Wake County, NC	141,752	9.28	0%			
North Carolina	900,993	9.31	0%			
United States	9,535,483	9.07	0.01%			

Data Source: Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network. 2012. Source geography: Tract; <a href="https://www.CommunityCommons.org">www.CommunityCommons.org</a>

# Promotion of Health & Well Being

A robust health system that includes cooperation and collaboration between public health authorities, hospitals and health systems, public utilities, human service, transportation, economic development and educational organizations is essential to ensure the health and well-being of Guilford County residents. This chapter details the many projects and collaborations that are undertaken by the dedicated professionals, community leaders and advocates who care deeply about the quality of life in Guilford County. This is not a complete list, but rather a snapshot of this moment in time, intended to give readers a sense of the depth and breadth of resources available in Guilford County.

#### **Medical Services**

#### Hospitals and Health Systems

The following acute care hospitals have facilities in Guilford County.

Hospital Name	Affiliation	Number of Beds	Specialty Services
High Point Regional Health (High Point)	UNC Health Care	351	Cancer Center, Heart Center, Women's Center, Joint Replacement Center, Neuroscience Center, Emergency Center, Diabetes Health and Wellness Center, Transitional Care Clinic
Wesley Long Hospital (Greensboro)	Cone Health	175	Cancer Center, Bariatric Center, Orthopedic Surgery Center, Urology Center, Sleep Disorders Center, Emergency Center
Moses Cone Memorial Hospital (Greensboro)	Cone Health	548	Heart and Vascular Center, Neuroscience Center, Orthopedics Center, Stroke Center, Level II Trauma Center, Inpatient Rehabilitation Center
Behavioral Health Hospital (Greensboro)	Cone Health	80	Adult and Adolescent Behavioral Health Units, Substance Abuse Treatment, 24-Hour Face-To- Face Assessment, 24-Hour Helpline
Women's Hospital (Greensboro)	Cone Health	134	Maternity Admissions Unit, Labor and Delivery, Women's Health, Level II and III Neonatal Intensive Care Unit, Family-Centered Maternity Care
Kindred Hospital (Greensboro)	Kindred	124	Long Term Acute Care, Pulmonary and Ventilator Dependent Patients, Dialysis, Sleep Disorder Studies

#### Guilford County Department of Health and Human Services

The Public Health Division of the Guilford County Department of Health and Human Services (GCDHHS), is the first full-time county health department organized in North Carolina and the second oldest in the nation. The mission of Public Health is to, in partnership with the community we serve, protect, promote and enhance the health and well-being of all people and the environment in our county. To achieve this mission and vision of healthy people living in a healthy community, Public Health offers a range of services addressing child health, women's health, environmental health and health promotion/disease prevention. The Health Department offers the following clinical services: Children's Dental Clinic, Family Planning Services, Regional Vasectomy Program, Maternity Care, Centering Pregnancy, Communicable Disease Clinic, Sexually Transmitted Infections Clinic, International Travel Clinic, Home Visiting Services, Women's Health and Refugee Health Services. In 2016, the Health Department opened the JustTEENS Clinic, which offers free services for those age 18 and under and

heavily discounted rates for 19-year-olds. The clinic offers teens their own waiting room, check-in counter and dedicated medical providers. The initiative aims to lower the teen pregnancy rate and decrease racial and ethnic disparities.

#### Access to Primary and Specialty Care

Key community partners work together with hospitals, Public Health and physician practices to assure that residents of our community who may be uninsured or underinsured can access primary and specialty care. The Partnership for Community Care aims to minimize barriers to health care by helping primary care providers better utilize evidence-based guidelines and reduce Medicaid expenses by providing care management services to patients, reinforcing their treatment plans to manage chronic conditions. Programs provided are Transitional Care Management, Chronic disease Tele-monitoring, Behavioral Health Integration, Project Lazarus (opioid drug abuse prevention), Pregnancy Medical Home and the Uninsured Program. Guilford Adult Health manages the Guilford Community Care Network ("Orange Card") and Guilford Adult Dental Access Program, helping residents access specialty care and avoid preventable hospitalizations and emergency department visits. This program is available for patients who are at/below 200% Federal Poverty Level (FPL). Guilford has many clinical sites designed to serve low income patients. Triad Adult and Pediatric Medicine is a federally-qualified health center that offers affordable care at multiple sites to insured and uninsured patients. The Community Clinic of High Point, Mustard Seed Community Health, Cone Health's Congregational Nursing Program, Cone Center for Children, Cone Health Community Health & Wellness Center, the Evans-Blount Community Health Center and the Sickle Cell Medical Center are all dedicated to offering access to patients who may otherwise face financial difficulties in finding care.

#### **Accountable Care Organizations**

Accountable Care Organizations (ACO) seek to reduce health care expenditures while improving quality of care. ACOs are networks of health care providers that come together voluntarily to provide coordinated care for their patients. In Guilford County, there are two ACOs: Triad Healthcare Network (THN) and Cornerstone Health Enablement Strategic Solutions (CHESS). THN is located in Greensboro and is a collaboration between Cone Health and community providers in five counties. CHESS is based in High Point and owned by Wake Forest Baptist Health, Cornerstone Healthcare and LabCorp. Both THN and CHESS participate in the Medicare Shared Savings Programs, which offers financial incentives to ACOs that meet 33 quality metrics while reducing overall costs. They were both among 18 ACOs selected from across the country in 2016 to participate in the "Next Generation ACO" program. Both ACOs aim to create a health system focused on effective chronic disease management, injury prevention and elimination of preventable hospitalizations and Emergency Department use.

# Local Philanthropy

Many philanthropic organizations in Guilford County support goals of health and social well-being. For example, the Cemala Foundation and Joseph M. Bryan Foundation are supporting the *Ready for School*, *Ready for Life* initiative to invest in an early childhood system of care. Two foundations in our community, Cone Health Foundation and The Foundation for a Healthy High Point, were formed as the result of hospital mergers, and are devoted specifically to improving health outcomes.

The Foundation for a Healthy High Point was established in 2013 as a result of the merger of High Point Regional Health and UNC Health Care. This foundation supports forward-thinking organizations, collaboration within the community and initiatives that improve the long-term health of the High Point community. The Foundation commissioned white papers on teen pregnancy prevention/early intervention and behavioral health in High Point, available in Appendix N.

Cone Health Foundation was formed in 1997 and focuses its grant making on four priorities: Access to Health Care, Adolescent Pregnancy Prevention, HIV and Substance Abuse and Mental Health. They have invested over \$77 million in the Greater Greensboro area in the past 18 years. In 2015, they began implementation of a five-year strategic plan focused on evidence-based interventions and depth of impact within their four focus areas. Cone Health Foundation's commissioned study on the costs of not expanding Medicaid in NC is found in Appendix G.

#### Health Promotion and Preventive Health

Effective health promotion and prevention is an interactive process that can only be successful when policies, resources, education and knowledge culminate with an individual making a personal choice to change from an unhealthy to a healthy behavior. Determining the success of resources and programs available is gauged by using benchmarks such as those provided by Healthy People 2020. Opportunities for health promotion and preventive health range from public policy development, addressing community and/or individual social determinants of health, community screening events, group education activities, online assessment tools, coalition development to individual counseling with a health care provider.

An example from the 2013 Chronic Disease Prevention action plan demonstrates this approach. By increasing access to healthy food through a mobile farmer's market as well as number of markets/vendors that accept EBT/SNAP/WIC, access to healthy food increases. Strategies designed to increase access to healthy food are changes to the physical environment, but by providing fruit and veggie prescriptions and "veggie bucks" to clients as they access health care, we encourage behavior change to purchase and consume healthier foods impacting nutrition and obesity. This also benefits the local farmers and the local food system and economy overall. Programs that increase access to healthy food outlets can increase community cohesion and may reduce violent crime. If expectant mothers use their WIC or other benefits to purchase healthy foods at farmer's markets or corner stores and increase their purchasing power through incentives, they eat better, as do their families. Better nutrition supports better birth outcomes.

#### **Community Coalitions**

Much of our work in Guilford County takes place through collaborative networks of agencies and individuals who share resources, information and accountability. Master of Public Health students in UNC Greensboro's Health Assessment class with Kay Lovelace, Ph.D. conducted interviews and completed resource inventories to summarize existing coalitions organized around the following areas: sexual health, older adults, immigrant/refugee populations, substance abuse, homelessness, mental health and early childhood development. For more information, please see Appendix O: Health Resources Inventory.

Guilford County also has a rich network of nonprofit organizations and faith-based entities that provide services to meet a wide range of needs. This includes many who are supported by United Way of Greater Greensboro and United Way of Greater High Point. United Way of Greater Greensboro is focused on breaking the cycle of poverty for families in Greater Greensboro. United Way of Greater Greensboro works with a network of more than 28 partner agencies to invest in over 65 programs and focused initiatives that create the greatest impact possible in our community. These partners are dedicated to the well-being of individuals and families, focusing on areas that advance their ability to succeed in life. United Way of Greater High Point supports 28 agencies in the High Point, Archdale, Trinity and Jamestown communities.

United Ways have a long-standing commitment to funding information and referral services in their communities. As a result of this commitment came NC 2-1-1, an innovative, one-stop shop connecting citizens to a network of over 18,000 services and resources right in their own community. NC 2-1-1 provides a comprehensive listing of available health and human service resources, including those offering access to affordable high quality child care/after-school care, counseling and support groups, health services, basic needs such as food, clothing and housing, services for seniors and the disabled. The service is free, confidential and available all day, every day in any language. Trained information and referral specialists are available to assist via phone by dialing 2-1-1 and online by visiting <a href="https://www.nc211.org">www.nc211.org</a>. In addition, Guilford Nonprofit Consortium serves as a collaborative of nonprofit organizations, large and small, in Guilford County, that fosters mutual assistance and support.

#### **Cancer Screening and Education**

Cancer is the leading cause of mortality in Guilford County. Health promotion efforts have been primarily focused on education and promotion of appropriate screening. Cone Health, High Point Regional Health and other community partners provide regular education and screening events in the community for skin cancer, prostate cancer, colon cancer, cervical cancer and breast cancer education.

#### **Breast Cancer**

Breast cancer is the most commonly diagnosed cancer in women. One out of every eight women will be diagnosed with breast cancer in her lifetime. High Point Regional Health's Hayworth Cancer Center and Wesley Long Hospital's Cancer Center provides free breast and cervical cancer screening and follow up services to eligible women. In addition to the free screening, a Breast Navigator helps women to assess risks of developing cancer or to assist with access to treatment if a cancer is diagnosed. The 2013 mammography screening rate for Medicare patients in Guilford County is 68% [6-1].

#### **Heart Disease**

Heart disease mortality has seen a steady decline in Guilford County; however, it remains our second leading cause of mortality. Primary efforts to decrease heart disease have been focused on education, screening events and the promotion of healthy lifestyle. Tobacco use, obesity, poor nutrition and the lack of physical activity are major contributors to this problem. Interventions in these areas have helped Guilford County to decrease heart disease mortality.

Heart Strides Cardiac and Pulmonary Rehabilitation Program of High Point Regional's Carolina Regional Heart Center, and the Heart and Vascular Center at Moses Cone Memorial Hospital are both designed to restore health and function to patients with heart or lung disease. Participants work toward a healthy recovery supervised by teams of skilled professionals. Through exercise, nutrition, counseling, education and behavior modification, cardiac and pulmonary patients in our community are making great strides toward an independent and healthy lifestyle.

#### **Diabetes**

UNC Regional Physicians Diabetes Health and Wellness Center in High Point and Cone Health's Nutrition and Diabetes Management Center in Greensboro provide diabetes education and counseling to groups and individuals. Services for people with diabetes are provided at numerous locations including the Community Clinic of High Point, physician practices, the YMCA's National Diabetes Prevention Program, Humana's Guidance Center in Greensboro, and by many local employers. While many of these programs are available free-of-charge, those with fees may also offer financial assistance. Screening and educational events are offered in Greensboro and High Point on a regular basis.

#### **Physical Activity**

Physical activity in combination with a healthy diet are the cornerstones to good health. Guilford County residents have access to 50 miles of trails and 125 neighborhood parks. The 2016 Guilford County Community Health Survey (GCCHS) demonstrates that many local residents have access to exercise opportunities, but face other barriers to participating in regular physical activity such as safety, lack of time and lack of motivation.

High Point Regional Health offers the Millis Regional Health Education Center, a health education facility specifically designed to give children a hands-on approach to health education. Millis Center is devoted to helping school students, church groups, local organizations and individuals learn about the human body and how to keep themselves healthy. The exhibits available within the center, such as a bicycling skeleton and a transparent anatomical mannequin, help create a healthier future for area youth.

Cone Health has developed a website (<a href="http://www.conehealth.com/wellness/10-habits-of-highly-healthy-people/">http://www.conehealth.com/wellness/10-habits-of-highly-healthy-people/</a>) with local resources to support the ten lifestyle habits that lead to long and healthy lives, including physical activity and nutrition as well as sleep habits, healthy relationships and coping with stress. This resource is updated with new information and is ever-evolving to meet the needs of our community, enabling residents to access local resources and stay healthy.

#### Nutrition

Though Guilford County offers good access to opportunities for physical activity, the county does not score well in terms of access to healthy food, scoring below the state and all neighboring and peer counties except for Forsyth County. Guilford County has 24 census tracts that are listed by the US Department of Agriculture as food deserts (see Chapter 5 for Guilford County food desert map). There is strong evidence that residing in a food desert is

correlated with a high prevalence of overweight, obesity and premature death. Supermarkets traditionally provide healthier options than convenience stores or smaller grocery stores.

In 2014, the GCDHHS Division of Public Health and community partners began the Mobile Oasis Farmers Market (MOFM) to offer healthy, affordable fruits and vegetables to those who have SNAP/EBT benefits and others living in county food desert areas. In 2015, the MOFM expanded from two locations in 2014 to six locations weekly from May to November. The Market, which began at GCDHHS on Maple Street and in the historic Warnersville neighborhood, has expanded to Greensboro's Hayes Taylor YMCA and Cone Health as well as Morehead Recreation Center and GCDHHS in High Point.

Community partners are instrumental to this project and in 2015 included: Vision Tree Community Development Corporation (CDC), East Market Street Development Corporation, UNC Greensboro's Department of Communications, the City of Greensboro Parks and Recreation Department and numerous volunteers and interns. In 2015, the Market sold \$14,866 worth of fresh produce to 2,751 customers at six sites in Greensboro and High Point. The mobile market is scheduled to continue in 2016. National Association of Counties (NACo) selected GCDHHS, Division of Public Health's MOFM for an Achievement Award in Health. Multiple partners support this project, a strong example of community collaboration:

- With support from USDA's Food Insecurity Nutrition Incentive (FINI) Grant, MOFM offers two types of
  incentives to increase consumption of fruits and vegetables by SNAP/EBT participants. These include a
  Double Bucks program that doubles the value of SNAP purchases up to \$20, and a customer rewards program
  that rewards repeat visits to the market through vouchers for produce or other incentives. Cone Health
  Foundation supports a Double Bucks program at the Greensboro Curb Market.
- The Warnersville Urban Farm provides produce to the MOFM. The Warnersville Urban Farm is located on land provided by Prince of Peace Lutheran Church within a food desert area.
- With the addition of Cone Health as a MOFM location, local safety net health providers began issuing
  Prescriptions for Produce for their patients. This Prescriptions for Produce program offers patients a coupon
  for \$5 worth of produce at any of the MOFM locations to encourage hospital patients to eat more fresh fruits
  and vegetables. In the first two months of implementation in late 2015, \$580 worth of coupons were redeemed.

Greater High Point Food Alliance (GHPFA) is working to promote access to nutritious and healthy food in High Point and surrounding communities. GHPFA is a group of concerned citizens from business, academia, non-profits, community activists and people who have experienced food insecurity. As a result of their 2015 Food Summit, 90 day plans and one-year goals were set and every single one of the 32 goals and action items were achieved. Six work teams (Food Access, Urban Agriculture, Food Education, Policy, Research and Advocacy, Senior Task Force and International Task Force) are currently involved in the Burns Hill neighborhood, the Washington Street neighborhood and West End neighborhood.

#### Maternal Health

The Guilford County Coalition on Infant Mortality, a collaborative effort to increase public awareness of infant mortality and to develop strategies to provide for healthier birth outcomes, is helping to address this disparity. The Adopt-A-Mom Program is sponsored by the Coalition on Infant Mortality and coordinates prenatal care for low-to-medium risk pregnant women who are not eligible for Medicaid, do not have private insurance to cover the cost of care and cannot afford to pay out-of-pocket for care. Adopt-a-Mom serves between 200 and 400 mothers annually. The Community Action for Healthy Babies (CAHB) consortium brings together a number of local service providers, working together to analyze prenatal care utilization, resource mapping, and breastfeeding promotion community-wide. In May 2016, CAHB worked with Greensboro Area Health Education Center (AHEC) to offer a training on perinatal mood disorders, attended by over 120 medical professionals in our community.

Parents-to-be often have many questions and concerns. Both High Point Regional Health and Women's Hospital offer educational events and classes to expectant parents, postpartum support and lactation services. High Point Regional Health's Women's Health Navigator Program is a special one-on-one program for mom-to-be and her family. The program staff acts as a patient/family guide and advocate during the journey through pregnancy, delivery and postpartum. In 2015, Women's Hospital's earned the Baby-Friendly Hospital designation, a global

program sponsored by the World Health Organization and the United Nations Children's Fund to encourage breastfeeding, one of the most protective health measures for infants and mothers.

#### Substance Abuse (Alcohol, Tobacco, Drugs)

Substance abuse refers to a set of related conditions associated with the consumption of mind- and behavioral altering substances that have negative behavioral and health outcomes. Both social attitudes and the political and legal responses to the consumption of alcohol and illicit drugs make substance abuse one of the most complex public health issues. There is now a deeper understanding of substance abuse as a disorder that develops in adolescence and, for some individuals, will develop into a chronic illness that will require lifelong monitoring and care.

Cigarette smoking is the leading cause of preventable death in the United States. However, nearly one in six adults still continue to smoke. Guilford County participates in the Smoke-free Rental Housing Through Policy Change project. As public awareness about the dangers of secondhand smoke increases, more tenants in multi-unit housing are asking for protection from secondhand smoke, which drifts easily from other units and common areas. Through policy change, management can provide protection to tenants and also reduce fire risk and turnover costs. Secondhand smoke in the home is a special risk to those with asthma, heart disease and other respiratory issues.

Heroin overdose has consistently been trending upward in Guilford County. NC Senate bill 20 deregulated the medication Naloxone which allows first responders access to the medication in the field where it is saving lives. Alcohol and Drug Services of Guilford County is working to distribute these kits more widely in the community.

There are over 16 service providers offering substance abuse treatment services for adults in Guilford County. Substance abuse and mental health has been identified as a key funding priority for Cone Health Foundation. This foundation has invested funds to increase the capacity of six substance abuse and mental health providers. This will allow providers to effectively address the needs of individuals diagnosed with co-occurring substance abuse and mental health disorders. The foundation also plans to invest in the training of more substance abuse and mental health providers and invest in outreach, screening and referral services for the behavioral health treatment of hard-to-reach populations, such as immigrants, refugees and the homeless.

#### Behavioral Health

Mental health disorders are common in the United States and have significant financial and social impact. Lost earnings, hospitalizations, chronic medical conditions, dropping out of school, homelessness and suicide are just a few of the ways mental illness impacts the lives of individuals in our community.

In Guilford County the Sandhills Center (SHC) is the primary mental health Managed Care Organization (MCO). Sandhills is responsible for managing Medicaid and other public funds to provide access to high quality mental health care for Medicaid beneficiaries and the uninsured. SHC responsible for 153,5341 covered lives in Anson, Guilford, Harnett, Hoke, Lee, Montgomery, Moore, Randolph and Richmond Counties. According to their Community Needs/GAP Assessment for FY 2014-2015, major initiatives are: Transition to Community Living, Crisis Solutions Initiative Integration of Physical and Behavioral Health Care (See Appendix P).

High Point Regional Health's Behavioral Health and Cone Behavioral Health Hospital provide behavioral health assessment, inpatient and outpatient treatment programs for chemical dependency and psychiatric conditions. In addition, Cone Health provides a 24 hour Helpline (336-832-9700 or 800-711-2635) provides access to a trained professional 24 hours a day, seven days a week.

The High Point and Greensboro Mental Health Associations and are active partners in the development of outpatient programs to assist individuals and patients who are coping with mental illness on a daily basis. The newest program offered by the Mental Health Association is a day activity program for mentally ill in High Point.

#### Sexually Transmitted Infections (STIs)

**Testing and Counseling:** Health education staff with GCDHHS Public Health Division partners with Nia Community Action Center, Piedmont Health Services and Sickle Cell Agency and Triad Health Project to provide a network of Integrated Targeted Testing Services (ITTS). During the 2015 calendar year, public health staff and partners provided HIV & syphilis screenings to 3,395 residents as well as 2,254 gonorrhea and chlamydia screenings. During that same time period, 1,874 HIV & syphilis screenings were implemented through expanded testing in the jails. In addition, GCDHHS Public Health clinics in Greensboro and High Point provided 12,057 STI screenings.

The ITTS network also implements evidence-based individual and group risk reduction education in Guilford County such as VOICES (promoting condom use and safer sex), SISTA (group-level intervention for African American women), CLEAR: Choosing Life: Empowerment! Action! Results! (therapeutic interventions using cognitive behavioral therapy to promote healthy behaviors) and Comprehensive Risk Counseling and Services (CRCS). When possible, testing and counseling are also offered with risk reduction education.

Triad Health Project provides emotional and practical support to individuals living with HIV/AIDS, to their loved ones and to those at risk for HIV/AIDS. In addition, this group provides free HIV testing to anyone in the community once a week. THP is a lead agency in the region's new strategy to reduce stigma, promote widespread HIV testing and improve sustained viral suppression among people living with HIV.

Cone Health Regional Center for Infectious Diseases is located in Greensboro and focuses on infectious disease treatment, including effective HIV treatment. Patients treated through this center achieve a suppressed viral load, a lower level of HIV in the blood, that is lower when compared to the national average.

#### **Unintentional Injury**

Accidents are the number three cause of death in the United States and also account for many trips to the Emergency Department. SAFEGuilford is a local injury prevention coalition that brings together health and safety experts, businesses, government departments, community-based organizations and volunteers to address accidental injury. The main priorities of this coalition include bike safety, child passenger safety and pedestrian safety.

#### Education

The links between education, income and health outcomes are clear. By maximizing an individual's access to education, there are more options for employment and better health outcomes, including a longer life expectancy. Ready for School, Ready for Life employs one singular goal: get children ready to enter into kindergarten. However, more than one in three children in Guilford County who enter kindergarten are not literacy-ready. Ready for School, Ready for Life built a framework for success which includes encouraging pre-natal care, healthy eating and living, and collective community action.

Say Yes to Education began in Guilford County to build local endowments that provide tuition scholarships so that public school graduates can complete a postsecondary education. Higher educational attainment results in better health outcomes. In addition, this program builds community supports to assist student learning. This includes after-school programs, summer programs, tutoring, legal assistance and health service (See Appendix Q: Guilford County Schools Annual Report, 2015).

# Appendix A – Guilford Assessment Team Members

Mark Banks, PA High Point Regional Health

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# Appendix B – Piedmont Health Counts!



This year the Guilford County Community Health Needs Assessment (CHNA) survey and plans team have been granted the approval to partner in the development of a local county and state data standalone website platform with Healthy Communities Institute.

The platform, which would be internet assessable, via <a href="www.piedmonthealthcounts.org">www.piedmonthealthcounts.org</a>, displays ongoing data with community and population health initiatives for Guilford County. This mapping tool facilitates pinpointing at risk populations and areas of readily identifiable intervention opportunities. The site allows filtering for target resource alignment and monitoring results of action plans. This evidence based program addresses chronic disease self-management and tracks the outcomes to show improved health and cost savings. Using this integrated secondary data analysis with community input from door-to-door surveys and four community meetings the platform provides widely available information for change to all involved collaboration organizations and the general public.

Some of the valuable feature of the platform are over 100 Health and Life Indicators, customizable local content, Healthy People 2020 Trackers, performance trackers, a database of over 2,000 proven programs, a collaboration center to maximize partnerships and a report assistant to quickly present data.

The platform, which provides a dashboard of indicators, is designed to give stakeholders in a community access to high-quality community development tools, that function together to help improve the health and environmental sustainability of the community.

# Appendix C –Demographics

This appendix provides additional demographics data for Guilford County to further describe its population. For select indicators, comparison data for North Carolina and select comparison counties are included. Comparison counties included peer counties (Durham, Forsyth, Mecklenburg, Wake) and other nearby counties (Davidson and Randolph).

#### **Population Trends**

- The estimated 2014 population for Guilford County was 512,119, as compared to 488,406 in 2010.
- From 2010 to 2014, the state as a whole and Forsyth, Guilford, Randolph and Davidson counties experienced low population growth (below 5%); with Randolph and Davidson counties presenting the lowest percentage of 0.7% (less than 1%).

# Comparison of Population of North Carolina and CHNA Counties, 2010 and 2014 Estimate

Residence	2010	2014 estimates	Percentage Change
North Carolina	9,535,483	9,943,964	4.3%
Davidson	162,878	164,072	0.7%
Durham	267,587	294,460	10.0%
Forsyth	350,670	365,298	4.2%
Guilford	488,406	512,119	4.9%
Mecklenburg	919,628	1,012,539	10.1%
Randolph	141,752	142,778	0.7%
Wake	900,993	998,691	10.8%

Source: American Community Survey, U.S. Census Bureau 2010 and 2014 estimates.

#### **Guilford County Municipalities Comparison**

This table provides a comparison of the population change for the select Guilford County cities and towns between 2010 and 2014.

• Guilford County's estimated percentage growth from 2010 to 2014 is an estimated 4.86%, with a higher percentage growth in the more rural areas of the county.

#### Guilford County Municipalities, 2010 and 2014 Population

Guilford County Municipalities	2010	2014 estimates	Percentage Growth
Guilford County	488, 406	512,119	4.86%
Gibsonville	6,410	6,697	4.48%
Greensboro	269,666	276,225	2.43%
High Point (part)	104,371	106,797	2.32%
Jamestown	3,382	3,549	4.94%
Oak Ridge	6,185	6,604	6.77%
Pleasant Garden	4,489	4,683	4.32%
Sedalia	623	652	4.65%
Stokesdale	5,047	5,289	4.79%
Summerfield	10,232	10,753	5.09%
Whitsett	590	618	4.75%

Median Age and Gender Distribution of North Carolina and CHNA Counties

		1	Male	]	Female
Residence	Median Age	Number	Percentage	Number	Percentage
North Carolina	37.8	4,750,366	48.7%	5,000,039	51.3%
Davidson	41.9	80,586	49.1%	83,486	50.90%
Durham	34.6	140,545	47.7%	153,915	52.3%
Forsyth	37.9	173,166	47.4%	192,132	52.6%
Guilford	36.8	238,318	47.6%	262,581	52.4%
Mecklenburg	34.7	486,970	48.1%	525,569	51.9%
Randolph	40.8	69,935	49.0%	72,843	51.00%
Wake	35.5	486,289	48.7%	512,402	51.3%

Source: American Community Survey, U.S. Census Bureau, 2014 estimates.

- Durham and Mecklenburg counties have the youngest median ages, with estimates median age of 34.6 and 34.7 respectively compared to the whole state of North Carolina with a median age of 37.8. Guilford County remains below the state median estimate at 36.8.
- The gender distribution remains similar in North Carolina, Guilford County and surrounding counties, with slightly more females than males.

#### Race and Ethnicity

	Raci	al Dis	stribution o	f No	rth Caroli	na a	nd CHN	A Co	ounties,	2014	Estima	ites			
Residence	Residence White		White Black/Africar American			American Indian/ Alaska Native		Asian		Native Hawaiian/ Other Pacific Islander		Some Other Race		Two or More Races	
	#	0/0	#	0/0	#	%	#	%	#	%	#	0/0	#	%	
North Carolina	6,869,207	69.1	2,154,387	21.7	111,276	1.1	246,721	2.5	5,768	0.1	322,251	3.2	234,354	2.4	
Davidson	140,453	85.6	14,506	8.8	545	0.3	1,949	1.2	129	0.1	3,511	2.1	2,979	1.8	
Durham	149,221	50.7	111,413	37.8	295	0.1	12,479	4.2	226	0.1	12,595	4.3	8,231	2.8	
Forsyth	241,129	66.0	94,255	25.8	675	0.2	7,587	2.1	0	0.0	15,915	4.4	5,737	1.6	
Guilford	291,168	56.9	171,523	33.5	2,187	0.4	22,070	4.3	206	0.0	14,806	2.9	10,159	2.0	
Mecklenburg	565,184	55.8	310,461	30.7	2,631	0.3	53,170	5.3	412	0.0	49,181	4.9	31,500	3.1	
Randolph	124,554	87.2	8,662	6.1	666	0.5	1,470	1.0	47	0.0	4,877	3.4	2,502	1.8	
Wake	667,782	66.9	203,155	20.3	3,480	0.3	62,548	6.3	515	0.1	32,778	3.3	28,433	2.8	

- For the North Carolina population, Whites made up 69.1%. Regionally, there was variability across counties, with highest percentages of Whites in Randolph (87.2%) and Davidson (85.6%); and with the lowest percentages in Durham (50.7%), Mecklenburg (55.8%) and Guilford (56.9%).
- Durham is the county with the highest population identified as Black/African American (37.8%); Randolph had the lowest percentage at 6.1%.
- Wake, Mecklenburg and Guilford are the counties with the highest population identified as Asian above the North Carolina percentage for 6.3, 6.5 and 4.3 respectively.

#### Hispanic Distribution

Residence	Number	Percentage		
North Carolina	890,601	9.00%		
Davidson	11,152	6.8%		
Durham	39,332	13.4%		
Forsyth	46,066	12.6%		
Guilford	39,139	7.6%		
Mecklenburg	128,473	12.7%		
Randolph	15,908	11.10%		
Wake	99,706	10.0%		

Source: American Community Survey, U.S. Census Bureau, 2014 estimates.

- Based on the Census Bureau population estimates, 9% of North Carolina population identified as Hispanic.
- There was some Hispanic variability across CHNA counties, with percentages highest in Durham County (13.4%), Mecklenburg (12.7%) and Forsyth (12.6%); and lowest in Davidson (6.8%) and Guilford (7.6%).

#### Household and families

- North Carolina and Guilford present similar average household sizes respectively 2.56 and 2.49.
- There were an estimated 3,790,620 total households in North Carolina according to 2010-2014 estimates, with about 65.7% identified as family households.

Residence	Total Number of Households	Average Household Size			
North Carolina	3,790,620	2.56			
Guilford	198,860	2.49			

Source: American Community Survey, U.S. Census Bureau, 2014 estimates.

# Households in North Carolina and Guilford County

	All Far	nily	Other							
	Househ	olds	Households							
Residence	Number	0/0	Number	%						
North	2 402 048	65 7%	1,298,572	34.3%						
Carolina	2,472,040	03.770	1,270,372	34.370						
Guilford	121,274	61.0%	77,586	39.0%						

- Guilford County had a slightly lower proportion of family households at 61%.
- Of the family households in Guilford County, the majority were married couples (41.4%), followed by householders living alone (33.1%); and male householders with no wife represent (4.5%).

Types of Households with Children under Age 18 in North Carolina and Guilford County

Residence	Total			rried uple	Hous no	Male seholder, o wife resent	Female householder, no husband present	
	#	0/0	#	0/0	#	0/0	#	0/0
North Carolina	1,093,337	29.8%	725,918	19.8%	79,734	2.2%	287,685	7.9%
Guilford	56,645	29.5%	35,178	18.3%	4,764	2.5%	16,703	8.7%

Source: American Community Survey, U.S. Census Bureau, 2014 estimates.

• There were an estimated 1,093,337 households with their own children under the age of 18 in North Carolina according to 2010-2014 estimates, or about 30% of all households. Guilford County had a similar breakdown. Source: American Community Survey, U.S. Census Bureau, 2014 estimates.

	Households, specified											
Residence	Married (	Couple	Male Householder (no wife present)		Female Householder (no husband present)		Householder living alone		65 years and older			
	Number	0/0	Number	%	Number	0/0	Number	%	Number	0/0		
North Carolina	1,803,874	47.6%	171,445	4.5%	516,729	13.6%	1,077,581	28.4%	388,901	10.3%		
Guilford	82,320	41.4%	8,939	4.5%	30,015	15.1%	65,867	33.1%	22,535	11.3%		

Population Estimates (5 years of age and older) of those who Speak a Language Other than English at Home, North Carolina and CHNA Counties

Residence	Language Other Than English at Home		Spanish		Other Indo- European Languages		Asian & Pacific Islander Languages		Other Languages	
	#	0/0	#	0/0	#	%	#	0/0	#	0/0
North Carolina	11,047,271	11.2%	695,405	7.0%	156,886	1.7%	140,931	1.5%	54,049	0.6%
Davidson	13,035	8.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Durham	50,937	18.6%	32,475	11.9%	6,089	2.2%	8,835	3.2%	3,538	1.3%
Forsyth	51,225	15.0%	19,300	5.6%	5,149	1.5%	5,222	1.5%	1,082	0.3%
Guilford	60,478	12.6%	30,523	6.3%	12,317	2.6%	11,770	2.4%	5,868	1.2%
Mecklenburg	176,545	18.7%	102,805	10.9%	35,714	3.8%	27,080	2.9%	10,946	1.2%
Randolph	14,117	10.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wake	154,665	16.60%	77,542	8.3%	31,827	3.4%	30,912	3.3%	14,384	1.5%

Source: American Community Survey, U.S. Census Bureau, 2014 estimates.

- Approximately 11% of the North Carolina population speaks a language other than English at home; Durham, Forsyth, Mecklenburg and Wake counties exceeded this state trend.
- Approximately 8.4% and 10.5% of the population in Davidson and Randolph counties speak a language other than English at home.
- Of those over age 5 living in Guilford County in 2014, an estimated 13% spoke a language other than English at home.
- Of those speaking a language other than English at home in Guilford County, 6% spoke Spanish, 3% spoke another Indo-European language, 2% spoke an Asian and Pacific Islander language and about 1% spoke some other language.

#### Civilian Veterans in North Carolina

 The estimate percentages of civilian veterans for the state of North Carolina was slightly higher than for Guilford County.

	Civilian Veterans					
Residence	Number	%				
North Carolina	743,377	10.5 %				
Guilford	33,758	9.1%				

# Appendix D - Guilford County Community Health Needs Assessment Survey 2016





Guilford Cou







of Greater Greensboro









# Acknowledgements

Technical support for the 2016 Guilford County Community Health Needs Assessment Survey was provided by Matt Simon and John Wallace of the North Carolina Institute for Public Health of the Gillings School of Global Public Health at the University of North Carolina at Chapel Hill. In addition to assistance with data collection, UNC-Chapel Hill graduate student Rachael Billock provided valuable support with survey analysis and preparation of this report.

THE NORTH CAROLINA Institute for Public Health



Thank you to staff from the Guilford County Department of Health and Human Services, community volunteers and partner agencies who helped with the survey process.

A special thank you goes to the residents of Guilford County who agreed to participate in the Community Health Assessment Survey.





## Introduction

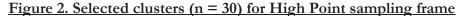
Every three years GCHC collaborate with community partners to conduct a comprehensive Community Health Assessment (CHA). The CHA is a process that involves identification, collection, analysis and dissemination of data and information on health status, risk factors and access to care, as well as community assets and resources, in order to identify priority health concerns and to develop community action plans to address these concerns. As part of this overall CHA process, Guilford County assessment partners collaborated with staff of the NC Institute of Public Health and community volunteers to conduct an in-person survey of Guilford County residents. The survey, conducted in March and April, 2016, obtained information from a random sample of county residents on health status, health behaviors, opinions and attitudes and neighborhood needs.

# Survey Design and Sampling Methods

The North Carolina Institute for Public Health (NCIPH) assisted with the development of a two-stage cluster sampling design based on the Centers for Disease Control and Prevention's Community Assessment for Public Health Emergency Response (CASPER) sampling methodology (CDC). The CASPER survey methodology was developed by the CDC for rapid needs assessments after natural disasters and was further developed by the NC Division of Public Health both for rapid assessment but also for community health assessment (Simon and Decosimo, 2014). Sampling was carried out for the Greensboro and High Point regions with each serving as a separate sampling frame. The two sampling frames were combined for the Guilford County analysis. In each region, 30 census blocks were randomly selected from all known census blocks in U.S. Census Bureau data to serve as clusters (Figures 1 and 2). The probability of a census block being chosen to serve as a cluster was proportional to the number of housing units in the census block.

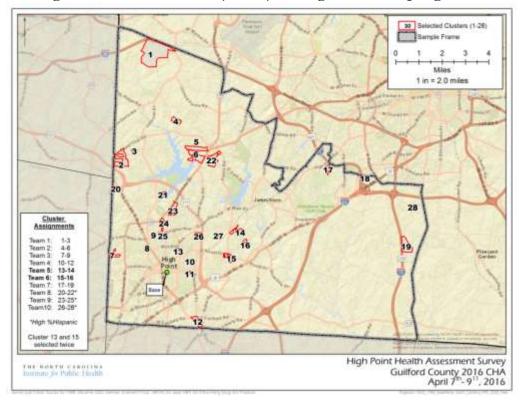
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Figure 1. Selected clusters (n = 30) for Greensboro sampling frame



Guilford County 2016 CHA March 31<sup>st</sup>-April 2<sup>nd</sup>, 2016

THE WORTH CARDINA COMMON SE PRINCE PLANT



In the second stage of CASPER sampling, seven housing units were randomly selected for interviews in each cluster (Figure 3). However, interview teams utilized discretion to obtain the required seven interviews in each cluster. If residents at a selected housing unit were not available for interview or refused interview, interview teams selected a neighboring housing unit for interview. In small clusters with very few housing units, every household may have been approached for interview in a census style. Not all clusters yielded seven interviews; the interviews obtained in these clusters were weighted appropriately during analyses to account for smaller sample sizes.

Selected clusters and housing units were entered into Epi Info for data collection. Interview teams administered surveys within the North Carolina Institute for Public Health's Epi Info add on app Collect Smart via mobile data collection tablets. Surveys were tagged by cluster number, interview within cluster, time of collection and location. If residents of a selected housing unit were willing to participate but were not able to complete the survey in English, a telephone translation service was offered. All interview subjects were 18 years of age or older and residents of the household approached.

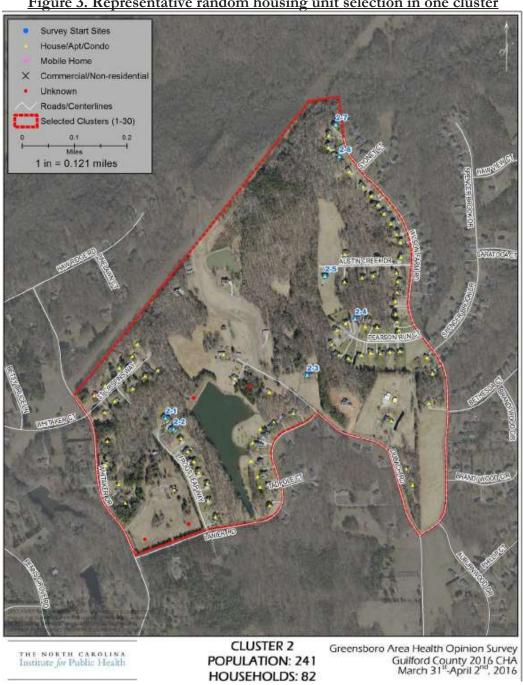


Figure 3. Representative random housing unit selection in one cluster

# Analytic Methods

All survey results were analyzed in SAS version 9.3 (SAS Institute Inc., Cary, NC) using survey adjusted methods. Each survey response was assigned a weight based upon the number of housing units in the cluster that it represented; each survey weight was  $1/7^{th}$  of the total cluster weight. Surveys from clusters where less than seven surveys were obtained were weighted to represent more than 1/7<sup>th</sup> of the cluster. This weight was calculated by dividing the total number of housing units in the sampling frame (Greensboro, High Point or Guilford County) by the number of interviews calculated in the cluster \* total number of clusters. Separate analyses were conducted for

the Greensboro and High Point regions, as well as both regions combined to represent Guilford County. Each survey response was assigned a different weight for the combined and separate analyses. These weights allow the sample results to be generalized to the entire sampling frame.

CASPER two-stage sample design with weighted frequency analysis should yield reasonably valid and precise estimates within 10% of the population sample statistic. More information on CASPER analysis and guidelines can be found in the CDC CASPER Toolkit (CDC). The Greensboro region had an interview success rate of 100% (210 interviews/210 necessary interviews) and the High Point region had a success rate of 94.3% (198 interviews/210 necessary interviews). Both regions and the Guilford County combined region achieved greater than the necessary 80% success rate for accurate representation of the sampling frame.

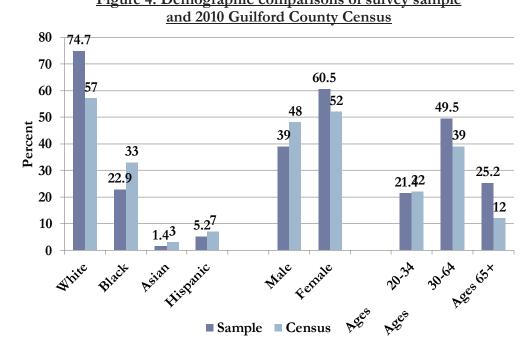
Before analysis, data were cleaned and checked for duplication. Categorical variables were analyzed with SAS procedure PROC SURVEYFREQ, which produces weighted counts, percentages and 95% confidence intervals (CIs). These weighted estimates were then analyzed visually as well. For questions that were only asked to a subset of respondents, such as questions within a skip pattern, unweighted counts, percentages and 95% CIs were calculated because the weights were no longer valid. Thus, these estimates cannot be taken as representative statistics for the survey sampling frame. Many questions allowed respondents to choose multiple responses or requested multiple responses; the weighted percentages calculated for these questions do not sum to 100%. Continuous variables were analyzed with SAS procedure PROC SURVEYMEANS, which produces a weighted mean and standard error that are plotted for visual examination. As with categorical variables, continuous variables that were produced from only a subset of respondents were not weighted for analysis.

# Demographics of Survey Respondents

Demographic characteristics of the sample population were compared to those from the most recent censuses of Guilford County to evaluate the representativeness of the sample. Guilford County data were drawn from the 2010 National Census and the 2010-2014 American Community Survey. The sample was whiter and older than the Guilford county population and skewed female (Figure 4). The sample also had a lower household income and had larger proportions of both some high school education and post-high school degrees than the full population (Figures 5 and 6). Demographic differences between the sample and the full population should be considered when generalizing results.

Figure 4. Demographic comparisons of survey sample

The average survey respondent was 51 years old and 57% of all respondents were female (Figure 4). Respondents selfreported an average weight of 184 pounds and an average height of 5 feet, 7 inches. Approximately 5% of respondents were of Hispanic, Latino or Spanish origin and 63% identified as White/Caucasian, 32% identified as Black or African American and <4% identified as American Indian/Native American, Asian or another race (Figure 4). Greensboro had a higher proportion of



White/Caucasian respondents (75% vs. 51%) and a lower proportion of African American respondents (23% vs. 42%) than High Point. The average household size was approximately 3 persons.

The majority of respondents reported a total household income of >\$35,000 last year (54.5%), while 8.4% reported a total household income of <\$10,000 and 14.1% refused to answer (Figure 5). 37.2% of respondents reported full-time employment, 10.8% reported part time employment and 30.5% reported being retired (Table 1). Greensboro respondents were more likely to report full or part time employment (55.2% vs. 40.1%) while High Point residents were more likely to report unemployment (13.5% vs. 5.2%).

Figure 5. Household income comparisons of survey sample and 2010-2014

Guilford County American Community Survey Census

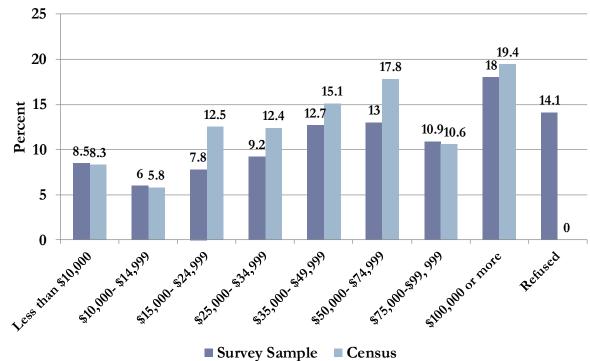


Table 1: Self-reported employment status of Guilford County residents
Respondents were asked "What is your employment status? I will read a list of choices.

Let me know which ones apply to you."

	Guilford	County	Greater Gre	eensboro	Greater H	ligh Point
Question 47	Frequency	Percent	Frequency	Percent	Frequency	Percent
Employed full-time	149	37.16	89	42.4	60	31.6
Employed part-time	45	10.78	27	23.9	18	8.6
Retired	126	30.48	65	31.0	61	30.0
Armed forces	4	0.99	2	1.0	2	1.0
Disabled	30	6.97	12	5.7	18	8.3
Student	20	5.02	11	5.3	9	4.8
Homemaker	20	5.02	11	5.3	9	4.8
Self-employed	30	7.45	11	5.3	19	9.8
Unemployed for more than 26 weeks	25	5.80	8	3.8	17	7.9
Unemployed for less than 26 weeks	12	3.45	3	1.4	9	5.6
Refused to answer	3	0.74	1	0.5	2	1.0

Most respondents had graduated high school or completed an equivalent program (88.3%) and nearly half had completed a college degree of some type or vocational training (46.7%) (Figure 6). Greensboro respondents were less likely to have completed some high school (5.7% vs. 12.12%) and more likely to have received a graduate or professional degree (17.6% vs. 7.1%) than High Point respondents (Table 2).

Figure 6. Educational attainment comparisons of survey sample and 2010-2014 Guilford County American Community Survey Census

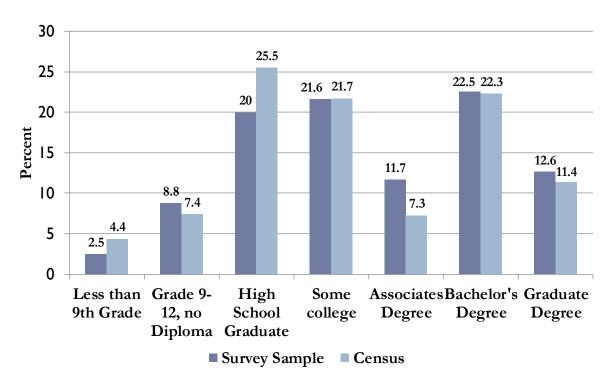


Table 2: Educational Attainment by Survey Area  Respondents were asked: "What is highest grade or year of school you completed?"											
		Greater G	reensboro		Greater High Point						
Question 45	Frequency	Percent	95% Confi Limits for					95% Confidence imits for Percent			
Less than 9th grade	3	1.4	0.0	3.0	6	3.6	0.5	6.6			
9-12 <sup>th</sup> grade, no diploma	12	5.7	2.5	8.8	25	12.1	6.9	17.4			
High school graduate	40	19.0	13.7	24.4	43	21.0	15.2	26.9			
Some college	46	21.9	16.3	27.5	43	21.0	15.3	27.1			
Associate's degree	22	10.5	6.3	14.6	23	12.9	7.4	18.4			
Bachelor's degree	50	23.8	18.0	29.6	42	21.0	15.1	26.9			
Graduate/Professional degree	37	17.6	12.4	22.8	14	7.1	3.5	10.8			
Refused	0	0.00			2	1.0					
Total	210	100.0			198	100.0					

# Community Health Issues

The first section of the survey asked respondents to identify three issues that they believed most affected the quality of life in Guilford County (Table 3). If respondents identified other issues that were not on the survey, they were able to write in their answers. Crime (30.9%), substance abuse (30.4%), education (27.6%), access to health care (26.5) and income (25.4%) were identified as issues affecting the quality of life in Guilford County by more than a quarter of respondents. Other common responses were mental health issues (21.9%) and nutrition and access to healthy food (21.7%). No write in answers accounted for a substantial portion of responses.

Table 3: "In your opinion, which three issues most affect the quality of life in Guilford County?"												
Question 1	Guilfor	d County	High P	oint Area	Greens	boro Area						
	Frequency	Percent	Frequency	Percent	Frequency	Percent						
Substance Abuse	126	30.43	67	32.93	59	28.10						
Crime	124	30.87	57	29.77	67	31.90						
Access to Health Care	110	26.48	42	20.15	68	32.38						
Education	110	27.64	42	22.55	68	32.38						
Tobacco Use	69	16.56	34	16.45	35	16.67						
Income	103	25.42	45	23.06	58	27.62						
Mental Health Issues	90	21.91	41	20.38	49	23.33						
Nutrition and Access to Healthy Food	89	21.74	44	22.07	45	21.43						
Opportunities for Physical Activity	29	7.00	16	7.86	13	6.19						
Opportunities for Youth	60	14.36	31	14.95	29	13.81						
Housing	51	12.91	20	10.92	31	14.76						
Domestic Abuse	38	8.74	20	8.93	18	8.57						
Discrimination and Racism	30	7.24	18	8.88	12	5.71						
Sexually Transmitted Diseases	30	7.27	23	11.48	7	3.33						
Pollution (air, water, land)	28	6.53	17	7.91	11	5.24						
Dental Health	26	5.91	12	5.10	14	6.67						
Unintended Pregnancy	19	4.68	6	3.06	13	6.19						
Chronic Disease	17	4.29	4	2.24	13	6.19						
Infectious Disease	11	2.87	7	3.90	4	1.90						
Other	23	5.83	11	5.94	12	5.71						
Refused to answer	3	0.92	3	1.91	0	0						

Greensboro residents identified education and access to health care as more important issues than High Point residents (32.4% vs. 22.6% and 32.4% vs. 20.2%), while High Point residents were more concerned about sexually transmitted diseases than Greensboro residents (11.5% vs 3.3%). Many of the issues identified by survey respondents are structural issues facing communities across America. The large proportion of respondents who identified substance abuse as a major issue in Guilford County may be indicative of a local manifestation of the national conversation around substance abuse; rising substance dependence and overdoses around the nation have brought recent attention to the issue (Rudd et. al). Access to health care was also identified as a major issue in Guilford County. Both of these issues were examined in more detail in later sections of the survey.

#### Personal Health Status

This section asked respondents to answer questions about their personal mental and physical health. Nearly 50% of respondents characterized their general health as very good or excellent (187/407, Figure 7). One in five respondents rated their health as either fair or poor (20.1%), a figure that is slightly higher than that of the state of NC as a whole (19.0%, 2014 BRFSS)

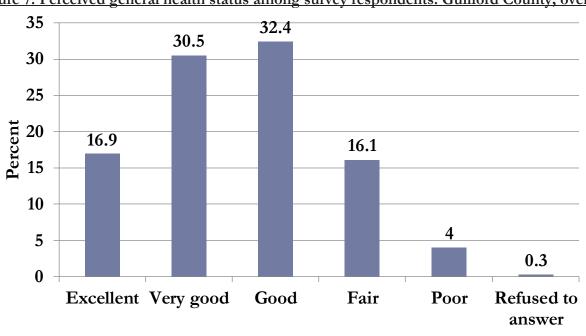


Figure 7. Perceived general health status among survey respondents. Guilford County, overall

■ Perceived General Health Status

Table 4: "Would you	Table 4: "Would you say that, in general, your health is excellent, very good, good, fair, or poor?"												
		Greater	Greensboro		Greater High Point								
Question 2	Frequency	Percent	95% Confidence I (CLs) for Percent	Frequency	Percent	95% Confid (CLs) for Po							
Excellent	36	17.2	12.1	22.4	31	16.5	10.6	22.3					
Very Good	66	31.6	25.2	37.9	54	29.3	22.3	36.2					
Good	73	34.9	28.4	41.4	61	29.6	23.0	36.2					
Fair	27	12.9	8.3	17.5	41	19.5	13.8	25.1					
Poor	7	3.3	0.9	5.8	10	4.7	1.6	7.8					
Don't Know/Not Sure	0	0.0			1	0.5	0.0	1.5					
Total	209	100.0			198	100.0							
Missing	1				0								

Respondents were then asked to indicate if they had ever been told by a doctor, nurse or other health professional that they had one of a number of listed health conditions. Of the selected conditions (Table 5), high blood pressure (38.6%), overweight/obesity (36.2%) and high cholesterol (31.6%) were the most common. Some of these prevalence estimates may be underestimated due to self-reporting; in 2014, 70.7% of adults in the US were overweight/obese (Obesity). Guilford County residents reported a higher prevalence of high blood pressure (39% vs. 29%, high blood pressure) and asthma (15% vs 8%, asthma) than the national averages.

Table 5: Self-reported prevalence of selected health conditions

Respondents were asked: "Have you ever been told by a doctor, nurse, or other health professional that you have any of the health conditions I am going to read?"

Question 3	Guilfor	d County	High P	oint Area	Greensl	Greensboro Area		
	Frequency	Percent	Frequency	Percent	Frequency	Percent		
Asthma	60	15.1	27	14.1	33	16.0		
Depression or Anxiety	100	24.0	55	26.3	45	21.7		
High Blood Pressure	161	38.6	86	41.0	75	36.4		
High Cholesterol	131	31.6	73	35.7	58	27.9		
Diabetes	74	17.7	46	22.1	28	13.5		
Osteoporosis	31	7.6	14	6.9	17	8.2		
Overweight/Obesity	145	36.2	66	34.1	79	38.2		
Angina/Heart Disease	43	10.5	22	10.8	21	10.2		
Cancer	41	10.4	16	8.5	25	12.1		

Mental Health and Social Support: Respondents were also questioned about their mental health and support systems. When asked to consider how many days during the past 30 days their mental health (which includes stress, depression and problems handling emotions) had been not good, survey respondents reported an average of four days of poor mental health in the past month. They also reported having strong support systems, with 63.0% stating that they always receive the social and emotional support that they need (Figure 8).

Figure 8. Frequency of reported social and emotional support received by survey respondents.

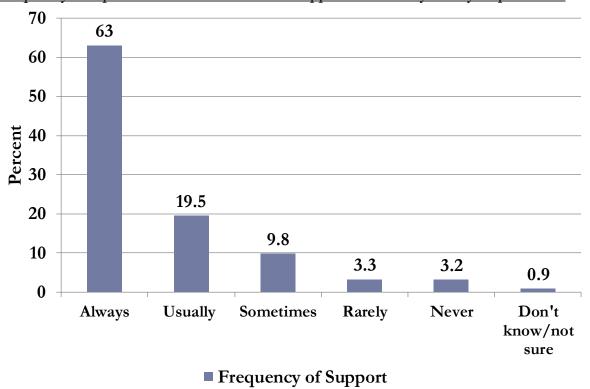


Table 6: "Ho	Table 6: "How often do you get the social and emotional support you need?"												
		Greater G	reensboro		Greater High Point								
Question 5	Frequency	Percent	95% CLs f	Frequency	Percent	95% C	Ls for Pct						
Always	130	61.9	55.3	68.5	121	64.2	57.2	71.2					
Usually	48	22.8	17.1	28.6	32	15.9	10.6	21.2					
Sometimes	20	9.5	5.5	13.5	24	10.1	5.9	14.2					
Rarely	4	1.9	0.04	3.8	11	4.8	1.9	7.8					
Never	7	3.3	0.9	5.8	7	3.1	0.7	5.4					
Don't Know	0	0	0	0	3	1.9	0.0	4.2					
Refused to answer	1 0.5 0.0		0.0	1.4	0	0	0	0					
Total	210	100.0			198	100.0							

# Health Behaviors

This section asked respondents to answer questions about their personal health behaviors, including exercise patterns, nutrition and tobacco and alcohol use. Of all respondents, 81.9% reported participating in physical activity or exercise, outside of a regular job, in the past month, somewhat higher than the 76.8% reported statewide (BRFSS, 2014). Lack of time (40.1%), lack of motivation (29.8%) and too tired (22.0%) were the most commonly selected factors preventing respondents from exercising as much as they thought they should. About 18% of respondents believed that they get adequate exercise (Table 8).

Table 7: "During the past month, other than your regular job, did you participate in any physical
activities or exercises such as running, calisthenics, golf, gardening or walking for exercise?"

Question 6	G	uilford Co	ounty		Gı	eater Gree	Greater High Point					
	Frequency	Percent		% CL Pct	Frequency	Percent	95% CL for Pct		Frequency	Percent	95% CL for Pct	
No	75	17.9	14.1	21.6	39	18.6	13.3	23.9	36	17.0	11.6	23.4
Yes	331	81.9	78.2	85.7	170	80.9	75.6	86.3	161	83.0	77.6	88.4
Don't know/ Not sure	1	0.2	0.0	0.7	1	0.5	0.0	1.4	0	0.0		
Total	407	100.0			210	100.0			197	100.0		

Table 8: Selected factors that prevent respondents from exercising as much as they think they should Respondents were asked: "Which of the following factors prevent you from exercising as much as you think you should?"

Question 7	Guilford	d County	Greater (	Greensboro	Greater I	High Point
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Lack of time	165	40.1	89	42.4	76	37.6
Lack of motivation	125	29.8	66	31.4	59	28.1
Too tired	91	22.0	54	25.7	37	18.0
Physical disability	71	17.0	34	16.2	37	18.0
None - I get adequate exercise	70	18.1	34	16.2	36	20.2
Lack of sidewalks in my neighborhood	48	11.7	22	10.5	26	13.0
My job is physical/involves hard labor	32	7.6	13	6.2	19	9.2
Lack of child care	29	6.8	16	7.6	13	6.0
Lack of convenient exercise facilities	25	5.9	10	4.8	15	7.0
Cost	23	5.6	13	6.2	10	4.9
Too much traffic in my neighborhood	19	4.7	10	4.8	9	4.7
Lack of bike lanes in my neighborhood	17	4.3	6	2.9	11	5.8
Crime rate in my neighborhood	14	2.8	4	1.9	10	3.8
Exercise makes me feel worse	12	2.8	6	2.9	6	2.8
I don't like other people to see me exercise	7	1.7	3	1.4	4	2.0
I don't know how	4	1.0	2	1.0	2	1.0
Don't know where to exercise	3	0.7	1	0.5	2	1.0
Other	32	7.8	17	8.1	15	7.4
Don't know	5	1.4	2	1.0	3	1.9
No response	1	0.2	1	0.5	0	0.0

Fruit and Vegetable Consumption: About 12% of respondents reported eating the recommended five or more servings of fruits and/or vegetables each day (Figure 9), considerably lower than the NC 2020 Objective of 29.3%. The most frequently reported barriers to healthy eating were the cost of healthy food (24.7%) and a lack of time to prepare healthy food (20.4%, Table 10). Of those surveyed, 28.9% of respondents believed that they were healthy eaters.

Figure 9. Self-reported number of servings of fruits and/or vegetables eaten per day

50 47.1 45 40 36.1

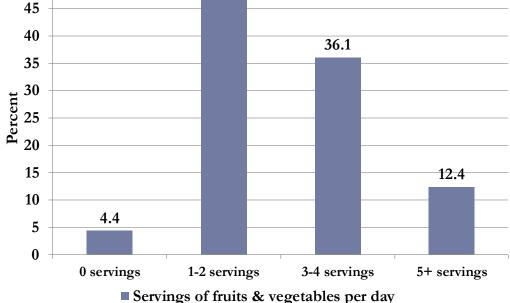


Table 9: "About how many servings of fruits and/or vegetables do you eat each day?"												
		Greater G	reensboro	Greater High Point								
Question 8	Frequency	Percent	95% CLs f	Frequency	Percent	95% C	Ls for Pct					
0 servings	6	2.9	0.6	5.1	12	6.0	2.5	9.5				
1-2 servings	98	46.7	39.9	53.5	98	47.6	40.1	55.0				
3-4 servings	83	39.5	32.9	46.2	60	32.5	25.2	39.8				
5+ servings	23	11.0	6.7	15.2	28	13.9	9.0	18.9				
Total	210	100.0			198	100.0						

Table 10: Selected factors that prevent respondents from eating as healthfully as they think they should Respondents were asked: "Which factors from the following list prevent you from eating as healthy as you should?"

Question 9	Guilford	l County	Greater Gr	eensboro	Greater H	igh Point
	Frequency	Percent	Frequency	Percent	Frequency	Percent
None - I think I am a healthy eater	116	28.8	56	26.7	60	31.2
Cost of healthy food	105	24.7	52	24.8	53	24.5
Lack of time to prepare healthy food	83	20.4	50	23.8	33	16.7
Choosing to eat out frequently	78	19.4	45	21.4	33	16.7
My food preferences	68	16.6	35	16.7	33	16.6
Consuming large portions	39	9.6	30	14.3	9	4.5
Don't know how to cook	26	6.2	10	4.8	16	7.8
Social pressure to eat unhealthy food	16	4.2	10	4.8	6	3.7
Don't have easy access to supermarkets	12	2.7	5	2.4	7	3.1
Other	33	8.7	19	9.0	14	8.4
Don't know	6	1.4	1	0.5	5	2.3
Refused to answer	1	0.1	0	0.0	1	0.3

<u>Tobacco Use</u>: While 12.8% reported smoking daily and 4.1% reported smoking less than daily, 82.4% of respondents reported not smoking tobacco at all. The rate of current smokers of 16.9% is lower than the NC rate of 19.1 (BRFSS 2014) but higher than the NC 2020 Objective of 13%. Twelve and one-half percent of all respondents, or 73% of those who reported smoking at all, had stopped smoking for one day or more in the last year because they were trying to quit smoking. Fourteen and one-half percent of respondents, or 86% of smokers, reported being advised by a doctor, dentist, nurse or other health professional to quit smoking cigarettes or using any other tobacco products in the last year. Of those who had been advised to quit by a health professional in the last year, 57.1% reported their health provider recommending or discussing methods and strategies other than medication to assist them in quitting smoking. Only 4.1% of respondents reported using electronic cigarettes in the past 30 days.

Table 11: "1	Table 11: "Do you currently smoke tobacco on a daily basis, less than daily or not at all?"													
Question 10	Gu	ilford Cou	ınty		G <sub>1</sub>	eater Gree	Greater High Point							
	Frequency	requency Percent 95% CL for Pct				Percent	95% CL for Pct		Frequency	Percent	95% CL for Pct			
Daily	51	12.8	9.3	16.3	27	12.9	8.3	17.5	24	12.8	7.4	18.1		
Less than daily	19	4.1	2.2	5.9	8	3.8	1.3	1.2	11	4.3	1.7	7.0		
Not at all	334	82.3	78.5	86.2	174	83.2	78.1	6.4	160	81.4	75.4	87.3		
Don't know/Not sure	3	0.7	0.0	1.6	0	0.0			3	1.5	0.0	3.3		
Total	407	100.0			209	100.0			198	100.0				

	Table 12: "Have you used electronic cigarettes in the past 30 days?"													
Question 11	G	uilford Co	ounty		Gı	eater Gre	Gre	ater High	Poin	t				
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% CL for Pct		Frequency	Percent	95% CL for Pct			
No	367	95.9	93.9	97.9	195	95.6	92.7	98.4	172	96.3	93.5	99.1		
Yes	16	4.1	2.1	6.1	9	4.4	1.6	7.2	7	4.7	0.9	6.5		
Total	383	100.0			204	100.0			179	100.0				
Missing	25				6				19					

Table 13: "During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?"

Question 12	G	uilford Co	unty		Gı	eater Gree	ensboro		Gre	Greater High Point			
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% CL for Pct		Frequency	Percent	95% CL for Pct		
No	284	86.8	83.2	90.5	136	86.6	81.2	92.0	148	87.1	82.0	92.1	
Yes	43	12.4	8.8	16.0	19	12.1	6.9	17.3	24	12.6	7.6	17.7	
Don't Know	2	0.5			1	0.6			1	0.3			
Refused	1	0.3			1	0.6			0	0			
Total	333	100.0			157	100.0			173	110.0			
Missing	78				53				25				

Table 14: "In the past 12 months, did any doctor, dentist, nurse or other health professional advise you to quit smoking cigarettes or using any other tobacco products?"

Question 13	Guilford County				Greater Greensboro				Greater High Point			
	Frequency	Percent	95% CL for Pct		Frequency	Percent	95% CL for Pct		Frequency	Percent	95% CL for Pct	
No	268	84.9	81.0	88.8	120	80.5	74.1	87.0	148	88.7	84.0	93.4
Yes	49	14.5	10.6	18.3	27	18.1	11.9	24.4	22	11.3	6.6	16.0
Don't Know/Not Sure	1	0.3			1	0.7			0	0.0		
Refused	1	0.3			1	0.7			0	0.0		
Total	319	100.0			149	100.0			170	100.0		
Missing	89				61				28			

Table 15: "Did your doctor or health provider recommend or discuss methods and strategies other than medication (such as referrals to Quitline, counseling opportunities, or educational materials, such as booklets or pamphlets) to assist you to quit smoking?"

Question 14	G	Guilford County				eater Gree	ensboro		Greater High Point				
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% for I		Frequency	Percent		% CL r Pct	
No	20	40.2	25.8	54.6	13	48.1	28.0	68.3	7	28.9	8.1	49.8	
Yes	28	57.6	43.1	72.1	13	48.1	28.0	68.3	15	71.0	50.1	91.9	
Don't Know/Not Sure	1	2.2			1	3.7			0	0.0			
Total	49	100.0			27	100.0			22	11.0			
Missing	1				1				0				

<u>Alcohol Use</u>: Almost half or 46.4% of respondents reported having no alcoholic drinks in the past 30 days. Of those who did drink alcohol, they had the option to report drinking days per week or per month. They reported having an alcoholic beverage such as beer, wine or liquor an average of 3.2 days per week and an average of 5.0 days per month. These averages are discordant; those who imbibe more frequently may have chosen to report drinking days per week while those who drink less frequently may have been more inclined to report drinking days per month. Those who drank alcohol at all reported drinking an average of 2.1 alcoholic beverages on the days when they did drink and reported binge drinking (five drinks or more for men and four drinks or more for women on a single occasion) an average of 1.2 times in the last month. There were no substantial differences in substance use or cessation efforts between Greensboro and High Point residents.

Table 16: "During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor?"

O	uestion 15 Guilford County						Greater Greensboro Greater High Point						
Question 15	G	umora Co	ounty		Gi	eater Gre	ensboro		Gre	ater High	Poin	τ	
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% for I	_	Frequency	Percent		% CL or Pct	
Reported days in past 30 days	118	29.2	24.6	33.8	75	36.1	29.5	42.6	43	21.9	15.6	28.2	
Reported days per week	91	23.2	18.9	27.6	38	18.3	13.0	23.6	53	28.5	21.7	35.4	
Don't Know/Not Sure	2	0.7			0				2	1.4			
No drinks in last 30 days	193	46.4	41.4	51.4	94	45.2	38.4	52.0	99	47.6	40.2	55.0	
Refused	2	0.5			1	0.5			1	0.5			
Total	406	100.0			208	100.0			198	100.0			
Missing	2				2				0				

#### Table 17: Mean days per Week and Peer Month

Reported mean days per WEEK drinking any alcoholic beverage such as beer, wine or a malt beverage

Survey Area	Number	Minimum	Maximum	Mean	Standard Error of Mean
<b>Guilford County</b>	91	1	7	3.2	0.234
Greensboro Area	38	1	7	3.7	0.391
High Point Area	53	1	7	2.9	0.281

Reported mean days per MONTH drinking any alcoholic beverage such as beer, wine or a malt beverage

Survey Area	Number	Minimum	Maximum	Mean	Standard Error of Mean
<b>Guilford County</b>	118	1	30	4.98	0.643
Greensboro Area	75	1	30	5.5	0.853
High Point Area	43	1	7	4.1	0.934

Table 18: "Considering all types of alcoholic beverages, how many times during the past 30 days did you have X [X = 5 for men, X = 4 for women] or more drinks on an occasion?"

Question 17	Number	Minimum	Maximum	Mean	Standard Error of Mean
<b>Guilford County</b>	202	0	30	1.16	0.271
Greensboro Area	110	0	30	0.80	0.296
High Point Area	94	0	30	1.56	0.470

<u>Overweight and Obesity</u>: Body Mass Index was calculated using reported height and weight. 32.4% of survey respondents had a BMI of greater than 30, or obese. 60.3% of respondents were either overweight or obese, somewhat smaller than the 65.6% reported statewide (BRFSS 2014).

Table 19: Body Mass Index (BMI) Categories Calculated from Reported Height and Weight Respondents were asked "About how much do you weigh without shoes?" and "About how tall are you without shoes?"

Questions 48 and 49	G	Guilford County				eater Gree	ensboro		Greater High Point				
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% CL for Pct		Frequency	Percent	95% Cl for Pct		
A. Underweight	59	13.9	10.5	17.4	24	11.4	7.1	15.8	34	16.1	10.8	21.5	
B. Normal weight	105	25.8	21.5	30.1	64	30.5	24.2	36.8	41	20.8	14.9	26.6	
C. Overweight	114	27.9	23.5	32.3	58	27.6	21.5	33.7	57	28.7	22.2	35.3	
D. Obese	130	32.4	27.6	37.1	64	30.5	24.2	36.8	66	34.4	27.1	41.7	
Total	408	100.0			210	100.0			198	100.0			

Underweight = BMI of Less than 18.5 Normal Weight = BMI of 18.5-23.9

Overweight = BMI of 25.0-29.9

Obese = BMI of 30.0 and greater

### Health Care Access

This section asked respondents to answer questions about their health care usage, health insurance, barriers to health care, sources of health information and emergency preparedness. When asked where they go most often when they are sick, 67.4% reported visiting a doctor's office, 13.1% reported using an urgent care center and 5.1% reported using the emergency room (Figure 10). Only 89.9% reported having any kind of health care coverage, including health insurance, prepaid plans (including HMOs), government plans such as Medicare, Medicaid or the Indian Health Service. A higher percentage of High Point area respondents reported having no form of health insurance (11.2%) compared with those in the Greensboro area survey (8.6%).

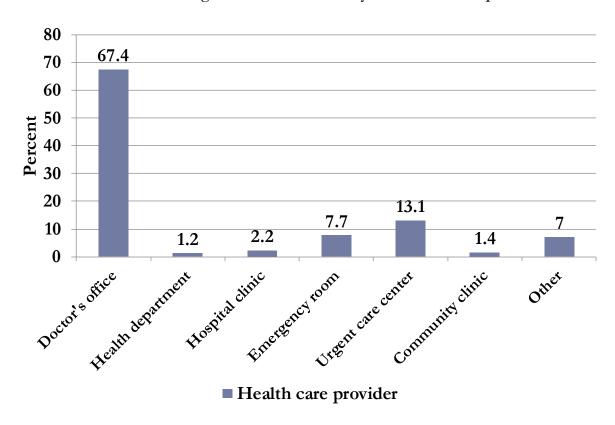


Figure 10. Most commonly used health care providers

Tab	Table 20: "Where do you go most often when you are sick?"												
		Greater G	reensboro			Greater H	igh Point	t					
Question 18	Frequency	Percent	95% CLs f	or Pct	Frequency	Percent	95% C	Ls for Pct					
Doctor's office	145	69.4	63.1	75.7	123	65.4	58.4	72.3					
Health Department	1	0.5	0.0	1.4	7	2.0	0.4	3.6					
Hospital Clinic	1	0.5	0.0	10.7	7	4.0	1.0	7.0					
Emergency Room	15	7.2	3.6	10.7	18	8.3	4.3	12.3					
Urgent Care Center	33	15.8	10.8	20.8	20	10.2	5.8	14.5					
Community Clinic	3	1.4	0.0	3.1	4	1.3	0.0	2.6					
Other	11	5.3	2.2	8.3	18	8.8	4.7	12.9					
Total	209	100.0			197								
Missing	1				1								

Table 21: "Do you have any kind of health care coverage, including private health insurance, prepaid plans, such as HMOs, or government plans such as Medicare, Medicaid or Indian Health Service?"

Question 19	G	uilford Co	ounty		Gr	eater Gree	ensboro		Greater High Point				
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% CL for Pct		Frequency	Percent		% CL or Pct	
No	43	9.8	6.9	12.8	18	8.6	4.8	12.4	25	11.2	6.7	15.7	
Yes	364	89.9	86.9	92.9	191	90.5	87.0	94.9	173	88.8	84.2	93.3	
Don't Know/Not Sure	1	0.2			1	0.5			0	0.0			
Total	408	100.0			210	100.0			198	100.0			

<u>Problems with Getting Health Care</u>: Of all survey respondents, 13.9% reported having a problem getting the health care they needed for them or for a family member from any type of health provider, dentist, or pharmacy in the past 12 months. High Point residents were more likely to report having trouble accessing health care than Greensboro residents (16.5% vs. 11.3%). Of those who had difficultly accessing health care, respondents reported having the most trouble receiving health care from general practitioners (32.2%), dentists (30.5%), and specialists (25.4%, Table 6). Greensboro residents reported having more trouble receiving care from dentists (34.8% vs. 27.8%) and general practitioners (43.5% vs. 25.0%) while High Point residents reported having more trouble getting care from pharmacies (16.7% vs. 4.3%).

Table 22: "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?"

Question 20	G	Guilford County				eater Gre	ensboro		Greater High Point				
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% CL for Pct		Frequency	Percent		% CL or Pct	
No	342	85.9	82.4	89.4	180	88.2	83.8	92.7	162	83.5	78.1	88.8	
Yes	59	13.8	10.4	17.3	23	11.3	6.9	15.6	36	16.5	11.2	21.9	
Don't Know/Not Sure	1	0.2			1	0.5			0	0.0781			
Total	402	100.0			204	100.0			198	100.0			
Missing	6				6				0				

Major barriers to health care access were not having health insurance (33.9%), insurance not covering the service (30.5%) and the deductible or copay being too high (23.7%). One tenth or 10.1% of respondents reported that they or a family member sought care at the emergency department in the last year because of a lack of insurance or inability to pay for care, while 12.3% reported needing prescription medicines, missing doses or splitting doses in the last year because they couldn't afford prescriptions.

Table 23: Types of health care providers that respondents reported having difficulty accessing Respondents who reported having difficulty getting the health care they needed for themselves or a family member were asked: "What type of provider or facility did you or your family member have trouble getting health care from?"

Question 21	Guilford	County	Greater (	Greensboro	Greater I	High Point
Type of Provider	Frequency	Percent	Frequency	Percent	Frequency	Percent
General Practitioner	19	32.2	10	43.5	9	25.9
Dentist	18	30.5	8	34.8	10	23.2
Specialist	15	25.4	7	30.4	8	21.6
Pharmacy/prescriptions	7	11.9	1	4.4	6	17.0
Eye Care/Optometrist /Ophthalmologist	6	10.2	1	4.4	5	10.8
Urgent Care Center	6	10.2	2	8.7	4	10.8
OB/GYN	5	8.5	2	8.7	3	7.7
Health Department	5	8.5	1	4.4	4	11.6
Hospital	5	8.5	1	4.4	4	13.1
Pediatrician	3	5.1	0	0.0	3	7.7
Medical Clinic	2	3.4	0	0.0	2	4.6
Other	8	13.6	4	17.4	4	10.8

Table 24: Factors preventing respondents from accessing health care
Respondents who reported having difficulty getting the health care they needed for themselves
or a family member were asked: "Which of these problems prevented you or
your family member from getting the necessary health care?"

Question 22	Guilford	County	Greater Gr	eensboro	Greater H	igh Point
	Frequency	Percent	Frequency	Percent	Frequency	Percent
No health insurance	20	33.9	9	39.1	11	26.2
Insurance didn't cover what I/we needed	18	30.5	6	26.1	12	34.7
Share of the cost (deductible/copay) was too high	14	23.7	7	30.4	7	26.3
Couldn't get an appointment	9	15.2	1	4.4	8	26.7
Dentist would not take my/our insurance or Medicaid	6	10.2	3	13.0	3	6.2
Doctor would not take my/our insurance or Medicaid	5	8.5	1	4.4	4	12.4
The wait was too long	5	8.5	1	4.4	4	10.8
Didn't know where to go	5	8.5	3	13.0	2	6.2
No way to get there	3	5.1	0	0.0	3	7.7
Hospital would not take my/our insurance or Medicaid	2	3.4	1	4.4	1	3.1
Pharmacy would not take my/our insurance or Medicaid	2	3.39	0	0.0	2	6.2
Other	11	18.6	7	30.4	4	10.8
Refused to answer	1	1.7	0	0.0	1	1.5

Table 25: "Was there any time in the past 12 months when you or someone in your family sought care at the emergency department because of lack of insurance or inability to pay for care?"

Question 23	Guilford County				Gr	eater Gree	ensboro		Greater High Point				
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% CL for Pct		Frequency	Percent		% CL r Pct	
No	350	89.4	86.4	92.4	184	91.5	87.7	95.4	166	87.2	82.5	91.9	
Yes	43	10.1	7.1	13.1	17	8.5	4.6	12.3	26	7.2	7.2	16.4	
Don't Know/Not Sure	3	0.5			0	0.0			3	1.0			
Total	396	100.0			201	100.0			195	100.0			
Missing	12				9				3				

Table 26: "During the past 12 months was there any time you needed prescription medicines, missed doses, or split doses because you couldn't afford the prescriptions?"

######################################													
Question 24	G	uilford Co	ounty		Gı	eater Gree		Greater High Point					
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% for I		Frequency	Percent		% CL or Pct	
No	349	87.5	84.2	90.7	183	88.8	84.5	93.2	166	86.1	81.2	91.0	
Yes	53	12.2	9.3	15.5	22	10.7	6.4	14.9	31	13.9	9.0	18.8	
Don't Know/Not Sure	1	0.2			1	0.5			0	0.0			
Total	403	100.0			206	100.0			197				
Missing	5				4				1				

Table 27: "Many people find it difficult to follow doctor's orders. Is this true for you?"														
Question 25	G	uilford Co	ounty		Gr	eater Gree	ensboro		Greater High Point					
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% CL for Pct		Frequency	Percent		% CL or Pct		
No	325	79.2	75.0	83.3	174	82.5	77.7	88.0	151	75.2	68.5	81.8		
Yes	82	20.6	16.4	24.8	36	17.1	12.0	22.3	46	24.3	17.7	30.9		
Don't Know/Not Sure	1	0.2			0	0.0			1	0.5				
Total	408	100.0			210	100.0			198	100.0				

One fifth or 20.6% of respondents reported having difficulty following doctors' orders; High Point residents were more likely to report having difficulty following doctors' orders than Greensboro residents (24.4% vs. 17.1%). These respondents most commonly had difficulty following doctors' orders because they don't like to take pills (32.9%) and for highly variable, personal reasons (other – 28.1%, Table 28). High Point residents more frequently reported not being able to pay for the medications than Greensboro residents (19.6% vs. 5.6%).

Table 28: Reasons why respondents may have difficulty following doctors' orders	
Respondents who reported finding it difficult to follow doctor's orders were asked: "Why is that?	"

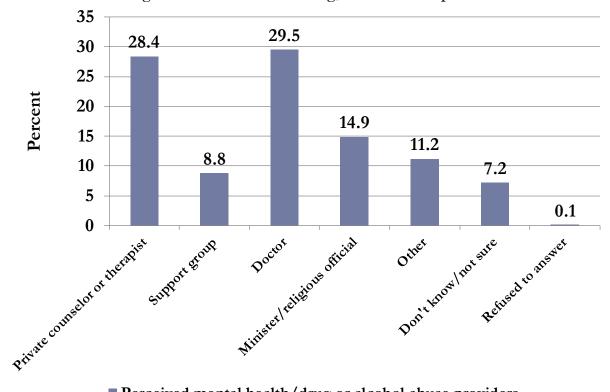
Question 26	Guilford	County	Greater Gre	eensboro	Greater Hi	gh Point
	Frequency	Percent	Frequency	Percent	Frequency	Percent
I didn't understand the instructions	5	6.1	3	8.3	2	4.2
Sometimes I can't remember the instructions	9	11.0	4	11.1	5	10.5
I can't afford to pay for the medications	11	13.4	2	5.6	9	21.0
I didn't think they were necessary	13	15.8	7	19.4	6	11.5
I don't like to take pills	27	32.9	10	27.8	17	38.3
I am too busy to follow the doctor's orders	7	8.5	1	2.8	6	13.4
Other	23	28.0	11	30.6	12	23.9
Don't know	4	4.9	2	5.6	1	4.2
Refused to answer	1	1.2	1	2.8	0	0

Table 29: "Instead of visiting your doctor in an office setting, would you be interested in talking with your doctor over the telephone or over the Internet?"

	100000000000000000000000000000000000000													
Question 26	G	uilford Co	ounty		G <sub>1</sub>	eater Gree	ensboro		Greater High Point					
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% CL for Pct		Frequency	Percent		% CL or Pct		
No	162	40.2	35.3	45.2	74	35.7	29.2	42.3	88	45.0	37.6	52.4		
Yes	233	57.0	52.0	62.0	129	62.3	55.7	69.0	104	51.4	43.9	58.8		
Don't Know/Not Sure	10	2.8			4	1.9			6	3.6				
Total	405	100.0			207	100.0			198	100.0				
Missing	3				3									

Respondents were asked if a friend or family member needed counseling for a mental health or drug/alcohol abuse problem, with whom would they recommend that person speak. They were most likely to refer others to a doctor (29.5%) or a private counselor or therapist (28.4%, Figure 11). A majority of respondents expressed interest in talking with their doctors over the telephone or Internet instead of visiting them in an office setting (57.0%). Respondents also reported receiving most of their information about health from doctors/nurses (64.2%), websites/Internet (54.9%), friends/family (29.0%) and television (28.5%, Table 30). Only 39.7% of respondents reported having a basic emergency supply kit for their family in their home. It is recommended that all families keep an emergency supply kit with water, non-perishable food, any necessary prescriptions, first aid supplies, a flashlight and batteries and other basic materials in case of a natural disaster or other emergency.

Figure 11: Providers to whom respondents would instruct a friend or family member who needed counseling for a mental health or drug/alcohol abuse problem to talk



■ Perceived mental health/drug or alcohol abuse providers

Table 30: "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?"

		Greater G	reensboro		Greater High Point							
Question 28	Frequency	Percent	95% CLs f	or Pct	Frequency	Percent	95% C	Ls for Pct				
Private counselor or therapist	61	29.3	23.1	35.6	53	27.4	20.6	34.1				
Support Group	12	5.8	2.6	9.0	23	11.9	6.7	17.2				
Doctor	60	28.8	22.6	35.0	60	30.2	23.4	36.9				
Minister/ religious official	35	16.8	11.7	22.0	26	12.8	8.0	17.7				
Other	24	11.5	7.2	15.9	21	10.8	6.3	15.4				
Don't Know/Not Sure	16	7.7	4.0	11.3	14	6.6	3.1	10.1				
Refused	0	0.0			1	0.3						
Total	208	100.0			198	100						
Missing	2				0							

Table 31: Reported sources of information about health Respondents were asked: "Where do you get most of your information about health?"												
Respondents were as												
Question 29	Guilford	d County	Greater (	Greensboro	Greater 1	High Point						
	Frequency	Percent	Frequency	Percent	Frequency	Percent						
Doctors/Nurses	264	64.2	141	67.1	123	60.9						
Websites/Internet	227	54.9	117	55.7	110	54.0						
Friends/Family	119	29.0	59	28.1	60	30.0						
Television	114	28.5	57	27.1	57	30.0						
Pharmacies	97	23.2	50	23.8	47	22.4						
Newspapers	59	15.2	35	16.7	24	13.6						
Magazines	57	13.9	31	14.8	26	13.0						
Radio	34	9.2	18	8.6	16	9.8						
Local Health Department	30	7.5	13	6.2	17	8.8						
Health Fairs	26	6.3	16	7.6	10	4.8						
School	25	6.0	12	5.7	13	6.3						
Church	16	3.7	11	5.2	5	2.0						
Community Meetings	10	2.3	6	2.9	4	1.8						
Healer or Non-Traditional Health Practitioner	8	1.8	4	1.9	4	1.8						
Other	24	6.6	14	6.7	10	6.6						
Don't know	2	0.5	2	1.0	0	0.0						

Table 32: "Does your family have a basic emergency supply kit? These kits include water, non-perishable food, any necessary prescriptions, first aid supplies, flashlight and batteries, non-electric can opener, etc."

Question 30	G	uilford Co	ounty		Greater Greensboro				Greater High Point				
	Frequency	Percent		% CL Pct	Frequency	Percent	95% for I		Frequency	Percent		% CL or Pct	
No	248	60.1	55.2	65.0	133	63.3	56.8	69.9	115	56.6	49.2	64.0	
Yes	159	39.6	34.7	44.6	77	36.7	30.1	43.2	82	42.8	35.5	50.2	
Don't Know/Not Sure	1	0.2			210	0			1	0.5			
Total	408	100.0			210	100.0			198	100.0			

# Neighborhood Needs

This section asked respondents to answer questions about their neighborhood and their access to food providers. Only 27.8% of respondents stated that the neighborhood in which they live has sidewalks (Table 33), although 85.6% stated that they felt safe walking in their neighborhood (Table 34). High Point residents were more likely to have sidewalks in their neighborhoods (31.9% vs. 23.9%). Approximately half (47.1%) of respondents stated that the neighborhood in which they live has easy walking access to public parks and playgrounds.

Table 33: "Does the neighborhood in which you live have sidewalks?"													
Question 31	G	uilford Co	ounty		G <sub>1</sub>	eater Gree	ensboro		Greater High Point				
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% for I	-	Frequency	Percent		% CL r Pct	
No	283	71.8	67.5	76.3	159	76.1	70.2	81.9	124	67.3	60.7	74.0	
Yes	122	27.8	23.4	32.1	50	23.9	18.1	29.8	72	31.9	25.3	38.5	
Don't Know/Not Sure	2	0.4			0	0.0			2	0.8			
Total	407	100.0			209	100.0			198	100.0			
Missing	1				1				0				

Table 34: "Do you feel safe walking in your neighborhood?"													
Question 32	G	uilford Co	unty		G <sub>1</sub>	eater Gree	ensboro		Gre	ater High	Poin	t	
	Frequency	Percent		6 CL Pct	Frequency	Frequency Percent 95% CL for Pct F			Frequency	Percent	95% CI for Pct		
No	56	13.5	10.1	16.9	25	11.9	7.5	16.3	103	52.8	45.4	60.3	
Yes	347	85.6	82.2	89.1	184	87.6	83.1	92.1	87	43.9	36.4	51.3	
Don't Know/Not Sure	5	0.9			1	0.5			8	3.3			
Total	408	100.0			210	100.0			198	100.0			

Table 35: "Do	Table 35: "Does the neighborhood in which you live have easy walking access to public parks and playgrounds?"													
Question 33 Guilford County Greater Greensboro Greater High Point														
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% for I	_	Frequency	Percent		% CL r Pct		
No	205	50.8	45.7	55.8	102	48.8	42.0	55.6	103	52.8	45.4	60.3		
Yes	192	47.1	42.1	52.1	105	50.2	43.4	57.1	87	43.8	36.4	51.3		
Don't Know/Not Sure	10	2.1			2	1.0			8	3.3				
Total	407	100.0			209	100.0			198	100.0				
Missing	1				1				0					

Table 36: "What is your opinion of policies that restrict smoking and tobacco use in public places like parks and bus stops?"

Question 34	G	uilford Co	unty		Greater Greensboro				Greater High Point				
	Frequency	Percent		% CL Pct	Frequency	Percent	95% CL for Pct		Frequency	Percent		% CL or Pct	
Oppose	331	81.5	77.6	85.3	169	80.5	75.1	85.9	162	82.5	77.1	88.0	
Support	54	12.8	9.6	16.1	30	14.3	9.5	19.0	24	11.2	6.8	15.6	
Don't Know/Not Sure	23	5.			11	5.2			12	6.2			
Total	408	100.0			210	100.0			198	100.0			

When asked their opinion of policies that restrict smoking and tobacco use in public places like parks and bus stops, 81.5% of respondents stated that they oppose tobacco-free policies.

Table	Table 37: "Consider where you or your household does most of your food shopping.  What kind of store is that?"											
Question 35	G	uilford Co	unty		Gr	eater Gree	ensboro		Gre	Greater High Point		
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% for I	_	Frequency	Percent		% CL or Pct
Supermarket	312	75.3	70.8	79.7	163	77.6	71.9	83.3	149	72.8	65.9	79.7
Small market	1	0.3	0.0	0.7	0	0.0	0.0	0.0	1	0.5	0.0	1.5
Discount or big box store	80	20.6	16.4	24.8	39	18.6	12.3	23.9	41	22.8	18.2	29.3
Wholesale Club	12	3.0	1.3	4.6	0	0.0	0.9	5.8	5	2.6	0.3	4.8
Other	3	0.9	0.0	2.0	1	0.5	0.0	1.4	2	2	0.0	3.4
Total	408	100.0			210	100.0			198	100.0		

A large majority (75.3%) reported conducting most of their household food shopping at a supermarket, while 20.6% reported shopping at a discount or big box store (Table 37). The few respondents who reported shopping at a small market (0.2%), wholesale club (3.0%) or another site (0.9%) were asked to identify why they choose not to shop at a large supermarket or big box store. They reported not having transportation to get to these stores, transportation to these stores costing too much, a lack of healthy food at these stores and a lack of specialty product availability at these stores.

Table 38: Selected factors that respondents identified as the best things about their neighborhoods Respondents were asked: "What would you say are the best things about your neighborhood?"

Question 37	Guilford County		Greater C	Greensboro	Greater High Point		
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Quiet	229	56.2	119	56.7	110	55.6	
Close to shopping	95	22.4	53	25.2	42	19.4	
Friendly neighbors	217	54.2	113	53.8	104	54.6	
Safe/lack of crime	145	36.0	82	39.0	63	32.8	
Good schools	59	13.9	36	17.1	23	10.5	
Parks and recreation areas	41	9.8	32	15.2	9	4.1	
Close to where I work	35	8.5	16	7.6	19	9.4	
Other	98	24.0	71	33.8	27	13.6	
Don't know	13	2.7	7	3.3	6	2.0	
Refused to answer	3	0.6	2	1.0	1	0.3	

When asked to identify the best things about their neighborhood, 56.2% stated that it was quiet, 54.2% stated that they had friendly neighbors, and 36.1% stated that it was safe or that there was a lack of crime.

Table 39: Selected factors that respondents identified as the biggest problems in their neighborhoods Respondents were asked: "What would you say are the biggest problems in your neighborhood?"

Respondents were asked.	what would you say are the biggest problems in your neighborhood?						
Question 38	Guilfor	d County	Greater G	reensboro	Greater High Point		
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Domestic violence	4	0.7	0	0.0	4	1.5	
Teen pregnancy	4	0.7	0	0.0	4	1.5	
School truancy	3	0.5	0	0.0	3	1.0	
Break-ins or thefts	33	7.8	17	8.1	16	7.4	
Gangs	6	1.1	0	0.0	6	2.3	
HIV/AIDS	0	0.0	0	0.0	0	0.0	
Drug dealing and/or drug use	38	8.7	14	6.7	24	10.8	
Criminal activity	29	6.9	8	3.8	21	10.3	
Other	237	59.3	140	66.7	97	51.4	
Don't know	106	25.6	45	30.0	61	30.0	
Refused to answer	3	0.7	0	0.0	3	1.5	

When asked to identify the biggest problems in their neighborhoods, respondents often made highly individualized responses (Other – 59.3%) or stated that there were no substantial problems in their neighborhood. The large majority of the "Other" responses were "None". Other neighborhood problems noted were traffic and speeding in the neighborhood.

Table 4	Table 40: "Do you personally know of an individual who regularly uses illegal drugs?"											
Question 39	G	uilford Co	ounty		Gr	Greater Greensboro				Greater High Point		
	Frequency	Percent		6 CL Pct	Frequency	Percent	95% for I	-	Frequency	Percent		% CL or Pct
No	287	71.9	67.4	76.4	150	73.1	67.0	79.3	137	70.6	64.0	77.1
Yes	109	26.3	21.9	30.6	53	25.8	19.8	31.9	56	20.4	20.4	33.0
Don't Know/Not Sure	5	1.3			1	0.5			4	2.2		
Refused	2	0.5			1	0.5			1	0.5		
Total	403	100.0			205	100.0			198	100.0		
Missing	5				5				0			

About a quarter of respondents (26.3%) believe that they personally know an individual who regularly uses illegal drugs.

The community health survey data highlighted in this report, were combined with secondary data to identify the following Guilford County priority health concerns:

#1: Healthy Eating/Active Living

#2: Social Determinants of Health

#3: Behavioral Health

#4: Maternal and Child Health

These and other data will also inform the development of collaborative action plans to address these concerns (see also Chapter 4, Guilford County Priority Health Concerns).

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## References

Simon, Matthew, Decosimo, Casey. "CASPER Method for Primary Data Collection in Community Health Assessments: A North Carolina Case Study." National Network for Public Health Institutes. <a href="www.nnphi.org">www.nnphi.org</a>, May 2014

"Asthma Statistics | AAAAI." The American Academy of Allergy, Asthma & Immunology. Web.

Centers for Disease Control and Prevention (CDC). Community Assessment for Public Health Emergency Response (CASPER) Toolkit: Second edition. Atlanta (GA): CDC; 2012.

"High Blood Pressure Facts." *Centers for Disease Control and Prevention.* Centers for Disease Control and Prevention, 19 Feb. 2015. Web.

"Obesity and Overweight." *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention, 27 Apr. 2016. Web.

Rudd, Rose A., Noah Aleshire, Jon E. Zibbell, and R. Matthew Gladden. "Increases in Drug and Opioid Overdose Deaths — United States, 2000–2014." MMWR. Morbidity and Mortality Weekly Report MMWR Morb. Mortal. Wkly. Rep. 64.50-51 (2016): 1378-382. Web.

# Appendix E – Findings from Outreach with Immigrant and Refugee Communities

In April 2016, we conducted two hour-long conference calls with community service providers that serve new immigrant and refugee groups. These service providers themselves were often members of the communities that they serve through their work, but not exclusively so. Agencies were identified with assistance from the Guilford Assessment Team (GAT) and Guilford Community Assessment Steering group members. The information below represents the three themes that emerged in response to three questions: What do you believe are the most important health and well-being concerns that immigrants and refugees have in Guilford County? What do you believe are their barriers to achieving better health and well-being? What do you believe would help to promote good health among immigrants and refugees in Guilford County?

Theme 1: Immigrants and refugees share many of the same health concerns as other populations in Guilford County, although with important differences. Participants in the conference call noted that many new immigrants and refugees faced similar issues with chronic disease as did the rest of the population, including high rates of diabetes, high blood pressure, obesity and heart disease. Sometimes these conditions are exacerbated by the transition into an American culture with widely available fast food and lower amounts of physical activity with more driving than walking in an average day. Understanding that lifestyle changes can affect health is one important suggestion, and many participants advocated for more health education. They mentioned that lifestyle changes, such as getting more exercise, would be most effective if delivered in a way that was culturally relevant; for example, some women may not feel comfortable exercising in public because of cultural norms. Participants also mentioned that lack of familiarity with American foods, and lacking access to the foods that they are used to is a barrier to health for many immigrants and refugees, resulting in lower levels of nutrition in the United States in some instances.

Theme 2: Immigrants and refugees often lack important health information, and/or a way to translate it culturally into their lives to improve health. Participants suggested that health systems step up their efforts to promote patients' ability to advocate for themselves beyond the "Ask Me 3" efforts already underway. Patients may not completely understand differences in standards of care between physicians and other health care providers in the United States and the countries in which they are used to receiving care. For example, a patient with cold symptoms may receive a pill or a shot in other countries, but be told by a provider in the United States to wait a few days to see if symptoms will clear on their own before filling a prescription for antibiotics (which are often available without a prescription in other countries). Immigrants and refugees may be reticent to ask questions and challenge the authority of the medical provider during their medical appointments, but then may not fully benefit from the care because they do not receive the information that they need to help improve their health.

Theme 3: Access to affordable, timely, culturally competent care remains a barrier to wellness for many immigrants and refugees. Participants mentioned that many immigrants and refugees face significant barriers in accessing care. Public insurance programs are often not available to immigrants and refugees, but even those with Medicaid and with the "Orange Card" have difficulty finding providers and being able to get appointments in a timely manner. Many mentioned the perception that medical providers often appear rushed, which limits the development of trust for patients and makes them less likely to feel comfortable asking questions. Several also mentioned the difficulty of working with interpreters, and suggested that medical providers receive additional training on working with interpreters, including remembering to speak directly to the patient, with eye contact, rather than to the interpreter. An additional barrier to health was the lack of familiarity with preventive care. Many immigrants and refugees, perhaps especially women, do not visit medical providers until they are sick, and do not receive timely preventive care and screenings.

# Appendix F-N Links

- F United Way of Greater Greensboro. One in Five Factsheet. Available at: <a href="www.unitedwaygso.org/wp-content/uploads/2015/08/Poverty">www.unitedwaygso.org/wp-content/uploads/2015/08/Poverty</a> Facts-March20151.pdf
- G Cone Health Foundation's The Economic and Employment Costs of Not Expanding Medicaid in North Carolina. Available at: <a href="www.conehealthfoundation.com/app/files/public/4202/The-Economic-and-Employment-Costs-of-Not-Expanding-Medicaid-in-North-Carolina.pdf">www.conehealthfoundation.com/app/files/public/4202/The-Economic-and-Employment-Costs-of-Not-Expanding-Medicaid-in-North-Carolina.pdf</a>
- H NC Child: The Voice for North Carolina's Children: How Healthy Are Guilford Children? Available at: <a href="https://www.ncchild.org/publication/2013-child-health-report-card-county-data-cards">www.ncchild.org/publication/2013-child-health-report-card-county-data-cards</a>
- I 2016 Leading Causes of Death Data Brief. Available at: <a href="https://www.myguilford.com/wp-content/uploads/2014/10/2016-LEADING-CAUSES-DATA-BRIEF-FINAL.pdf">www.myguilford.com/wp-content/uploads/2014/10/2016-LEADING-CAUSES-DATA-BRIEF-FINAL.pdf</a>
- J 2016 Chronic Diseases Data Brief. Available at: <a href="https://www.myguilford.com/wp-content/uploads/2014/10/2016-CHRONIC-DATABRIEF-FINAL.pdf">www.myguilford.com/wp-content/uploads/2014/10/2016-CHRONIC-DATABRIEF-FINAL.pdf</a>
- K 2016 Communicable Diseases Data Brief. Available at: <a href="https://www.myguilford.com/wp-content/uploads/2014/10/2016-COMMUNICABLE-DATA-BRIEFFINAL.pdf">www.myguilford.com/wp-content/uploads/2014/10/2016-COMMUNICABLE-DATA-BRIEFFINAL.pdf</a>
- L- 2016 Injury Data Brief. Available at: <a href="https://www.myguilford.com/wp-content/uploads/2014/10/2016-INJURY-DATA-BRIEF-FINAL.pdf">www.myguilford.com/wp-content/uploads/2014/10/2016-INJURY-DATA-BRIEF-FINAL.pdf</a>
- M 2016 Maternal and Child Health Data Brief. Available at: <a href="https://www.myguilford.com/wp-content/uploads/2014/10/2016-MCH-DATA-BRIEF-FINAL.pdf">www.myguilford.com/wp-content/uploads/2014/10/2016-MCH-DATA-BRIEF-FINAL.pdf</a>
- N The Foundation for a Healthy High Point's White Paper on Behavioral Health in the Greater High Point, NC Area and White Paper: Early Childhood Intervention and Teen Pregnancy Prevention. Available at: <a href="https://www.healthyhighpoint.org/resources">www.healthyhighpoint.org/resources</a>

# **Appendix O – Community Resource Inventory**

Guilford County has a wealth of community resources and assets to support the health of the community.

Below is a summary of existing coalitions organized around the following areas:

- Aging,
- Early childhood development,
- Immigrant/refugee populations,
- Mental health,
- Homelessness,
- Sexual health and
- Substance abuse.

This is not a complete list of all organizations and groups that are addressing the above topics. This inventory was compiled by MPH students in HEA 612: Management of Community Health Organization at The University of North Carolina at Greensboro (Kay Lovelace, PhD, Instructor). A more comprehensive list of local community resource information is available through <a href="https://www.nc211.org">www.nc211.org</a>.

		Aging	
Agency/Entity	Location/Contact information	Population served	Services provided and their availability
Senior Resources of Guilford	Ashlyn Martin 301 E. Washington St. Greensboro, NC 27401 336-373-4816 www.senior-resources- guilford.org	Aging Population, Caregivers	Caregiver Assistance, Case Assistance, Eldercare Locator, Home Delivered Meals, Housing Options, Long Term Care Options, Medical or Medicare Insurance, Prescription Drug Assistance, Senior Health Insurance Information (SHIIP), Social Activities for Seniors, Tax Preparation, Transportation MonFri.: 8:00am-5:00pm
Piedmont Triad Council of Government Area Agency on Aging	Bob Cleveland 1398 Carrollton Crossing Dr. Kernersville, NC 27284 336-904-0300 www.ptrc.org	Aging Population, Disabled Population, Caregivers	Advocacy, Funding, Planning, Collaborative Spaces, Policy MonFri.: 8:00am-5:00pm
Community Housing Solutions	Gene Brown 823 N Elm St #102, Greensboro, NC 27401 336676-6986 www.CHSHousing.org	Aging Population, Disabled Population, 80% of income households	Home repairs including: roofs, plumbing, floors, energy efficiency repairs, accessibility modifications, electrical hazards and code violations MonFri.: 8:00am-5:00pm
Greensboro Public Library	Brigitte Blanton 300 West Washington Street, Greensboro, NC 336-335-5430 www.greensboro- nc.gov/index.aspx?page=780	All citizens and community members	Speaker's Bureau: get expert speakers on various topics to speak at your organizations and events for free.  Meeting spaces open to the public.  MonThur.: 9:00am - 9:00pm  FriSat.: 9:00am - 6:00pm  Sundays: 2:00pm - 6:00pm
Adult Center of Enrichment	Nicole Reynolds 4100 Well Spring Drive Greensboro, NC 27410 336-274-3559 acecare.org	Aging population (particularly those who are frail or impaired), Family members, caregivers.	Adult Day Center: offers art, music, exercise, and recreational activities.  Group Respite Program: provided lunch with activities, exercise, music, and interaction with others.  Caregiver Education: three support groups that offers workshops and resources on a number of health topics about caring for a loved one.  Administrative Office: MonFri.: 8:30am-5pm  Adult Day Center: MonFri.: 7:30am-5:30pm  Respite Programs: MonFri.: 10am-2pm

Guilford County	Jenise Davis	Aging population	They are responsible for monitoring Adult Care Homes
Department of Health and Human Services, Social Services Division	1203 Maple Street Greensboro, NC 27405 336-641-3380 myguilford.com	(particularly those who are low- income, disabled, or in need of services).	to ensure proper licensure and follow up of complaints. Other programs offered are General Adult Services (short term,) Adult Day Care/Health Services, Adult Placement, Guardianship, Adult Protective Services, Adult Representative Payee Services, Special Assistance In-Home Program, and In-Home Aide Services. MonFri. 8:00am-5:00pm
United Way of Greater Greensboro	Crystal Broadnax 1500 Yanceyville Street Greensboro, NC 27405 336-378-6600 www.unitedwaygso.org	Serves populations across all lifespans, but the aging programs fall under health and basic needs impact areas.	Funding for community programs and initiatives in the Greensboro area including: 2-1-1 access line, Family Success Center, Free Tax Prep, Mentoring Matters and Thriving at 3.  Mon-Fri: 8:30am-5:00pm
Creative Aging Network	Leah Miller 200 North Davie Street 321-C Greensboro, NC 27401 336-253-0856 www.can-nc.org Email: lia@can-nc.org	Aging population, family members, health care providers, artists, and LGBTQ seniors.	The center offers educational and vocational opportunities for seniors to learn and share.  MonFri. 9:00pm-5:00pm
UNCG Gerontology Program	Rebecca Adams The University of NC at Greensboro 212 Ferguson Building Greensboro, NC 27412 336-256-1020 gerontology.wp.uncg.edu	Students who are interested in gerontology or aging populations, the program links students with existing programs in the community.	Offers educational Masters, PhD and certificate programs along with community based opportunities for those who want to work with older adults.  MonFri. 8:00am-9:00pm
Shepherd's Center of Greensboro	Sandy Doyle-Jones 302 West Market Street, Suite 103 Greensboro, NC 27401 336-378-0766 www.shepctrg.org	Aging population, in particular those who are interested in active aging.	The organization provides five unique opportunities for seniors to get involved.  Adventures in Learning-offers educational sessions to enrich the lives and learning of older adults.  Shepherd's WHEELS-requests for grocery store visits or social outings can be arranged through this program.  ShepNet Computer-computer lessons for older adults are offered for those who want to build technological skills.  Table Games-seniors can use a variety of games provided by the organization and have the opportunity to meet with other seniors.  Travelers-a senior lead program for those who want to continue safely traveling in a group setting through their aging years.  MonFri.: 9:30am-3:30pm

	Early Childhood Development 2015-2016 Partnership for Children Community Partners							
Agency/Entity	Location/Contact information	Population served	Services provided and their availability					
	Eas	rly Child Care & Edu	ucation					
Bringing Out the Best	923 West Lee Street Greensboro, NC 27403 Wanda Dodson-Hoff, <i>Program</i> <i>Director</i> : 336-334-3120 Email: bobuncg@uncg.edu	Childcare providers, families and caregivers of children in preschool in Guilford County, children identified at for or may have social-emotional development/ behavior issues.	Educate child care providers, families and professionals to support healthy social/emotional development in children birth to age 5.  Offers: Provider trainings, onsite consultations, direct/indirect contact with parents, child-centered intervention meetings, and staff trainings.  MonFri. 8:00 am-5:00 pm					

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Child Care Health Consultant (CCHC)	NC Child Care Health and Safety Resource Center 5601 Six Forks Road Raleigh, NC 27609 Jonathan Kotch, <i>Project Director</i> 919-707-5676 Email: jonathon_kotch@unc.edu	Licensed child care facilities serving children birth to age 5 in Guilford County and the providers.	Child Care Health Consultants work with child care staff to promote healthy and safe environments for young children.  Offers: On-site visits to childcare facilities, written/phone consultations, child care plans development, child health education sessions, and group training sessions on health, nutrition, physical activity, and safety.  MonFri.: 8:00 am-5:00 pm
Child Care WAGE\$ Project	Child Care Services Association 1829 East Franklin Street P.O. Box 901 Chapel Hill, NC 27514 Allison Miller (919)967-3272	Low paid child care providers who work in licensed child care facilities in Guilford County.	Increases the education, retention and compensation of early education.  Offers: Education-based salary supplements to low-paid teachers, directors and child care providers. This compensation may help teachers pursue additional training or can be used as a reward.  MonFri.: 8:00 am-5:00 pm
Education, Quality Improvement & Professional Development	UNCG Campus 319 College Ave. Room 188, Stone Building P.O. Box 26170 Greensboro, NC 27402 336-315-7768 Email: equipd@uncg.edu	Child care center director/administr ator and child care teachers in Guilford County.	Focuses on the professional development of early childhood professionals.  Offers: Professional development plans, peer coaching, training on appropriate activities for children, leadership training, improving working conditions for teachers, and enhances quality of classrooms.  MonFri.: 8:00 am-5:00 pm
Purchase of Care (POC) Child Care Subsidy: Rising Stars	Guilford County Department of Health and Human Services, Social Service Division 1203 Maple Street Greensboro, NC 27405 336-641-3447	Guilford County children birth to age 5 enrolled in 4 or 5 star care whose families' income is 0-75% of the state median income.	Implemented through the state-level subsidy contract and offers financial assistance on a direct per child basis for the purchase of care and enhancements for Temporary Assistance for Needy Families eligible or Child Care Development Fund eligible families.  Offers: Provides subsidies for children whose families are not able to afford high-quality childcare.  MonFri.: 8:00 am-5:00 pm
Pre-K Subsidy	122 North Elm Street Suite #1010 Greensboro, NC 27401 336-369-5097 Email: patrag@guilfordchildren.org	Low-income four year olds in Guilford County who may be at-risk for developmental delay.	Provides direct financial assistance for children to attend four star or five-star child care.  Offers: Funding for 1,900+ eligible four year olds the opportunity to attend free, high-quality child-care before entering kindergarten.  MonFri.: 8:00 am-5:00 pm
	Fam	ily Support & Early	Literacy
Family Literacy/ Language Development	Grace United Methodist Church 438 W. Friendly Ave. Greensboro, NC 27401 336 378-7700	Guilford County parents and children with low literacy; native English speakers and learners of English as a second language.	Helps parents in Guilford County improve their literacy and life skills while preparing their children for success in school.  Offers: ESOL and GED courses, quality preschool education (children 6 months to 5 years), safe and supportive learning environment, children's books for home learning, field trips to community places & events, and guidance and instruction from health and education professionals.  Tues., Wed. and Thurs.: 9:00 am-12:00 pm.
Healthy Start	Washington Street Building 315 East Washington Street Greensboro, NC 27401 24-hour Crisis Line: Greensboro 336 273-7273 High Point 336 889-7273 General Contact Number: 336387-6161, ext. 2288	Designed for new parents (children ages 0-2 years old) and expectant moms with high stress factors in Guilford County.	Caseworkers are used to help parents to nurture their children's development by helping to create a positive, safe living environment for their families.  Offers: Healthy Start offers in-home, adult individual counseling to participating families. This service targets moms/caregivers with mental health concerns such as depression, anxiety, and mood swings.  Individual sessions are offered weekly, and services are provided for three to six months.

Parent Connection	Children's Home Society of NC 1416 Yanceyville St., Ste. C, Greensboro, NC 27405 Dr. Sebrina Cooke-Davis 336-553-9708 Email: scookedavis@chsnc.org	Parents in Guilford County who wish to sharpen their parenting skills to better parent their children.	Parent Connection is a ten-week parent education program.  Offers: The sessions include topics such as alternatives to spanking, communicating with respect, ages & stages of growth for infants & toddlers, ways to enhance positive brain development in children & teens, and programs on learning how to praise children and their behavior. There is a fee of \$40/person or \$60/couple.  Mon Fri.: 5:30pm-7:00pm
Parents as Teacher Guilford County	415 N. Edgeworth St. Suite 206 Greensboro, NC 27401 336-691-0024 Email: patgc@patgc.org	This program is accessible to any family in Guilford County with a child who is five years old or younger.	This program was built on the principle that parents are their child's first and best teachers.  Offers: Trainings for parents and teachers that focus on three growth areas: school readiness, parent proficiency, and family health.  MonFri.: 8:00 am-5:00 pm
Reach Out and Read	Reach Out and Read National Center 89 South St, Suite 201 Boston, MA 02111 Local Locations: Triad and Adult Pediatric Medicine, Guilford Child Health 617-455-0600 Email: info@reachoutandread.org	Health professionals who care for children in Guilford County, from infancy through 5 years, and parents are advised about the importance of reading aloud.	Books are incorporated into pediatric care and families are encouraged to read aloud together.  Offers: Parents learn new ways to stimulate their children's literacy development, have more books in their home, and read to their children more.  MonFri.: 8:00 am-5:00 pm
	H	ealth & Early Interve	ention
Adopt-A-Mom Program/Prenatal Care	Guilford County Coalition on Infant Mortality Participating OB/GYN practices:  - Dr. Bernard Marshall, Cone Family Practice  - Dr. Henry Dorn, Guilford County Department of Public Health Clinics  - Women's Hospital of Greensboro Clinic  - Center for Women's Health care at Stoney Creek  - Solstas Lab  - LabCorp  - Duke Perinatal Consultants Leandra Vernon 336-641-7513	Women in Guilford County who are Medicaid ineligible, who lack private insurance or otherwise cannot pay out of pocket for prenatal care.	Adopt-A-Mom arranges prenatal care for low to medium-risk pregnant women who aren't eligible for Medicaid, cannot afford to pay out of pocket fees or do not have private insurance.  Offers: Prenatal care and ancillary services; one-time education workshop, connecting newborns with pediatricians, translation services provided and discounted rates for lab work and ultrasounds.  MonFri.: 8:00 am-5:00 pm
Guiding Healthy Behaviors in Early Childhood	Guilford County Partnership for Children 122 N. Elm St. #1010 Greensboro, NC 27401 Trish Nelson, <i>Provider Specialist</i> 336- 274-5437 Email: trician@guilfordchildren.org	Licensed early childhood professionals and providers at childcare facilities in Guilford County.	Guiding Healthy Behaviors collaborates with childcare providers and the community to promote a child's healthy development and the prevention of childhood obesity.  Offers: Assessment of the physical environment, plans with detailed instructions for moving forward and working with current program strengths, assistance in implementing plans, connections to community resources to help achieve goals, training sessions, on-site consultations and community meetings.  MonFri.: 8:00 am- 5:00 pm

Juvenile Court Infant Toddler Initiation	UNCG Center for Youth, Families, and Community Partnerships 1001 W. Gate City Boulevard Greensboro, NC 27402 336- 334-3681	Guilford County infants aged birth to three in the child welfare system and are victims of abuse and neglect.	Provides support to parents and early childhood teachers of children who are victims of abuse and neglect. Offers: Families are tracked by community court coordinator, families are connected with resources, court team meetings, and works to prevent problems leading to additional court involvement.  MonFri.: 8:00 am- 5:00 pm
NICU and Child Developmental Services Agency Family Support	Women's Hospital of Greensboro 801 Green Valley Rd. Greensboro, NC 27408 336- 882-6507	Families with infants admitted to the neonatal intensive care unit in Guilford County.	NICU and CDSA Family Support provides support and education to families of premature infant with special needs.  Offers: One-on-one education and support during hospitalization, support groups, early intervention program, personal visits, the blanket project, books for babies, parent-to-parent mentor program, sibling support and orientation program, baby basics program, and educational opportunities.  MonFri.: 8:00 am-5:00 pm
Universal Newborn Home Visiting Program	Guilford County Dept. Health and Human Services, Public Health Division 1203 Maple Street Greensboro, NC 27405 336-641-3447 Email: ttollis@myguilford.com	Families and mothers of non- Medicaid newborns in Guilford County.	Families of newborns are offered a nurse who visits the home after the birth of a child.  Offers: Nurse home visits, support and assessment, connection with and referral to community resources.  MonFri.: 8:00 am-5:00 pm
		Program Support	t
Awareness and Engagement	Guilford County Partnership for Children 122 North Elm Street, Suite 1010 Greensboro, NC 27401	Community stakeholders such as parents of young children, childcare providers, businesses, civic leaders, policy makers and community partners.	The Awareness and Engagement activity provides services that improve the way professionals, families and community members engage with each other and improve their services to families and children. <i>Offers</i> : Community needs assessment, strategic plan development, early childhood compensation workgroup meetings and development.  MonFri.: 8:00 am-5:00 pm
Program Coordination/Ev aluation	Guilford County Partnership for Children (GCPC 122 North Elm Street, Suite 1010 Greensboro, NC 27401 Candy Scott, <i>Chief Program Officer</i> 336-274-5437 Email: Candys@guilfordchildren.org	All Smart Start funded community partners, GCPC Board of Directors, committees and community.	Used by the GCPC to work with service providers to clarify program goals and activities, review and improve outcomes, output and program evaluation plans. Offers: National Capital Planning Commission quarterly outputs, quarterly summary reports, special projects and quarterly community partner meetings.  MonFri.: 8:00 am-5:00 pm

	Immigrant and Refugee Health							
Agency/Entity	Location/Contact information	Population served	Services provided and their availability					
Americorps Access Project	The Center for New North Carolinians 915 W Gate City Blvd, Greensboro, NC 27403 Khouan Maoxomphu Rodriguez, Project Director at 336-256-1060 Cynthia Mejia, Training Coordinator at 336.256.1375 cnnc.uncg.edu/americorps- access-project/	Refugee and Immigrants of Alamance, Buncombe, Durham, Guilford, Mecklenburg and Wake counties.	Provides employment coaching and placement, ESOL instruction, volunteer recruitment and management, interpretation services, and disaster preparedness. Provides professional and leadership development training to AmeriCorps members. Provides professional development training to community and faith based partner organizations. MonFri.: 8am-5pm					

Ashton Woods, Glen Haven and Oakwood Forest Community Centers	The Center for New North Carolinians 915 W Gate City Blvd, Greensboro, NC 27403 Lizzie Biddle at 336.334.5466 cnnc.uncg.edu/community- centers	Residents of the Glen Haven, Ashton Woods and Oakwood Forest Complexes and the surrounding community.	The three Centers provide: ESOL classes (group and one-on-one), employment readiness sessions, American cultural education, social and cultural orientation, a place to gather for tutoring after school and field trips, family-based health and safety classes, forums to educate parents in the complex on issues of safety, health and childcare, health and sports activities and summer programs, family empowerment activities and school and community linkages, social work experience for social work interns, a great opportunity for volunteers and a Congregational Nurse in two centers. MonFri.: 8am-5pm
Immigrant Health ACCESS Project	915 W. Gate City Blvd., Suite A, Greensboro, NC, 27403 Project Coordinator: H'Tuyet "Snow" Joyce htuyet.cnnc@uncg.edu 336-707-4010 Project Coordinator: Krycya Flores 336-334-9889 krycya.cnnc@uncg.edu cnnc.uncg.edu/immigrant- health-access-project	Refugee/ Immigrants of Guilford County. Reaching over 500 immigrant families per year targeting Southeast Asians and Latin Americans.	Provides information and referral to community resources and collaborating with other agencies.  Workshops and presentations on how to navigate the health system and health related topics.  Services are coordinated between Guildford Community Care Network (GCCN) partners, specialty care, & clients. Provides interpretation, translation, and on-sight translation to clients and providers.  Assists the community with case management related to health, economical, and social issues.  Provides workshops & presentations to agencies and providers about multiculturalism, language barriers, and the latest information about population trends.  MonFri.: 8am-5pm
Interpreter ACCESS Program	The Center for New North Carolinians 915 W Gate City Blvd, Greensboro, NC 27403 IAP Interpreter Bank at 336.256.8617 or 336.256.1059. cnnc.uncg.edu/interpreter- access-project	IAP bank interpreters serve Guilford County and the surrounding Triad area. Interpreter trainings take place across NC.	Provides interpreters who help smooth communication between various service providers and the refugee/immigrant population MonFri.: 8am-5pm
Latino Community Coalition of Guilford	The Center for New North Carolinians 915 W Gate City Blvd, Greensboro, NC 27403 Kathy Hinshaw at 336.256-1065 cnnc.uncg.edu/latino- community-coalition-of-guilford	The Latino population in Guilford county.	Partners with other organizations to host One City One Book events as well as the Immigration Matters Summit. Promotes networking events including LCCG Monthly meetings, Notable Latinos of the Triad, and Social Fridays.  Provides leadership trainings such as Racial Equity-Latino Challenges and Latino Women on Board.  MonFri.: 8am-5pm
Thriving at Three	The Center for New North Carolinians 915 W Gate City Blvd, Greensboro, NC 27403 Angela Guerrero at 336.256.1066 cnnc.uncg.edu/thriving-at-three	Greater Greensboro, NC	Educates parents about their child's developmental stages Supports families as they help their children reach their full potential, provides positive parental skills, ensures early detection of developmental delays and provide proper referral, and reduces the negative impact of parental mental health or substance abuse problems on children.  MonFri.: 8am-5pm
Immigration Services Program	The Center for New North Carolinians 915 W Gate City Blvd, Greensboro, NC 27403 BIA Accredited Staff: Janet Johnson: jajohns5@uncg.edu Kathy Hinshaw: rkhinsha@uncg.edu 336-256-1065 cnnc.uncg.edu/immigration- services	Refugee/ Immigrants in NC	Provides legal assistance on: Family immigration, naturalization/citizenship, permanent residence, remove conditions on residence, affidavit of support, consular processing, fiancé petitions and deferred action for childhood arrivals (DACA)  MonFri.: 8am-5pm

	Mental Health			
Agency	Location/Contact information	Population served	Services provided and their availability	
Cone Behavioral Health	General Programming: 700 Walter Reed Drive Greensboro, NC 27403 336-832-9800 24-hour HelpLine: 336-832-9700 or 1-800-711-2635 Outpatient Locations: Behavioral Health Center at Greensboro 700 Walter Reed Drive Greensboro, NC 27403 336-832-9800 Behavioral Health Center at Kernersville 1635 NC 66 South Kernersville, NC 27284 336-993-6120 Behavioral Health Center at Reidsville 621 S. Main Street, Suite 200 Reidsville, NC 27320 336-349-4454	Adults, adolescents and children	Cone Behavioral Health Hospital provides inpatient services to individuals suffering from mental illness(es) and/or addiction issues. They offer a variety of services including counseling services, treatment programs, and a 24-hour helpline staffed by registered nurses and master's level clinicians.	
Family Service of the Piedmont	Main Greensboro Office 336-387-6161 Washington Street Building 315 East Washington Street Greensboro, NC 27401 Main High Point Office 336-889-6161 Slane Center 1401 Long Street High Point, NC 27262-2541 Main Jamestown Office 336-889-6161 Jamestown Building 902 Bonner Drive Jamestown, NC 27282 24-Hour Sexual Assault Line Greensboro: 336-273-7273 High Point: 336-889-7273 Child Abuse Hotline: 336-641-3795 Employee Assistance Program: 336- 387-6161 ext. 3304	Serving individuals and families in Greensboro, High Point, and Jamestown.  Integrated Care: Indigent Clients  Outpatient: Adults and Children  Substance Abuse Service: Adults  Support Services: Adults and children	Integrated Care: Co-located primary medical care for indigent clients who are coping with mental illness or substance abuse through a multidisciplinary team of care providers.  Outpatient Mental Health Service: Services teach techniques managing symptoms, educate individuals about their diagnosis, link individuals to available services they may choose to engage and provide support for ongoing recovery efforts.  Substance Abuse Service: Services are available for individuals experiencing both behavioral and substance disorders.  Domestic Violence: Shelters (Clara House in Greensboro and Carpenter House in High Point) serve women and their children who are victims of domestic violence. Shelters may be used up to two years. Services provided include counseling and court advocacy.  Sexual Assault: Women's support groups, children's treatment groups, support groups for batterers, and individual and group counseling.	

Mental Health	General Programming:	Adults; individuals	Provides educational presentations, mental health
Association in Greensboro	301 E. Washington St., Suite 111 Greensboro, NC 27401 336- 373-1402 Email: info@mhag.org One on One Peer Support: Alyse Sapp, Director of Program Development 336- 373-1402 ext. 206, Email: alyse@mhag.org	with mental health illness and families.	screenings, a Mental Health Recovery Conference (in May), one-on-one peer support by appointment and Wellness Academy classes: MonFri., 10-11:30am Six week classes on range of topics (examples: choice, personal responsibility, and self-empowerment) Nine week classes on anger management Support Groups: Groups include a mental health recovery group for those coping with a range of issues, schizophrenia group and Family and Friends Support group. Hands of Hope: Gift Giving program serving adults and children at Central Regional Hospital, Cone Behavioral Hospital, and residents of several group homes. Open to anyone interested in recovery. Suicide Awareness and Prevention: Classes for suicide prevention and aversion.
Mental Health Associates of the Triad	General Programming 336-883-7480 information@mha-triad.org High Point Outpatient Service: 910 Mill Avenue High Point, NC 27260 Greensboro Outpatient Service: The Guilford Building 301 South Elm St. Suites 412, 413, and 424 Greensboro, NC 27401 Support Groups: Dr. Kim Soban, Clinical Director 336-822-2827	Adults in Guilford County with mental health illness particularly those with severely and persistently mentally ill	Destiny House: Psychosocial rehabilitation day program for severely and persistently mentally ill adults. Call for Information about referrals, fee for service; Medicaid accepted.  Journey Program: Step down day program for adults with severe mental illness. Five days, Five hours a day Court Services: Call for information.  Outpatient Service: High Point and Greensboro offices. Call to set up an appointment, fee for service; Medicaid accepted.  Crossroads Depression Support Group: Tuesday, 6-7:30pm, free.  Zenith Club -Support for schizophrenia: Every 2 <sup>nd</sup> and 4 <sup>th</sup> Wednesday, 1:00pm, free.
Sandhills Center	800-256-2456 Corporate Headquarters: 1120 Seven Lakes Drive West End, NC 27376 www.sandhillscenter.org	Individuals and families battling mental illness in Anson, Guilford, Harnett, Hoke, Lee, Montgomery, Moore, Randolph and Richmond Counties	Offers assistance with mental health, substance abuse disorders or intellectual/development disabilities through their call center, 24 hours a day, seven days a week. Clients who call may speak to a licensed mental health clinician for information or to schedule an assessment appointment.
Sanctuary House	518 N. Elm Street Greensboro, NC 27401 336- 275-7896 Intake Department 336- 215-7062 General Email sanctuaryhouse@sanctuaryhouse gso.com A Sweet Success! Bakery 336- 215-8239	Guilford County adults (21 and over) with a severe mental illness (schizophrenia, bipolar disorder, schizoaffective disorder, psychotic disorder or major depression).	Provides day programs and support for individuals with chronic mental illnesses, with the goal of helping consumers live more independently.  Employment and Education: Sanctuary House works with members to prepare them for and help them find work and educational opportunities.  Work-Ordered Day: Members and staff work together to fulfill daily administrative and operational tasks. Social and Recreational: A range of social and recreational activities are offered to help members overcome insecurity and isolation.  Wellness: Sanctuary House provides members access to wellness activities including YMCA sessions and on-site exercise sessions with an instructor.  Outpatient Services: Outpatient services such as comprehensive clinical assessments and individual/group therapy are available to members.  A Sweet Success! Bakery: Members help with this inhouse business while gaining social and vocational skills that can be transferred to future employment opportunities.

		artners Ending Hor tuent Organization	
Agency	Location/Contact information	Population served	Services provided and their availability
ACTS Ministries	792 North Main Street High Point, NC 27262 336- 886-5723 www.hpcav.com	Serves individuals who live in high-crime and low-income areas within Guilford County.	Mission work on Mondays, Tuesdays and Wednesdays. Provide high-crime, low-income community's meals, worship services, and offer some much-needed encouragement to the hurting. In addition, to offer up prayers on behalf of God's people. Available at multiple locations.
Affordable Housing Management	330 South Greene Street, Suite B-11 Greensboro, NC 27401 336-273-0568 info@ahmi.org	Serves lower income households and families.	Provides the community with quality affordable rental housing for citizens through the development and management of properties.
Alternative Behavioral Solutions, Inc.	157 Blue Bell Road Greensboro, NC 27406 336-370-9400		Home Health Services
Acceptance, Responsibility, and Judgement (ARJ)	503 W McGee St, Greensboro, NC 27401 336-676-5644	Serves the mentally ill, developmentally disabled and substance abuse populations.	Provides outpatient therapy, community support teams, intensive in-home care, comprehensive clinical assessment and peer support.  MonFri.: 8:00am-5:30pm
Building Up Dreams, LLC	1501 Garland Dr. Greensboro, NC 27408 336-608-8252 anna@buildingupdreams.com		Specializes in business-to-business database and visualization solutions.
CareLink Solutions, Inc.	1214 Grove St Greensboro, NC 27403 336-285-6887		Mental health services, mental health clinics and information.
Caring Services, Inc.	102 Chestnut Dr. High Point, NC 27262 336-886-5594	Serves recovering alcoholics, addicts and their loved ones.	Transitional housing, supported living, outpatient treatment, substance abuse intensive outpatient program, veteran's safety network.  MonFri.: 8:00am-5:00pm
City of Greensboro	300 West Washington Greensboro, NC 27401 336-373-2489	Greensboro Citizens	Collaborating with the community to build the desired quality of life for Greensboro.
City of High Point	211 South Hamilton St. High Point, NC 27260 336-883-3111	High Point Citizens	Collaborating with the community to build the desired quality of life for High Point.
Department of Housing & Urban Development	1500 Pinecroft Rd #401 Greensboro, NC 27407 336-547-4000	Serves low-income, single families and the elderly.	MonFri.: 8:00am-4:30pm
Department of Veterans Affairs: Health care for Homeless Veterans Program	3515 W Market St., Suite 120 Greensboro, NC 27406 336-323-2660	Serves Guilford County Veterans and their families.	MonThurs.: 8:00am-7:00pm Fri.: 8:00am-4:30pm 1st Saturday of each month, 9:00am-5:30pm
Family Promise of Greater Guilford County Family Service of the Piedmont	2505 Fairview Street Greensboro, NC 27405 336-389-2006 315 E Washington St, Greensboro, NC 27401 336-387-6161	Serves the homeless within Guilford County. Serves families and individuals in crisis.	Shelters, meals and supportive services to families without homes. Cost-efficient, effective and replicable community response to family homelessness.  Offers domestic violence shelters, children's advocacy centers, substance abuse and mental health counseling, consumer credit counseling, in-home therapy and
First Lutheran Church	3600 W Friendly Ave Greensboro, NC 27410 336- 292-9125	Serves the Guilford County population.	support and family preservation.  MonFri.: 24 hours a day  Participate in collaborative ministries that fight hunger and provide housing.

Goodwill Industries of Central NC, Inc.	3921 Battleground Ave Greensboro, NC 27410 336- 545-1212	Serves the Guilford County population.	Provides career development services and work opportunities for people with employment needs.  MonSat.: 9:00am-8:00pm
Greensboro Housing Authority	450 N Church St Greensboro, NC 27401 336- 275-8501	Serves low-income families, the elderly and disabled.	Sunday, 1:00pm-6:00pm  To provide safe, quality, and affordable housing for families with low income, the elderly and disabled.
Greensboro Housing Coalition	122 N Elm St #4 Greensboro, NC 27401 336- 691-9521	Serves individuals with special needs, low and moderate income in Greensboro.	To provide decent and affordable housing for individuals with low and moderate income.  MonFri.: 8:30am-5:30pm
Greensboro Urban Ministry (GUM)	305 W Gate City Blvd. Greensboro, NC 27406 336- 271-5959 greensborourbanministry.org	Those in Greater Greensboro where poverty has created a crisis in their lives.	Help clientele find paths to economic stability, personal fulfillment and spiritual well-being through these programs: Chaplaincy, emergency assistance, food bank, Partnership Village, Pathways Center, Potter's House Community Kitchen, Weaver House, winter emergency shelters and beyond GUM.
Guilford County Department of Social Services	Greensboro Office: 1203 Maple Street Greensboro NC 27405 336- 641-3447 High point Office: 325 East Russell Avenue High Point NC 27260 336- 641-3447	Low income individuals and families	Family Services and Programs: Family recruitment for foster and adoptive homes, food and nutrition services, guardianship services, Work first family assistance and Medicaid.  Children Services and Programs: Child day care, children foster care, children protective services and adoption services.  Adult Services: Adult care licensure, general adult services, adult day care/health services, adult placement and guardianship.  Other Services and Programs: Guilford adolescent prevention services, representative payee, services for the blind, and Work first employment.  Mon.—Fri.: 8:00 am to 5:00 pm
Guilford County Schools	712 N. Eugene Street Greensboro, NC 27401 P.O. Box 880 Greensboro, NC 27402 336-370-8100	Students	Provide an appropriate climate for students to graduate as responsible citizens prepared to succeed in higher education, or in the career of their choice.
Habitat for Humanity of Greater Greensboro	603 N Elm St Greensboro, NC 27401 336-275-4663	Families in need of a home	Builds homes for families in need Monday-Saturday, 10:00 am – 5:30 pm
Holy Trinity Episcopal Church	607 N. Greene St. Greensboro, N. C. 27401 336-272-6149 Fax: 336-272-6197 info@holy-trinity.com	Everyone	Formalized period of communal worship. Activities for everyone who want to join. Everyone is welcome to use their outdoor Labyrinth and garden
House of Serenity	2211 W Meadowview Road Suite 114 Greensboro, NC 27405 336- 254-8586	Unknown	Life skills coaching
Housing Authority of the City of High Point	500 East Russell Avenue High Point, NC 27260 336-887-2661	Low-income citizens of High Point	Provide eligible families and individuals with adequate and affordable housing, economic advancement and homeownership opportunities — in a safe, drug-free, suitable, living environment — without discrimination.
Interactive Resource Center	407 E Washington Street P.O. Box 20568 Greensboro, NC 27401	People who are homeless, recently homeless or facing homelessness reconnect with their own lives and with the community at large	Provide everything from showers facilities to a computer lab to a mail room to classrooms and meeting spaces The IRC is open 365 days a year MonFri.: 8am - 3pm Sat. & Sun.: 8am - 2pm

Jericho House	2824 Liberty Rd, Greensboro, NC 27406 336- 275-9625	Ex-offenders being released from prison	A Christian based aftercare program. Provides room, board, transportation and Christian discipleship.
Joy A. Shabazz Center for Independent Living	211 Commerce Place, Suite D Greensboro, NC 27401 336-272-0501 Fax 336- 272-0575	Unknown	Consumer Advocacy: Consumers are provided with non-legal advocates who inform them of their rights and represent them to ensure that they obtain access to services and programs.  Community Advocacy Information & Referrals: Through community agency and service referrals, information about community resources, Americans with Disabilities Act (ADA), Disability rights publication and other legislation information.  MonFri.: 8:30-4:30
Malachi House	PO Box 3171 Greensboro, NC 27402 336-375-0900 336-375-9005 admin@malachihouse2.org	People who recover from life- controlling issues, such as drug and alcohol addiction	When a participant enrolls in Malachi House II, he not only receives food, clothing and shelter, he also embarks on a journey that will assist him in developing a personal relationship with God, expand his education, obtain new job skills and develop a positive work resume.
Mary's House	520 Guilford Avenue Greensboro, N.C. 27401 336-275-0820 Fax: 336-275-0884 maryshousegso@aol.com	Mothers in recovery	Provides transitional housing to women in recovery from substance abuse and their minor children. We assist our residents with in-house substance abuse issues and case management concerns. We teach our residents parenting skills and assist our mothers in assuring that our children meet their developmental milestones.
Mental Health Association in Greensboro	301 E. Washington St., Suite 111 Greensboro, NC 27401 336-373-1402	People with mental illnesses	Provides services and programs that promote mental health and support recovery from mental illnesses.  Provide the most up-to-date information, programs, and services that better inform and provide support for mental illnesses patients.
NC Division of Vocational Rehabilitation	Raleigh 2001 Mail Service Center Raleigh, NC 27699-2001 919-855-4800	For all North Carolinians, especially our most vulnerable citizens – children, elderly, disabled and low- income families	Aging and adult services, children's services, deaf-blind services, disability services, hearing loss, low-income services, Medicaid, mental health and substance abuse, NC Medicaid Reform, pregnancy services, guardianship, Veteran's Services, vision loss and vital records.
New Horizons	7017A Albert Pick Road Greensboro, NC 27409 844-974-4687 enrollmentsupport@nh- alliance.com	Individuals and business in local community	Computer training Hours of Operation: Monday – Friday, 8:00am to 5:00pm Mentored Learning Classroom Hours MonFri.: 8:00am - 5:00pm
North Carolina Housing Coalition	3800 Faringdon Pl. Raleigh, NC 27609 919-881-0707	Low-and moderate-income North Carolinians	Resource and referral, technical assistance/outreach, advocacy, clearinghouse for data, statistics, best practices and research.  MonFri., 8:30am-5:00pm

Open Door Ministries	LGraham@odm-hp.org Cassell House: 1022 True Lane High Point, NC 27260 336-885-2166 Emergency Services: 400 North Centennial Street High Point, NC 27262 336-885-0191 Father's Table: 400 North Centennial Street	Cassell House: homeless men Emergency Services: Father's Table: anyone who is hungry Men's Shelter: adult homeless men Permanent	Cassell House: transitional living facility for homeless men.  Emergency Services: provides financial assistance for household utility, rent and medical prescriptions.  Father's Table: serves three meals a day, seven days a week to anyone who is hungry (365 days/year; 8-9am, 11am-12pm, 6-7pm).  Men's Shelter: shelter, casement manager services and medical services (Tuesdays).  Permanent Supportive Housing: houses individuals in one bedroom houses or apartments.
	High Point, NC 27262 336-885-0191 Men's Shelter: 400 North Centennial Street High Point, NC 27262 336-886-4922 Permanent Supportive Housing: 400 North Centennial Street High Point, NC 27262 336-885-0191	Supportive Housing: chronic homeless individuals	one bedroom nouses of apartments.
Peace of HOPE Foundation	4004 Coltrain Rd Apt. B Greensboro, NC 27455	Unknown	Unknown
Partnership for Community Care/ Partnership for Health Management	1050 Revolution Mill Road, Studio #4 Greensboro, NC 27405 336-235-0930	Medicaid patients	Minimize barriers to health care, provide care management services to Medicaid patients, transitional care nursing, chronic disease and telemonitoring, behavioral health integration, Project Lazarus, performing medication reconciliations, reduce infant mortality, palliative care, early intervention program, nutrition program, care coordination for children, CHIRPA, CHACC, uninsured program and quality improvement.
Phillips Foundation	P.O. Box 4034 Greensboro, NC 27404		A private family foundation and catalytic capital platform, which leverages its resources for positive change through impact investing, strategic grants, and original programs.
Piedmont Health Services & Sickle Cell Agency	Greensboro: 1102 E. Market Street Greensboro, NC 27401 336-274-1507 High Point: 401 Taylor Avenue High Point, NC 27260 336-886-AIDS (2437) Winston-Salem: 1317 N. Cherry Street Winston Salem, NC 27105 336-725-9181	People with highrisk health problems in Guilford, Forsyth, Alamance, Rockingham, Randolph, Caswell, and Mecklenburg Counties. Baby Love Program: Medicaid eligible women of childbearing age	Sickle Cell: newborn screening, genetic counseling, case management, summer enrichment camp HIV/AIDS outreach, education, and testing Baby Love Plus Program.
Psycho- therapeutic Services	3 Centerview Dr. Greensboro, NC 27407 336-834-9664	Persons with severe and persistent psychiatric disabilities	MonFri., 8:00am-8:00pm Saturday-Sunday, 8:00am-4:00pm
RHA Behavioral Health, High Point	2205 Benton Ln Greensboro, NC 27455 336-282-6081	People with intellectual, physical, and developmental disabilities and individuals with mental health needs or substance use challenges	Provides services for people with intellectual, physical, and developmental disabilities and individuals with mental health needs or substance use challenges.

Rabbit Quarter Ministries	Raymond Payne		Transitions the homeless into permanent housing and helps them become self-sufficient.
Sandhill's Center	201 N Eugene St. Greensboro, NC 27401 800-256-2452	Citizens of Anson, Guilford, Harnett, Hoke, Lee, Montgomery, Moore, Randolph, and Richmond counties	Call center is open 24 hours, Access to health care as an agent of NC Department of Health & Human Services.
Ready for Change	5 Centerview Dr. Suite 101 Greensboro, NC 27407 336-907-7819 Crisis Prevention/Intervention	Unknown	Substance Abuse Services
	Hotline: 1-800-414-4741		MonFri., 9:00am-7:00pm
Room at the Inn	734 Park Ave Greensboro, NC 27405 336-275-0206	Homeless, single, pregnant women, before and after the birth of their babies	Provides shelter, food, clothing, case management, child development services, transportation, life skills education, and counseling MonFri., 9:00am-4:00pm
Salvation Army of Greensboro Center of Hope	Greensboro Corps 821 S Aycock St Greensboro, NC 27403 336-273-1366 Lee Street Family Store 307 W Lee St Greensboro, NC 27406 336-274-0259 Greensboro Center of Hope 1311 S Eugene St Greensboro, NC 27406 336-273-5572 Boys and Girls Club 1311 S Eugene St Greensboro, NC 27406 336-235-0345	Center of Hope: Homeless Men, Women, and Families	Character building programs for youth, music training, community-building and fellowship for adults, housing assistance. Center of Hope and Boys and Girls Club: MonFri., 8:00am-5:00pm
Salvation Army of High Point	High Point Corps 121 SW Cloverleaf Place High Point, NC 27260 336-881-5400 High Point Family Store 1501 S Main St. High Point, NC 27260 336-881-5424 High Point Center of Hope 301 West Green Dr. High Point, NC 27260 336-881-5420 William Booth Gardens Seniors Apartments 123 SW Cloverleaf Place High Point, NC 27260 336-881-5450 Boys and Girls Club 121 SW Cloverleaf Place High Point, NC 27261 336-881-5444	Center of Hope: Homeless men, women and families  William Booth Gardens: elderly residents of High Point	Community-building and fellowship for adults, housing assistance. Center of Hope: Open 24 hours
Serenity Rehabilitation Services	2211 W Meadowview Rd. #10 Greensboro, NC 27407 336-617-8910	Children and adolescents; adults	Day treatment, intensive in-home, targeted case management, medication management, outpatient therapy services for children, adolescents and adults.

StepUp Ministry	707 N Greene St Greensboro, NC 27401 336-676-5871	Disadvantaged, low-income, jobless, underemployed, sometimes homeless individuals and their families Ages 21-55 90 days free of substance abuse, 4 months free of domestic violence, have no pending criminal charges. Able to present a social security card	Job readiness program, life skills program, children's program, hot dish & hope and bridge programs.  MonThurs., 8:30am-5:00pm  Fri., 8:30am-2:30pm
S.L.I.D.E.S., Inc.	2 Centerview Dr. Greensboro, NC 27407 336-285-7262	Unknown	Counseling services
StreetWatch	PO Box 10482 Greensboro, NC 27404 336-254-0953 streetwatchgreensboro.com	Homeless persons in Greensboro	Homeless outreach ministry
The Servant Center	1312 Lexington Ave Greensboro, NC 27403 336-275-8585	Men Disability Assistance Program- must meet the 50% adjusted median income maximum limit. Glenwood Housing and Haworth House- low-income and disabled individuals. Triad Stand Down- homeless veterans.	MonFri., 9:00am-5:00pm Servant House- transitional housing program. Disability Assistance Program- provides assistance with the application process for entitlements through the SSA. Glenwood Housing and Haworth House- assist individuals to remain in permanent housing; case management. Triad Stand Down- substance abuse services, senior services, diabetes services, toiletry kits, VA benefits assistance, deaf and hard of hearing information, dental services, housing services, mental health services, etc.
Triad Adult and Pediatric Medicine	433 Meadowview Rd. Greensboro, NC 27406 336-370-9091	Unknown	MonFri., 8:30am-5:30pm
Triad Health Project	801 Summit Ave. Greensboro, NC 27405 336-275-1654	Individuals living with HIV/AIDS, their loved ones, and those at risk.	Provides emotional and practical support to individuals living with HIV/AIDS, their loved ones, and those at risk Mon., 10:30am-7:00pm TuesThurs., 8:30am-5:00pm Fri., 8:30am-3:00pm
Turning Point 180, a program of New Jerusalem Cathedral	1606 Phillips Ave. Greensboro, NC 27405 336-272-1520	Homeless individuals	Offers supportive services, affordable housing and economic development, food pantry, housing counseling, life skill courses, winter emergency shelter and prehomeownership assistance.

United Way of	1500 Yanceyville St.	Family Success	Family Success Centers: bringing together partners to
Greater Greensboro	Greensboro, NC 27405 336-378-6600	Centers: families facing poverty. 211 Helpline: everyone. Thriving at 3: at risk youth. Mentoring Matters: youth. Free Tax prep: low- to moderate-income households in Greater Greensboro area.	serve families. 211 Helpline: resource number for nonprofit services (open 24 hours, 365 days a year). Thriving at 3. Mentoring Matters. Free Tax Prep. MonFri., 8:30am-5:00pm
United Way of Greater High Point	201 Church Ave. High Point, NC 27262	Greater High Point community	African American Initiative: African Americans in Greater High Point BackPack Program: elementary school students Children's Initiatives: children, families, and caregivers Food & Toiletry Drives: low-income people in Guilford County Prescription Discount Cards: residents who do not have health insurance, or who have prescriptions not covered by insurance Venture Grants: qualified local nonprofits Young Leaders United: 18-40 year old leaders MonFri., 8:30am-5:00pm
VA Sidelines	620 S Elm St. Ste. 322 Greensboro, NC 336-701-2129	Homeless veterans	Assist veterans
West End Ministries (WEM)	903 W English Rd High Point, NC 27262 336-884-1105	Community Center: children through seniors. Leslie's House: homeless women without dependents. Thrift Store: community members.	Community Center: boys & girls club, emergency assistance, food ministry, kids' café, life skills education, WEM neighborhood association, senior adult activities, tax services.  Leslie's House: MonFri., 6:00pm-8:30am. Day room available 8:30am-6:00pm Saturday: Open all day for residents Sunday: Closed from 9:00am-1:00pm Thrift Store: TuesFri., 12:00pm-5:00pm Saturday, 9:00am-12:00pm
Women's Resource Center	628 Summit Ave. Greensboro, NC 27405 336-275-6090	Women	Legal resources, job strategies, empowerment/self- esteem, community resource counseling Mon., 9:00am-5:00pm TuesThurs., 9:00am-7:00pm
Youth Focus	715 N Eugene St. Greensboro, NC 27401 336-274-5909	At risk and troubled young people ages 5-21	Professional counseling, family preservation services, therapeutic family services, emergency shelter for runaway and homeless youth, psychiatric day treatment, adolescent substance abuse, transitional living program, psychiatric residential treatment facility
Engagement Center of Greensboro	803 Oak St. Unit C Greensboro, NC 27403 336-565-6034	Unknown	Referrals to mental health resources and transportation to NA or AA meetings
YWCA Greensboro	1807 Wendover Ave. E Greensboro, NC 27405 336-273-3461	Teens, young women, middle school youth, homeless women and children	Emergency family shelter, help for women starting micro-enterprises, life skills for young women, improving the health of teens, programming for middle school youth MonFri., 9:00am-5:00pm

	Sexual Health			
Agency	Location/Contact information	Population served	Services provided and their availability	
Triad Health Project	Lakecia Owens 801 Summit Avenue Greensboro, NC 27405 336-275-1654 www.triadhealthproject.com	Anyone who contacts them or comes in	Free HIV/STI Testing: every Monday 5pm-7pm; client services for those who are HIV/AIDS positive, including referrals to clinical care and other community resources, on a case by case basis	
Partnership for Healthy Youth	Mary Coyne Wessling 1807 E. Wendover Ave. Greensboro, NC 27406 336-273-3461 ext 206 Email: mwessling@ywcagsonc.org www.partners4healthyyouth.org	Young women and men, adolescents and young adults, local school systems and youth-based organizations	Comprehensive sexual health education and services for teen moms, pregnant teens, young women and young men and foster youth. Sexual and reproductive health training for health care professionals working with adolescents and young adults through YWCA programming.	
Smart Girls	Wanda Mackey Guilford County Department of Health and Human Services 1203 Maple Street Greensboro, NC 27405 336- 641-7777	11-14 year old girls and 9th and 10th grade girls.	Multi-session pregnancy prevention education within schools and the community.	
Planned Parenthood	Mary Connor Hill Greensboro Health Center 1704 Battleground Ave Greensboro, NC 27408 336-373-0678 www.plannedparenthood.org	Women, men, young people	STI testing, diagnosing and treatment, contraceptive methods, vaccinations, pregnancy testing Mon. 2-7pm Tues. and Fri. 9-5pm Sat. 9-1pm Appointments are required for all services except emergency contraception, pregnancy testing and confirmation.	
SHA Guilford	Dennis Jenkins Guilford County Department of Health and Human Services 1203 Maple Street Greensboro, NC 336-641-3899 Email: dienkins@myguilford.com	Anyone who comes in for testing	Free HIV/STI testing	
NIA Community Action Center	122 N. Elm Street, Suite 1000 Greensboro, NC 336-617-7722 Email: kiss.niacacinc@gmail.com www.niacacinc.org	Anyone who comes in for testing	Free HIV/STI testing Wednesdays 2pm-8pm	
Piedmont Health Services and Sickle Cell Agency	1102 E Market St Greensboro, NC, 27401 336-274-1507 www.piedmonthealthservices.or g	Anyone who walks through the doors	Free HIV/STI testing Thursdays 9am-12pm/1pm-4pm	
Wise Guys	Rick Brown Children's Home Society of NC 604 Meadow St. Greensboro, NC 27405 336-274-1538 www.chsnc.org	Males 11-15 years old in middle and high school	Male-oriented teen pregnancy prevention program. Offered as a multisession session within schools and the community. The program is also culturally adapted into Spanish as Jovenes Sabios.	

		Substance Abu	ıse
Agency	Location/Contact information	Population served	Services provided and their availability
Alcohol and Drug Services (ADS)	Angela Maxwell amaxwell@adsyes.org 336-333-6860	Prevention and intervention: Guilford, Alamance, Caswell, Anson, Harnett, Hoke, Lee, Montgomery, Moore and Richmond counties. Outpatient services: Guilford, Alamance, and Randolph counties. Opioid treatment services are offered in Greensboro for residents of central NC counties	Prevention, intervention, outpatient and opioid treatment services are offered through the use of: Counseling sessions, Community workshops, and Community based prevention.  MonFri.: 8am-5pm and offers night classes at 6pm
Greensboro Parks and Recreation Department	Administrative Offices, 1001 Fourth St., Greensboro, NC 27405 336-373-CITY (2489)	Youth populations	Programs for youth populations housed at Parks and Recreation locations Administrative offices, MonFri.: 8am-5pm
High Point Detention Center	507 East Green Drive High Point, NC 27260 336- 641-7900 Fax: 336- 641-4137	High Point, NC residents	Distributes information on overdoses, aids in the disposal of prescriptions collected at take-back events.  Administrative offices, MonFri.: 8am-5pm
Cone Health Foundation	721 Green Valley Road, Suite 102 Greensboro, NC 27408 336- 832-9555	Residents of the greater Greensboro area	Provides funding support to Cone Health Hospital. Administrative offices, MonFri.: 8am-5pm
	Т	obacco Prevention C	Coalition
Agency	Location/Contact information	Population served	Services provided and their availability
Centers for Disease Control and Prevention (CDC)	1600 Clifton Rd. Atlanta, GA 30333 Atlanta-GA (404) 639-3311 www.cdc.gov	United States of America	Provides significant financial support, 24/7
Mary Gillett	Guilford County Department of Health and Human Services Public Health Division 1203 Maple Street Greensboro, NC 27405 336-641-6000 mgillett@myguilford.com	Alamance, Caswell, Rockingham, Guilford, Person, Chatham, Durham, Orange counties	Prevent initiation of smoking and other tobacco use, eliminate exposure to secondhand smoke, help tobacco-users quit and identify and eliminate tobacco-related health disparities among NC populations and communities.  MonFri. 8am-5pm
Tobin Lee	828-349-2480 tobin@mountainwise.org	Cherokee, Clay, Graham, Macon, Swain, Haywood, Jackson, Transylvania counties	Prevent initiation of smoking and other tobacco use, eliminate exposure to secondhand smoke, help tobacco-users quit and identify and eliminate tobacco-related health disparities among NC populations and communities.  MonFri. 8am-5pm

Karen Caldwell	828-620-1646 Karen.Caldwell@dhhs.nc.gov	Madison, Buncombe, Henderson, Yancey, McDowell, Rutherford, Polk, Avery, Caldwell, Burke counties	Prevent initiation of smoking and other tobacco use, eliminate exposure to secondhand smoke, help tobacco-users quit and identify and eliminate tobacco-related health disparities among NC populations and communities.  MonFri. 8am-5pm
David Willard	828-264-4995 <u>David.Willard@apphealth.com</u>	Ashe, Alleghany, Surry, Stokes, Forsyth, Davie, Davidson, Watauga, Wilkes, Yadkin counties	Prevent initiation of smoking and other tobacco use, eliminate exposure to secondhand smoke, help tobacco-users quit and identify and eliminate tobacco-related health disparities among NC populations and communities.  MonFri.; 8am-5pm
Michelle Mulvihill	919-250-1171 Catherine.Mulvihill@wakegov.com	Wake, Johnston, Granville, Vance, Warren, Halifax, Nash, Edgecombe, Franklin counties	Prevent initiation of smoking and other tobacco use, eliminate exposure to secondhand smoke, help tobacco-users quit and identify and eliminate tobacco-related health disparities among NC populations and communities.  MonFri. 8am-5pm
Lisa Phillips	252-475-5077 Lisa.Phillips@arhs-nc.org	Northampton, Gates, Camden, Currituck, Pasquotank, Chowan, Hertford, Bertie, Martin, Perquimans, Washington, Tyrell, Dare, Hyde counties	Prevent initiation of smoking and other tobacco use, eliminate exposure to secondhand smoke, help tobacco-users quit and identify and eliminate tobacco-related health disparities among NC populations and communities.  MonFri. 8am-5pm
Ernest Watts	910-334-1488 ernest.watts@hth.co.robeson.nc.us	Robeson, Bladen, Columbus, Sampson, Duplin, Pender, Onslow, Brunswick, New Hanover counties	Prevent initiation of smoking and other tobacco use, eliminate exposure to secondhand smoke, help tobacco-users quit and identify and eliminate tobacco-related health disparities among NC populations and communities.  MonFri.: 8am-5pm
Moneka Midgette	252-902-2330 Moneka.Midgette@pittcountync.gov	Wayne, Wilson, Greene, Lenoir, Pitt, Craven, Jones, Beaufort, Pamlico, Carteret counties	Prevent initiation of smoking and other tobacco use, eliminate exposure to secondhand smoke, help tobacco-users quit and identify and eliminate tobacco-related health disparities among NC populations and communities.  MonFri. 8am-5pm

# Appendix P-Q Links

Appendix P - Sandhills Center, A Local Management Entity Managed Care Organization Provider Capacity, Community Needs Assessment and Gaps Analysis Report: FY 2014-2015: Community Needs Assessment/Gaps Analysis FY 2013-2014: Provider Capacity-Medicaid and State Funded. Available at: www.sandhillscenter.org/wp-content/uploads/2015/06/2015-State-Report-Final-Needs-Assessment.pdf Appendix Q - Guilford County Schools Annual Report, 2015, GCS, Yes! From Classroom to College and Career. Available at: www.gcsnc.com/dynimg/ RTAAA /docid/0x0B29067E021F0D44/3/GCS-AR2016-web%2B%25281%2529.pdf

# Appendix R – Citations and Resources

#### Chapter 2 - Description of Guilford County

- [2-1] American Community Survey, 2014. Retrieved from: <a href="www.census.gov/programs-surveys/acs">www.census.gov/programs-surveys/acs</a>
- [2-1] AccessNC, North Carolina Economic Data and Site Information, County Profile, Guilford County, June 2016. Retrieved from <a href="accessnc.commerce.state.nc.us/docs/countyProfile/NC/37081.pdf">accessnc.commerce.state.nc.us/docs/countyProfile/NC/37081.pdf</a>

#### Chapter 3 – Data Collection and Priority Setting Process

- [3-1] County Health Rankings, 2016. Retrieved from www.countyhealthrankings.org
- [3-2] County Health Data Book, 2016. Retrieved from www.schs.state.nc.us/schs
- [3-3] American Community Survey, 2014. Retrieved from: <a href="www.census.gov/programs-surveys/acs">www.census.gov/programs-surveys/acs</a>
- [3-4]. State Center for Health Statistics, Behavioral Risk Factor Surveillance System. Retrieved from: www.schs.state.nc.us/schs/brfss/results.html
- [3-5] Centers for Disease Control and Prevention. Assessment for Public Health Emergency Response (CASPER) Toolkit, Second Edition, 2012. Retrieved from: <a href="mailto:emergency.cdc.gov/disasters/surveillance/pdf/casper-toolkit-version-2-0-508-compliant.pdf">emergency.cdc.gov/disasters/surveillance/pdf/casper-toolkit-version-2-0-508-compliant.pdf</a>
- [3-6] North Carolina Department of Health and Human Services. 2012 Community Health Assessment Guide Book. Retrieved from: <a href="mailto:publichealth.nc.gov/lhd/cha/docs/2012GuideBook/12gb-phase5.pdf">publichealth.nc.gov/lhd/cha/docs/2012GuideBook/12gb-phase5.pdf</a>

#### Chapter 4 – Guilford County Priority Health Concerns

- [4-1] State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2011-2013. Retrieved from: www.schs.state.nc.us/data/brfss
- [4-2] Food Research and Action Center (FRAC). How Hungry is America? FRAC's National, State and Local Index of Food Hardship. Retrieved from: <a href="mailto:frac.org/pdf/food">frac.org/pdf/food</a> hardship 2014.pdf
- [4-3] Food Research and Action Center (FRAC). Food Hardship in America 2012, Data for the Nation, States, 100 MSAs, and Every Congressional District. Retrieved from: <a href="mailto:frac.org/pdf/food">frac.org/pdf/food</a> hardship 2012.pdf
- [4-4] High Point University Survey Research Center, April 22, 2016. News Release New Survey Looks at Food Security and Food Hardship in High Point Area. Retrieved from: <a href="https://www.highpoint.edu/blog/2016/04/35125">www.highpoint.edu/blog/2016/04/35125</a>
- [4-5] State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2013. Retrieved from: <a href="https://www.schs.state.nc.us/data/brfss">www.schs.state.nc.us/data/brfss</a>
- [4-6] University of Wisconsin Population Health Institute. Access to Exercise Opportunities. Retrieved from: <a href="https://www.countyhealthrankings.org/app/north-carolina/2016/measure/factors/132/datasource">www.countyhealthrankings.org/app/north-carolina/2016/measure/factors/132/datasource</a>
- [4-7] Derived by Guilford County Department of Health and Human Services, Public Health Division with data from: US Census Bureau, American Community Survey, 2009-2013. Retrieved from: <a href="https://www.census.gov/programs-surveys/acs">www.census.gov/programs-surveys/acs</a> and State Center for Health Statistics, 2016. Retrieved from: <a href="https://www.schs.state.nc.us/schs">www.schs.state.nc.us/schs</a>

- [4-8] Kneebone, E. The Growth and Spread of Concentrated Poverty, 2000 to 2008-2012 Retrieved from: <a href="https://www.brookings.edu/research/interactives/2014/concentrated-poverty#/M24660">www.brookings.edu/research/interactives/2014/concentrated-poverty#/M24660</a>
- [4-9] Guilford County Schools. By the Numbers. Retrieved from: www.gcsnc.com/pages/gcsnc/District/About GCS/By the Numbers
- [4-10] US Census Bureau, American Community Survey, 2012-2014. Retrieved from: <a href="https://www.census.gov/programs-surveys/acs">www.census.gov/programs-surveys/acs</a>
- [4-11] United Way of Greater Greensboro. One in Five Factsheet. Retrieved from: <a href="www.unitedwaygso.org/wp-content/uploads/2015/08/Poverty\_Facts-March20151.pdf">www.unitedwaygso.org/wp-content/uploads/2015/08/Poverty\_Facts-March20151.pdf</a>
- [4-12] NC State Bureau of Investigation, Crime in North Carolina, Annual Summary Report, 2014. Retrieved from: <a href="mailto:crimereporting.ncsbi.gov/public/2014/ASR/2014%20Annual%20Summary.pdf">crimereporting.ncsbi.gov/public/2014/ASR/2014%20Annual%20Summary.pdf</a>
- [4-13] US Census Bureau, American Community Survey, 2014. Retrieved from: <a href="www.census.gov/programs-surveys/acs">www.census.gov/programs-surveys/acs</a>
- [4-14] WHO mental health definition. Retrieved from: www.who.int/mediacentre/factsheets/fs220/en
- [4-15] Postpartum Support International. Depression during Pregnancy and Postpartum. Retrieved from: <a href="https://www.postpartum.net/learn-more/depression-during-pregnancy-postpartum">www.postpartum.net/learn-more/depression-during-pregnancy-postpartum</a>
- [4-16] State Center for Health Statistics. Detailed Mortality Statistics, 2011-2014. Retrieved from: <a href="https://www.schs.state.nc.us">www.schs.state.nc.us</a>
- [4-17] Centers for Medicare and Medicaid Services, Piedmont Health Counts. Retrieved from: www.piedmonthealthcounts.org
- [4-18] State Center for Health Statistics, Behavioral Risk Factor Surveillance System. Retrieved from: www.schs.state.nc.us/schs/brfss/results.html
- [4-19] Guilford County Department of Health and Human Services. Guilford County Schools School Nurse End of Year Report, 2014-2015.
- [4-20] County Health Data Book. Retrieved from: www.schs.state.nc.us/schs
- [4-21] County Health Data Book. Retrieved from: www.schs.state.nc.us/schs
- [4-22] Data prepared by the Health Surveillance Unit, Guilford County Department of Health and Human Services with data from State Center for Health Statistics, Detailed Pregnancy Files, 2012-2014.
- [4-23] County Health Data Book, 2016. Retrieved from: www.schs.state.nc.us/schs
- [4-24] Reidpath, D. and Allotey, P. (2003). Infant Mortality Rate as an Indicator of Population Health. *Journal of Epidemiology and Community Health* 57: 344-346.
- [4-25] NC Child: The Voice for North Carolina's Children: How Healthy Are Guilford Children? Retrieved from: www.ncchild.org/publication/2013-child-health-report-card-county-data-cards

#### Chapter 5 – Data on the Health and Well-being of Guilford County

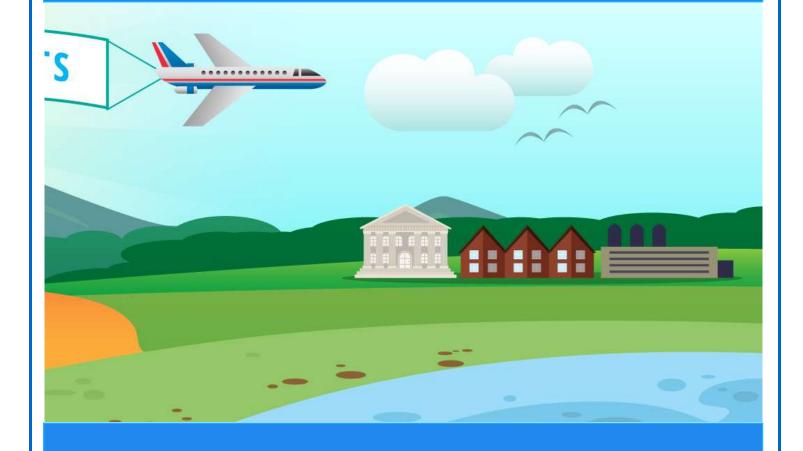
- [5-1] Genuis, SJ, Genuis SK. Managing the sexually transmitted disease pandemic: A time for reevaluation. Am J Obstet Gynaecol. 2004; 191:117-122.
- [5-2] Centers for Disease Control and Prevention. How You Can Prevent Sexually Transmitted Diseases Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention. Retrieved from: <a href="https://www.cdc.gov/std/prevention">www.cdc.gov/std/prevention</a>
- [5-3] Centers for Disease Control and Prevention. Retrieved from: www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm
- [5-4] Irving RJ, Belton NR, Elton RA, Walker BR. Adult cardiovascular risk factors in premature babies. Lancet. 2000;355:2135-2136.
- [5-5] Shenkin SD, Starr JM, Deary IJ. Birth weight and cognitive ability in childhood: A systematic review. Psychol Bull. 2004 Nov;130:989-1013.
- [5-6] Petrou S, Petrou, S, Sach T, Davidson L. The long-term costs of preterm birth and low birth weight: Results of a systematic review. Child Care Health Dev. 2001:27:97-115.
- [5-7] Meade, CS, Iskovics JR. Systematic review of sexual risk among pregnant and mothering teens in the USA: Pregnancy as an opportunity for integrated prevention of STD and repeat pregnancy. Soc Sci Med. 2005; 60:661-678.
- [5-8] Scholl TO, Hediger ML, Belsky DH. Prenatal care and maternal health during adolescent pregnancy-A review and meta-analysis. J Adolesc Health. 1994;15:444-456.
- [5-9] Chandra PC, Schiavello HJ, Ravi B, Weinstein AG, Hook FB. Pregnancy outcomes in urban teenagers. Int J Gynaecol Obstet, 2002; 79:117-122.
- [5-10] National Campaign to Prevent Teen and Unplanned Pregnancy. (2012) Counting it Up. The Public Costs of Childbearing. Available at www.thenationalcampaign.org/costs
  Centers for Disease Control and Prevention.
- [5-11] Centers for Disease Control and Prevention. Retrieved from: <a href="www.cdc.gov/physicalactivity/basics/pa-health/index.htm">www.cdc.gov/physicalactivity/basics/pa-health/index.htm</a>
- [5-12] Centers for Disease Control and Prevention. Retrieved from: www.cdc.gov/healthyweight/healthy\_eating/index.html
- [5-13] Centers for Disease Control and Prevention. Overweight and obesity: Causes and consequences. Centers for Disease Control and Prevention Web Site. Updated April 27, 2012. Accessed February 27, 2013.
- [5-14] Hensrud DD. Diet and obesity. Current Opin Gastroentero. 2004; 20:119-124.
- [5-15] Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and obesity-related health risk factors, 2001. JAMA, 2003;289:76-79
- [5-16] North Carolina Department of Transportation, Governor's Highway Safety Program. Retrieved from: www.ncdot.gov/programs/GHSP/download/2015\_seatbelt\_survey.pdf
- [5-17] Fronstin, P. Sources of Health Insurance and Characteristics of the Uninsured: Analysis of the March 2009 Current Population Survey. Employee Benefit Research Institute; 2009. EBRI Issue Brief no. 334.

- [5-18] Institute of Medicine. Hidden Costs, Value Lost: Uninsurance in America. Washington, DC: Institute of Medicine: 2003.
- [5-19] Macinko J, Starfield B, Shi L. Is primary care effective? Quantifying the health benefits of primary care physician supply in the United State. Intl J Health SEerv. 2007;37:111-126.
- [5-20] Fergusson DM, Boden JM, Horwood LJ. Exposure to single parenthood in childhood and later mental health, educational, economic, and criminal behavior outcomes. Arch Gen Psychiatry. 2007;64:1089-1095.
- [5-21] Wille N, Bettge S, Ravens-Sieberer U, BELLA Study Group. Risk and protective factors for children's and adolescents' mental health: Results of the BELLA study. Eur Child Adolesc Psychiatry. 2008;17:133-147.
- [5-22] Rahkonen O, Laaksonen M, Karvonen S. The contribution of lone parenthood and economic difficulties to smoking. Soc Sci Med. 2005;61:211-216.
- [5-23] Ringbäck Weitoft G, Burström B, Rosén M. Premature mortality among lone fathers and childless men. Soc Sci Med. 2004;59:1449-1459.
- [5-24] Weitoft GR, Haglund B, Hjern A, Rosén M. Mortality, severe morbidity and injury among long-term lone mothers in Sweden. Int J Epidemiol. 2002;31:573-580.
- [5-25] Weitoft GR, Hjern A, Haglund B, Rosén M. Mortality, severe morbidity, and injury in children living with single parents in Sweden: A population-based study. Lancet. 2003;361(9354):289-295.
- [5-26] Ellen IG, Mijanovich T, Dillman KN. Neighborhood effects on health: Exploring the links and assessing the evidence. Journal of Urban Affairs. 2001;23:391-408.
- [5-27] University of Wisconsin Data Institute. Retrieved from: www.countyhealthrankings.org
- [5-28] Jaworowska A, Blackham T, Davies IG, Stevenson L. Nutritional challenges and health implications of takeaway and fast food. Nutrition Reviews. 2013;71(5):310–8. Accessed on January 14, 2016.

#### Chapter 6 – Promotion of Health and Well-being

[6-1] Piedmont Health Counts. Retrieved from: piedmonthealthcounts.org/modules.php?op=modload&name=NS-Indicator&file=indicator&iid=27350705

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