

### 2016 Wilson County, NC Community Health Needs Assessment







A Duke LifePoint Hospital

### **Community Health Needs Assessment**

### Wilson County, North Carolina

On-line and paper copies of this document may be obtained at:

Healthcare Foundation of Wilson - www.healthcarefoundationofwilson.org, 2505-A Nash Street NW, Wilson, NC 27896, 252.281.2105

Wilson County Health Department - www.wilson-co.com/85/Health-Department, 1801 Glendale Drive, Wilson, NC 27893, 252.237.3141

Wilson Medical Center- http://www.wilsonmedical.com/ or 1705 Tarboro St W, Wilson, NC 27893, 252.399.8040

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# Executive Summary

The 2016 Community Health Needs Assessment (CHNA) is a collaboration of Healthcare Foundation of Wilson, Wilson County Health Department and Wilson Medical Center. This Community Health Needs Assessment engaged the community to define priorities for health improvement, created a collaborative community environment to engage stakeholders, and provided an open and transparent process to listen and truly understand the health needs of Wilson County, North Carolina. This assessment focuses on the Wilson County service area, identifying the unmet health care and human service needs of a population and identifying how to meet those needs. The community assessment is the foundation for improving the health of community members.

The community health needs assessment provided the opportunity to:

- Assess the population's health status
- Highlight areas of unmet needs
- Present the community's perspectives
- Provide suggestions for possible interventions
- Highlight recommendations that policymakers might consider when setting new policy goals and objectives for health improvement activities

Healthcare Foundation of Wilson, Wilson County Health Department and Wilson Medical Center conducted a community health needs assessment in 2013. In 2014 after the local community hospital affiliated with Duke LifePoint, a health summit was conducted to confirm the 2013 priorities. The 2016 assessment analyzes progress since the last assessments as well as defines new or continued priorities for the next three years.

The report includes secondary data from national, state, and local databases. The primary service area of the local hospital was used to determine statistical data included. The report outlines major findings and details.

In a community-based assessment, as is promoted in the North Carolina Health Assessment Process, community members take the lead role in forming partnerships, gathering health- related information, determining priority health issues, identifying resources, and planning community health programs. The assessment process starts with people who live in the community and give the community primary responsibility for determining the focus of assessment activities at every level, including collection and interpretation of data, evaluation of health resources, and identification of health problems. This CHNA was completed in a systematic 8 phase plan as outlined by the North Carolina Department of Health and Human Services.

The top three health priorities identified which will be addressed over the next three years are

- Obesity
- Mental Health
- Substance Abuse

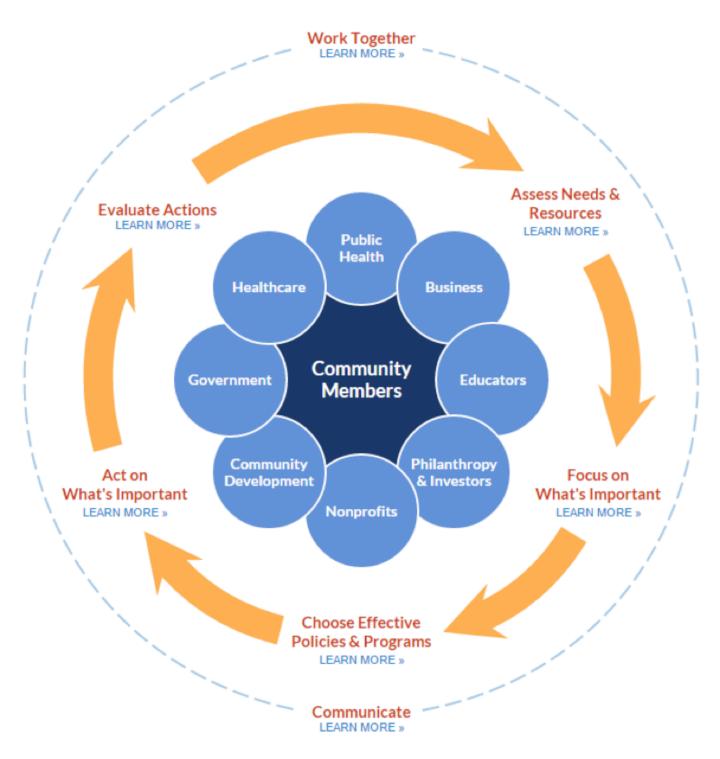
Community-wide Action Plans will be developed to address these health priorities and may also be found on the websites of Healthcare Foundation of Wilson, Wilson County Health Department and/or Wilson Medical Center.



Photo credit: Andrew Walker

# Perspective / Overview

Creating a culture of health in the community



Sourced from the Robert Wood Johnson Foundation's County Health Rankings website: http://www.countyhealthrankings.org/roadmaps/action-center

## Phase One Establish the CHNA Team

#### Phase 1: Establish the CHNA Team

Wilson 20/20 Community Vision's Beyond 21 Health and Wellness Committee served as the advisory group during the CHNA process. Wilson 20/20 represents the combined efforts of city and county government, businesses and neighborhoods, schools and colleges, civic organizations and churches, reflecting all facets of the Wilson community, to work together for the purpose of creating, supporting, and promoting positive developments that result in the greatest possible benefit for all citizens of Wilson.

Action Plans will be discussed by the committee, using the template provided by the Department of Health and Human Services, which is due June 2017.





## Phase Two

Primary Data Collection: Community Input and Collaboration Over seventy individuals from over forty community and health care organizations collaborated to conduct a comprehensive CHNA process focused on identifying and defining significant health needs, issues, and concerns of Wilson County. The four-month process centered on gathering and analyzing data as well as receiving input from persons who represented the broad interests of the community and had special knowledge of or expertise in public health to provide direction for the community and hospital to create a plan to improve the health of the community.

#### **Project goals**

- 1. To continue a formal and comprehensive community health assessment process which allows for the identification and prioritization of significant health needs of the community to determine resource allocation, inform decision-making and collective action that will improve health.
- 2. To continue a collaborative partnership between The Partners and all stakeholders in the community by seeking input from persons who represent the broad interests of the community, including low-income, medically underserved and minorities.
- 3. To support the existing infrastructure and utilize resources available in the community to instigate health improvement in the community.

Our goals as we collaborated on the Community Health Needs Assessment was to analyze changes from 2013's assessment, identify significant health needs and priorities, and address those needs," said Denise O'Hara, Executive Director, Healthcare Foundation of Wilson. "Our hope is that the findings will provide a rich foundation for improving and promoting the health and well-being of residents of the greater Wilson Community."

"By working collaboratively, Healthcare Foundation of Wilson, Wilson County Health Department and Wilson Medical Center gathered valuable insight that has allowed us to set priorities for improving health," said Bill Caldwell, CEO of Wilson Medical Center.

"The Community Health Summit was the final, critical step in an important process," said Wilson County Health Director Teresa Ellen. "Now the real work – addressing the opportunities and needs identified to improve the health of the community – begins."

#### **Primary Data Collection**

Both primary and secondary data sources were used in the CHNA.

Primary methods included:

- Community focus group
- Community on-line and paper surveys
- Community physician on-line and paper surveys
- Community Health Summit

The primary method of data collection included input from persons who represent the broad interests of the community using several methods:

- 21 community members, employers, not-for-profit organizations (representing medically underserved, low-income, minority populations, seniors and children), health plan, economic development, health department, health providers, and government representatives participated in a focus group for their perspectives on community health needs and issues on September 7, 2016. Detailed information collected at the Focus group is outlined below, beginning on page 22.
- 663 community members and 53 community physicians completed on-line and/or on paper surveys regarding their perspectives on community health status and needs from June 1-July 22, 2016. Detailed information obtained from the survey results is provided below, beginning on page 25.
- A Community Summit was conducted on September 29, 2016 with 65 community stakeholders. The audience consisted of healthcare providers (Wilson Medical Center and physicians), the Wilson County Health Department, business leaders, law enforcement, government representatives, colleges, not-for-profit organizations, (mental health, substance abuse, elderly services, schools, Healthcare Foundation of Wilson) and other community members.

Photo credit: Sean Larkin



Participation in the focus group, Community Health Summit, creating the Wilson County Community Health Needs Assessment and Improvement Plan included:

|  | Population Represented (kids, low     |                     |
|--|---------------------------------------|---------------------|
| Organization                                   | income, minorities, those w/o access) | How Involved        |
| Allstate Insurance                             | All                                   | Summit              |
| Area L AHEC                                    | All                                   | Summit              |
| Barton College                                 | College students, youth, diversity    | Summit, Focus Group |
| BB&T   | All                                   | Focus Group         |
| City of Wilson                                 | All                                   | Summit, Focus Group |
| City of Wilson (fire/rescue)                   | All                                   | Summit, Focus Group |
| City of Wilson (Planner/botanist)              | City wide                             | Summit              |
| City of Wilson (police)                        | All                                   | Summit, Focus Group |
| UNC Medicine                                   | Adults                                | Summit              |
| Duke Network Services                          | All                                   | Focus Group         |
| Farmer, WMC Board Chairman                     | All                                   | Summit, Focus Group |
| Greenfield School                              | Youth                                 | Summit              |
| Healthcare Foundation of Wilson                | All                                   | Summit, Focus Group |
| Healthcare Foundation of Wilson Board          | All                                   | Focus Group         |
| Hope Station                                   | Low income                            | Summit              |
| Merck  | All                                   | Summit              |
| Narron Holdford Law                            | All                                   | Summit              |
| Nash Healthcare Foundation                     | All                                   | Summit              |
| NC Dept of Health & Human Services             | Deaf & hard of hearing                | Summit              |
| NC House of Representatives                    | All                                   | Summit              |
| NC Institute for Public Health                 | Public health                         | Summit              |
| President, Medical Staff Wilson Medical Center | Adult                                 | Summit              |
| Retired  | Youth                                 | Summit              |
| Retired physician                              | All                                   | Summit              |
| The Chesson Agency                             | Children                              | Summit, Focus Group |
| Upper Coastal Plain Council of Governments     | Aging                                 | Summit              |
| Vets Pets, WMCHFW                              | All                                   | Summit, Focus Group |
| Wilson 20/20                                   | All                                   | Summit, Focus Group |
| Wilson Chamber of Commerce                     | Business community                    | Summit              |
| Wilson County Substance Abuse Coalition        | Youth                                 | Summit              |
| Wilson Community College                       | All - low income, youth               | Summit, Focus Group |
| Wilson County                                  | All                                   | Summit, Focus Group |
| Wilson County Board of Commissioners           | All, children                         | Summit, Focus Group |
| Wilson County Board of Health                  | Board of Health, all                  | Summit              |
| Wilson County DSS                              | All - low income, families            | Summit, Focus Group |
| Wilson County EMS                              | All                                   | Summit              |
| Wilson County Health Department                | All                                   | Summit, Focus Group |
| Wilson County Schools                          | Children                              | Summit, Focus Group |
| Wilson Medical Center                          | All                                   | Summit, Focus Group |
| Wilson Preparatory Academy                     | Youth                                 | Summit              |
| Wilson Public Library                          |                                       |                     |
|  | All                                   | Summit              |
| Wilson Surgical Associates                     |                                       | Summit<br>Summit    |
|  | All                                   |                     |

In many cases, several representatives from each organization participated.

#### Input of Public Health Officials

At the Summit held on September 29, 2016 Teresa Ellen, Health Director, Wilson County Health Department presented the results of the focus group. The Health Department was also a leader in the process assisting with the data gathering and a member of Beyond 21 Health and Wellness Committee.

Where there are common initiatives between the state, counties, hospitals, and community groups, coordination of efforts are ideal. Addressing the needs identified through the CHNA is a common initiative in Wilson County, NC.

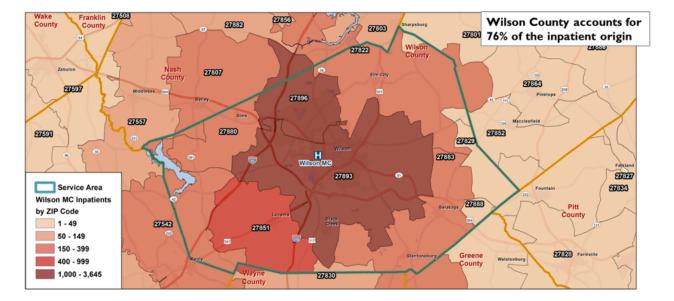
#### Input of Medically Underserved, Low-Income, and Minority Populations

Input was received during the focus group, community survey, and community health summit. People representing these population groups were intentionally invited to participate in the process. Community physicians were also surveyed. They have insight into medically underserved, health needs and the community at-large.

#### **Community Selected for Assessment**

Wilson County was selected as the primary focus of the CHNA. Wilson Medical Center's health information provided the basis for the geographic focus of the CHNA. The map below shows where Wilson Medical Center received its patients; most of the inpatients came from Wilson County (76%). While it was reasonable to select Wilson County as the primary focus of the CHNA, surrounding counties could benefit from efforts to improve health in Wilson County.

The community included medically underserved, low-income and minority populations who live in the geographic areas from which WMC draws its patients. All patients were used to determine the service area without regard to insurance coverage or eligibility for financial assistance under WMC's Financial Assistance Policy.



#### Wilson Medical Center Patients - 2015

#### Geography of Wilson County

The geography of Wilson County is varied. Wilson County is located roughly on the fall line that separates the Piedmont and the Coastal Plain. Though the majority of the county is level, there are rolling hills in the west which are characteristic of the Piedmont. Traveling in an easterly direction within the county, the geography becomes flat as the land quickly transitions into the Coastal Plain.

There are no major rivers that flow through Wilson County. This may have contributed to the county's slower development, as rivers were thoroughfares for transportation in the absence of good roads during the early history of North Carolina. Contentnea Creek is a large creek that spans the county and is a tributary to the Neuse River. In 1820, there was a proposal to link Contentnea Creek with the Tar River with the construction of a canal. This proposal, however, was not aggressively pursued and never reached fruition.

A major factor affecting the growth of Wilson County was organized mass agriculture. Subsistence farming was replaced with the large production of cash crops. Due to the economics of the time, merchants, investors, and landlords encouraged and sometimes even demanded that farmers plant such crops for increased profits. Between the 1860's and the 1880's, cotton was the primary cash crop. However, because cotton depleted the soil and required expensive fertilization, it became less profitable. By the 1880's, however, the face of Wilson County agriculture was forever changed with the demand for flue-cured tobacco. Wilson County was ideally suited for growing tobacco because its climate and its sandy, loamy soil. By the turn of the century, tobacco had largely replaced cotton as the county's main cash crop. In 1920, Wilson came to be known as the "World's Greatest Tobacco Market". Tobacco continued to be one of the largest industries in the county well into the 20th century.

With the completion of the nationwide interstate highway system after World War II, Wilson was able to diversify its economy even further. Interstate 95, a major north/south artery on the east coast of the United States, was constructed straight through the heart of the county. Coupled with the interstate and its intersection with US Highway 264, new industries were attracted to the county. Wilson County has developed a diverse industrial base that includes pharmaceuticals, life sciences, automotive parts, and building supplies. Moreover, agriculture still remains and important industry.

As we move into the 21st century, Wilson County has become a major center for commerce, education, culture, and tourism in Eastern North Carolina. Wilson County is also thought of as the center for world-famous Eastern Carolina-style pork barbecue. As new development and industry continue to grow within its borders, Wilson County maintains a strong presence in the communities of eastern North Carolina. With its colorful and fascinating history, Wilson County promises to continue as a vibrant community for today and tomorrow.

According to the U.S, Census Bureau, the county has a total area of 374 square miles, of which, 371 square miles of it is land and 3 square miles of it is water.

The county is divided into ten townships: Black Creek, Cross Roads, Gardners, Old Fields, Saratoga, Springhill, Stantonsburg, Taylors, Toisnot, and Wilson.

Wilson is located approximately 45 minutes east of Raleigh, the North Carolina state capital.

#### Wilson County Towns/ Communities – Total Population by City/Town

| City/Town                   | Total Population | Total Population | Percent Change |
|-----------------------------|------------------|------------------|----------------|
|                             | 2010 Census      | 2000 Census      |                |
| Black Creek                 | 769              | 714              | 7.7%           |
| Elm City                    | 1,298            | 1,047            | 23.97%         |
| Lucama                      | 1,108            | 847              | 30.81%         |
| Saratoga                    | 408              | 379              | 7.65%          |
| Sims                        | 128              | 282              | 120.31%        |
| Stantonsburg                | 784              | 738              | 6.23%          |
| Wilson (City) (County Seat) | 49,167           | 44,679           | 10.07%         |
| Wilson (County)             | 81,234           | 73,814           | 10.05%         |

Source: www.uscensus.gov

Photo credit: Andrew Walker

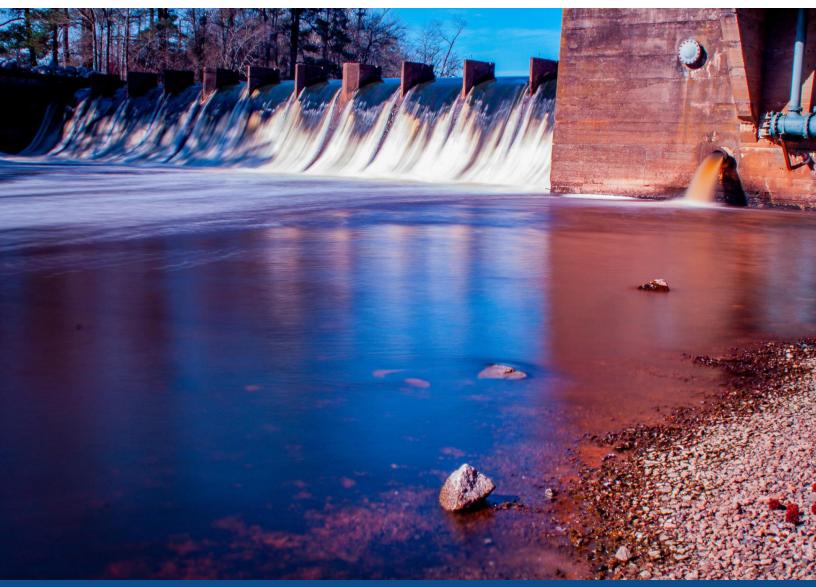




Photo credit: Andrew Walker

## Phase Three Secondary Data Collection

Secondary data collection methods included:

- Public health data death statistics, county health rankings
- Demographics population, poverty, uninsured
- Psychographics spending-based behavior information
- Information gathering, using secondary public health sources occurred in August and September of 2016. As part of the process, Stratasan, a healthcare analytics and facilitation company out of Nashville, Tennessee was engaged to provide community health data and facilitation expertise to assist the community with determining significant health needs.

The details of the primary and secondary data collection are noted in Phase 4 of this document, along with the analysis of the data.





## Phase Four

Key Findings of the Community Health Assessment and Analysis of Data

#### **Information Gaps**

While this assessment was quite comprehensive, it cannot measure all possible aspects of health in the community, nor can it adequately represent all possible populations of interest. It must be recognized that these information gaps might in some ways limit the ability to assess all of the community's health needs.

For example, certain population groups (such as, institutionalized persons, or those who only speak a language other than English, Spanish, American Sign Language, Chinese and Swahili) were not represented in the primary data.

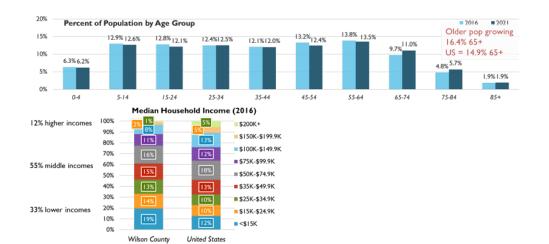
Other population groups (for example, pregnant women, lesbian/gay/bisexual/transgender residents, undocumented residents, and members of certain racial/ethnic or immigrant groups) might not be identifiable or might not be represented in numbers sufficient for independent analyses.

#### **Demographics of the Community**

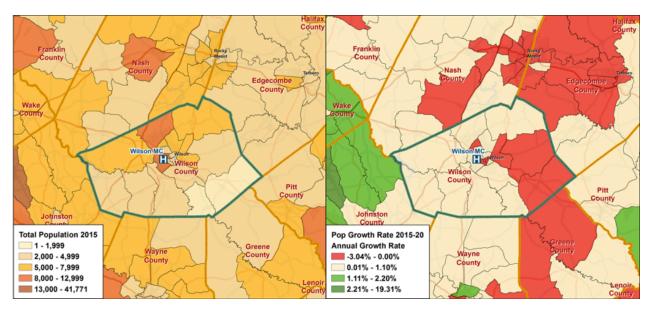
The table below shows the demographic summary of Wilson County compared to North Carolina and the U.S.

|                                     | Wilson Co       | ounty        | North Carolina            | USA              |
|-------------------------------------|-----------------|--------------|---------------------------|------------------|
| Population (2015)                   |                 | 83,022       | 10,220,672                | 323,580,626      |
| Median Age (2015)                   | Older           | 39.7         | 38.3                      | 38.0             |
| Median Household Income (2015)      | Lower HH Inc.   | \$38,017     | \$47,019                  | \$54,149         |
| Annual Pop. Growth (2015-20)        | Positive growth | 0.22%        | 1.16%                     | 0.84%            |
| Household Population (2015)         |                 | 32,465       | 3,992,205                 | 121,786,233      |
| Dominant Tapestry (2015)            | Southern Sate   | llites (10A) | Southern Satellites (10A) | Green Acres (6A) |
| Businesses (2015)                   |                 | 3,197        | 400,469                   | 13,207,211       |
| Employees (2015)                    |                 | 42,098       | 4,846,589                 | 162,998,347      |
| Medical Care Index* (2015)          |                 | 71           | 89                        | 100              |
| Average Medical Expenditures (2015) |                 | \$1,367      | \$1,718                   | \$1,921          |
| Total Medical Expenditures (2015)   |                 | \$44.4 M     | \$6.9 B                   | \$234.0 E        |
| Racial and Ethnic Make-up           |                 |              |                           |                  |
| White                               |                 | 50%          | 67%                       | 71%              |
| Black                               |                 | 39%          | 22%                       | 13%              |
| American Indian                     |                 | 0%           | 1%                        | 1%               |
| Asian/Pacific Islander              |                 | 1%           | 3%                        | 5%               |
| Other                               |                 | 7%           | 5%                        | 7%               |
| Mixed Race                          |                 | 2%           | 3%                        | 3%               |
| Hispanic Origin                     |                 | 11%          | 9%                        | 18%              |

Source: Esri



- The population of Wilson County was projected to increase from 2015 to 2020 (.22% per year), lower than the rate of NC at 1.16%, the U.S. at .75%.
- Wilson County was older (39.7 median age) than NC and the U.S. and had lower median household income (\$38,017) than both NC and the U.S.
- The medical care index measures how much the county spent out of pocket on medical care services. The U.S. index was 100. Wilson County (71 index) spent 29% less than the average U.S. household out of pocket on medical care (doctor's office visits, prescriptions, hospital visits).
- The racial make-up of Wilson County was 50% white, 39% black, 1% American Indian, 1% Asian/Pacific Islander, 2% mixed race, 7% some other race, and 11% Hispanic origin.
- The median household income distribution of Wilson County was 12% higher income (over \$100,000), 55% middle income and 33% lower income (under \$24,999).



#### 2015 Population by Census Tract and Population Change 2015-2020

#### Source: Esri

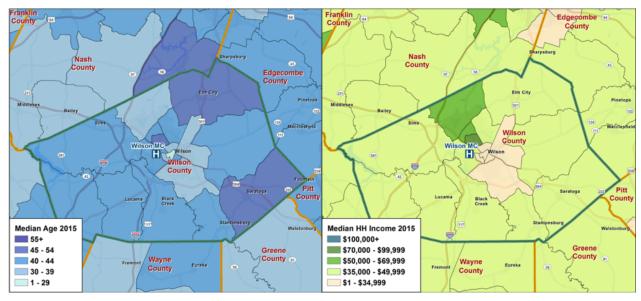
Census tracts generally have a population size between 1,200 and 8,000 people, with an optimum size of 4,000 people. There was a higher population census tract, 8,000-12,999 in the large census tract in the upper northwest section of the county, north of Wilson and another higher population tract where WMC is located. The tracts in northern Wilson County have population of 5,000 to 7,999. The remainder of the county is more rural with tracts containing 2,000 to 4,999 population. Two tracts in the southeast section of the county have lower population 1-1,999 population.

The population was projected to grow in most census tracts in the county from .01% up to the NC growth rate. There are several tracts in Wilson and in the southeast corner of the county that were projected to decline. However, the previous table shows the whole county growing at a modest .22% per year.

The census tract maps are useful for analyzing sections of the county that may need focused attention and to pinpoint geographic areas that may have lower health outcomes.

#### 2015 Median Age

2015 Median Income



#### Source: Esri

These maps depict median age and median income by census tract. There were three areas of older population (45-54 median age), north of WMC and to the north and southeast of Wilson. There was one tract of younger population in east of WMC (1-29), Barton College. There were five tracts with median ages 30-39, and the remainder of the county's tracts had median ages between 40 and 44.

There were six tracts of lower median household income (\$1 - 34,999) in central Wilson County east of WMC.<sup>1</sup> Not all households were at the median in a census tract, but these are indicators of segments of the population that may need focused attention. There is one higher median income (\$70,000 - \$99,999) tract north of WMC. There are two tracts north of this tract with median incomes of \$50,000-\$69,999 north to the county line. The remainder of the county had a median income of \$35,000 to \$49,999.

The rate of poverty in Wilson County was 23.9% (2014 data), which was above NC (17.2%) and the U.S. (15.5%). The poverty percentage was in the middle of the surrounding counties with the highest being Greene at 28.3% and the lowest being Johnston at 15.3%

Wilson County's unemployment was 8.7% compared to 5.1% for North Carolina and 4.9% for the U.S. Unemployment decreased significantly in the last few years.

<sup>1</sup>The median is the value at the midpoint of a frequency. There is an equal probability of falling above or below the median.

#### Health Status Data

The major causes of death in Wilson County were cancer, followed by heart disease, stroke, chronic lung disease, diabetes, Alzheimer's disease, influenza, pneumonia, and accidents. *Source(s): CDC/NCHS, National Vital Statistics System, Mortality 2013 (2014); North Carolina County Health Data Book - N.C. Department of Health and Human Services (2016); unadjusted per 100,000* 

Based on the latest County Health Rankings study performed by the Robert Wood Johnson Foundation and the University of Wisconsin,<sup>2</sup> Wilson County ranked 81st healthiest county in North Carolina out of the 100 counties ranked (1= the healthiest; 100 = unhealthiest). County Health Rankings suggest the areas to explore for improvement in Wilson County were: higher adult smoking, adult obesity, physical inactivity, uninsured, lower high school graduation, percent of adults with some college, higher unemployment, children in poverty, children in single parent households, violent crimes, and higher percentage of severe housing problems. The areas of strength were lower excessive drinking, higher diabetic monitoring and mammography screening.

When analyzing the health status data, local results were compared to North Carolina, the U.S. (where available) and the top 10% of counties in the U.S. (the 90th percentile). Where Wilson County's results were worse than the State and U.S., there is an opportunity for group and individual actions that will result in improved community ratings. There are several lifestyle gaps that need to be closed to move Wilson County up the ranking to be the healthiest community in North Carolina and eventually the Nation. For additional perspective, North Carolina was ranked the 31st healthiest state out of the 50 states. Source: America's Health Rankings (2015); America's Health Rankings is the result of a partnership between United Health Foundation, American Public Health Association, and Partnership for Prevention.<sup>™</sup>

#### **Focus Group Results**

Twenty-one community stakeholders representing the broad interests of the community participated in a focus group on September 7, 2016 for their input into the community's health. There was broad community participation in the focus group representing a range of interests and backgrounds. Below is a summary of the 90-minute discussion.

- When asked to describe the community's health, the group responses varied:
  - Depends on insured or uninsured, in poverty or not
  - Socioeconomics are tied to health
  - High food insecurity lack of access to fresh food and food deserts
- We reviewed the priorities from 2013 and then discussed the biggest health or healthcare concerns for Wilson County today. The group mentioned:
  - Transportation
  - Obesity (including childhood)
  - Diabetes

<sup>2</sup>The Rankings are based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play. Building on the work of America's Health Rankings, the University of Wisconsin Population Health Institute has used this model to rank the health of Wisconsin's counties every year since 2003.

- Food accessibility
- Drug abuse heroin, fentanyl
- Mental health access and treatment
- Adolescent pregnancy
- The group thought the most important health issues facing medically-underserved, low-income and minority populations or other groups were:
  - Obesity and diabetes tied to poverty
  - Health disparities among African Americans, Hispanics
  - Adolescent pregnancy
  - Access to care physicians cutting back on Medicare and Medicaid
- The group thought the most important issues facing children were:
  - Access to care including transportation
  - Mental health
  - Obesity
  - Adolescent pregnancy
- The group believed the behaviors that have the most negative impact on health are:
  - Diet
  - Smoking
  - Inactivity and opportunities for activities
  - Substance abuse
- The group believed the environmental factors that have the biggest impact on health were:
  - Really clean air in Wilson County
  - City and County water is fluoridated
  - The build environment is a problem (buildings, parks, access to healthy foods, community gardens, etc.)
  - Difficult for families to get and prepare healthy foods; exposure to fresh fruits and vegetables early is important.
- The group thought the biggest barriers to improving health in the last three years and moving forward were:
  - Mismatch with health needs and resources available primary care, mental health treatment
  - Disengaged, disinterested parents
  - Transportation
  - Landscape inducements, build environment, sidewalks, hiking, biking, walking trails, greenways
  - Difficulty changing habits
  - Technology and exercise
  - Cultural barriers Eastern NC lifestyle and food, barbecue

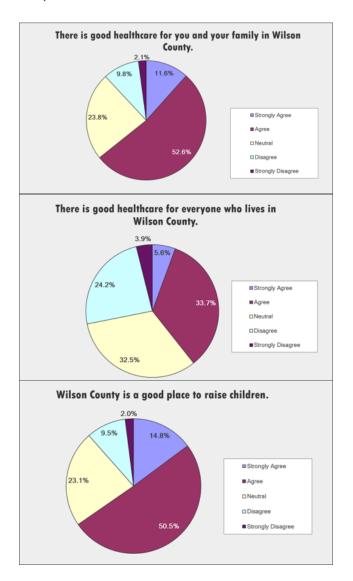
- Difficulty getting grant funding
- Doctors aren't incentivized to keep patients healthy yet; value based purchasing
- Mental health stigma
- The group listed the following as community assets to support health and well-being:
  - Police Athletic Leagues
  - Community partnerships and collaborations
  - Faith Community
  - Meals on Wheels
  - Healthcare Foundation of Wilson
  - Wilson Medical Center
  - Wilson County Health Department
  - Wilson County Dept. of Social Services
  - Large industrial base
  - Level of mutual care found here
- When asked, where do members of the community turn for basic healthcare needs, the group listed:
  - Hospital Emergency Room
  - Immediate Care
  - Two Federally Qualified Health Centers (FQHCs)
  - Primary care physicians
  - OB/gynecologists (for women)
  - · Assisted Livings have Doctors Making House Calls
  - Churches
  - Internet
  - Community dental clinic
  - School nurses
- When asked, what the community needs in order to manage health conditions or stay healthy, the group mentioned:
  - Providers
  - Continued community involvement and collaboration
  - · More school-based health centers that evolve into family resource centers
  - Improved built environment trails
  - Stay consistent
  - Target children to change behaviors
  - Be open to the fact we can't solve all problems; see what works

- When asked what priority health improvement action should Wilson County focus on, the group listed:
  - Availability of good food we're a rural community so should be able to produce good food
  - Safe, outdoor activities
  - Substance abuse drugs, alcohol and tobacco
  - Focus on children, adolescent pregnancy stop the cycle
  - More opportunities for children to be involved in organized sport environment, but hard to find parents to volunteer to organize.

#### **Community and Physician On-line and Paper Survey Results**

663 community members and 53 community physicians were surveyed on-line and in paper from June 1 – July 22, 2016 regarding their perspectives on community health status and needs. Most of the physicians are members of the local community and have unique insight into the health status of the community. The community skewed female, as to be expected, but the other demographics, age and race, were reflective of the community as a whole.

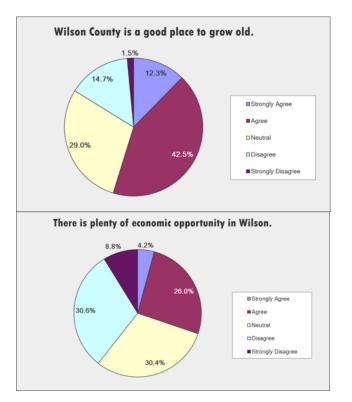
#### **Responses included:**



11.6% strongly agree, 52.6% agree that "there is good healthcare for you and your family in Wilson County." Leaving 2.1% who strongly disagree,9.8% who disagree and 23.8% were neutral.

5.6% strongly agree, 33.7% agree, that "there is good healthcare for everyone who lives in Wilson County." 24.2% disagree and 3.9% strongly disagree with 32.5% neutral.

When asked about agreement with the statement, "Wilson County is a good place to raise children," 14.8% strongly agree, 50.5% agree, while 2.0% strongly disagree, 9.5% disagree and 23.1% were neutral.



Respondents were asked about the one issue that most negatively affected the quality of life in Wilson County. Responses were:

Wilson County is a safe place to live.

13.0%

12.3% strongly agree and 42.5% agree with the statement, "Wilson County is a good place to grow old." 1.5% strongly disagree, 14.7% disagree and 29.0% were neutral.

4.2% strongly agree and 26.0% agree that "there is plenty of economic opportunity in Wilson."8.8% strongly disagree, 30.6% disagree and 30.4% were neutral.

| Issue/Concern                          | % Response |
|--|------------|
| Low Income / Poverty                   | 48.3%      |
| Dropping out of school                 | 9.5%       |
| Violent crime                          | 9.0%       |
| Theft                                  | 5.5%       |
| Lack of or inadequate health insurance | 4.4%       |
| Hunger                                 | 4.3%       |

5.6% strongly agree and 50.1% agree that Wilson County is a safe place to live. 2.0% strongly disagree, 13.0% disagree and 29.3% were neutral.

Strongly Agree Agree 29.3% Neutra Disagree Strongly Disagre There are good parks and recreation facilities in Wilson County -Consider the availability of parks, playgrounds, greenways, bike trails. 4.19 12.4% , 15.1% Strongly Agree Agree 23.3% Neutral Disagree Strongly Disagree

12.4% strongly agree and 45.1% agree that "There are good parks and recreation facilities in Wilson County (consider the availability of parks, playgrounds, greenways, bike trails)." 4.1% strongly disagree, 15.1% disagree and 23.3% were neutral. When asked what one health behavior does our community need more information about, the responses indicated:

| Health Behavior  | % Response |
|--|------------|
| Eating well / nutrition / managing weight/ exercising / fitness  | 30.9%      |
| Alcohol/Substance abuse prevention                               | 15.2%      |
| Mental Health  | 10.8%      |
| Yearly check-ups and screenings                                  | 5.9%       |
| Child care / parenting   | 5.2%       |
| Preventing adolescent pregnancy and sexually transmitted disease | 5.1%       |
| Stress Management  | 3.8%       |
| Caring for family members with special needs                     | 3.4%       |

Respondents were asked, "If you used an illegal drug in the past 30 days, which one have you used?" Nine responded marijuana, 2 cocaine and 2 heroin.

They were also asked, "How many times in the past 30 days have you taken someone else's prescription medication?" Responses were:

| 1 Time | 2-3 Times | 4 Times | 5+ Times |
|--------|-----------|---------|----------|
| 1      | 8         | 4       | 3        |

When asked, "In the last 30 days, how many times did you have 4 or more drinks on one occasion?" the responses were:

| 0 Times | 1-4 Times | 5+ Times | Prefer Not<br>to Answer |
|---------|-----------|----------|-------------------------|
| 75%     | 19.1%     | 4.2%     | 1.2%                    |

Responses to, "What healthcare concern has improved the most in the past three years?" were:

| Healthcare Concern           | General Survey | Physicians |
|------------------------------|----------------|------------|
| Healthcare Availability      | 22.6%          | 30%        |
| Adolescent Pregnancy         | 18.5%          | 15%        |
| Heart Disease                | 12.8%          | 30%        |
| Cancer                       | 9.0%           | 5%         |
| Sexually Transmitted Disease | 6.6%           | 5%         |
| Obesity                      | 5.9%           | N/A        |

The services that most needed improvement in the community as indicated by the respondents were:

| Services Needed                         | % Response |
|---|------------|
| Positive Teen Activities                | 14.3%      |
| Availability of Employment              | 14.1%      |
| Higher Paying Employment                | 13.8%      |
| Counseling/Mental Health/Support Groups | 11.3%      |
| Better/More Recreational Facilities     | 8.1%       |
| More Affordable Healthcare Services     | 6.7%       |
| More Healthy Food Choices               | 3.8%       |
| More Affordable Housing                 | 3.8%       |

What topic do children need more information about?

| Торіс                         | % Responding | % Physicians Responding |
|-------------------------------|--------------|-------------------------|
| Nutrition/Obesity             | 38.9%        | 63%                     |
| Alcohol/Substance Abuse       | 14.7%        | 19%                     |
| Sexually Transmitted Diseases | 8.0%         | 6.3%                    |
| Mental Health Issues          | 7.2%         | 13%                     |
| Dental Hygiene                | 6.1%         | N/A                     |
| Adolescent Pregnancy          | 4.8%         | 6.3%                    |

When asked, "What education should be provided for our elderly population?"

| Торіс                                 | % Responding | % Physicians Responding |
|---------------------------------------|--------------|-------------------------|
| Healthcare Availability/Affordability | 42.8%        | 42%                     |
| Alzheimer's Disease                   | 31.1%        | 25%                     |
| Heart Disease                         | 8.1%         | 8.0%                    |
| Mental Health Issues                  | 6.2%         | N/A                     |
| Cancer                                | 5.0%         | N/A                     |
| Obesity/Overweight                    | 4.4%         | 25%                     |
| Alcohol/Substance Abuse               | 2.5%         | N/A                     |

Ten percent of the surveyed individuals indicated they had problems obtaining healthcare in the previous twelve months. The reasons were:

| Reason  | % Response |
|---|------------|
| No health insurance                                     | 26%        |
| Insurance did not cover needs                           | 21%        |
| Deductible/Co-pay was too high                          | 18%        |
| Could not get an appointment                            | 10%        |
| The wait was too long                                   | 5%         |
| Provider would not take insurance, Medicare or Medicaid | 4%         |
| Lack of transportation                                  | 4%         |
| Did not know where to go                                | 4%         |

| Top Healthcare Concerns for Wilson County          | % Response<br>Overall | % Response<br>Physicians |
|--|-----------------------|--------------------------|
| Alcohol/Substance Abuse                            | 30.5%                 | 15%                      |
| Obesity/Overweight Adults/Children                 | 21.8%                 | 35%                      |
| Mental Illness                                     | 13.8%                 | 15%                      |
| Health Care Availability/Affordability             | 11.5%                 | 5%                       |
| Adolescent Pregnancy                               | 7.1%                  | 10%                      |
| Sexually Transmitted Diseases/Infections (STD/STI) | 5.3%                  | 10%                      |
| Cancer   | 4.8%                  | Not Noted                |
| Chronic Disease                                    | Not Noted             | 10%                      |

The survey question asking the top healthcare concern for Wilson County received the following responses:

A copy of the total survey questions is available from Healthcare Foundation of Wilson.

#### Additional Secondary Data Utilized:

Information from County Health Rankings and America's Health Rankings was analyzed in the Community Health Needs Assessment in addition to the previously reviewed information and other public health data. Other data analyzed was: causes of death, demographics, socioeconomics, and consumer health spending. When data was available for North Carolina, the U.S. or the top 10% of counties (90th percentile), they were used as comparisons. Strengths are important because the community can build on those strengths and it's important to continue focus on strengths so they don't become opportunities for improvement. The full data analysis can be seen in the CHNA PowerPoint. There were strengths and opportunities identified for measures and for the counties. Opportunities were denoted with red stars, and strengths were denoted using green stars. The years displayed on the County Health Rankings graphs show the year the data was released. The actual years of the data is included in the source notes below the graphs.

#### Leading Causes of Death: Age-adjusted deaths per 100,000

| Cause of Death                    | Wilson<br>County<br>(2013) | North<br>Carolina<br>(2013) | US<br>(2013) |
|-----------------------------------|----------------------------|-----------------------------|--------------|
| Heart Disease                     | 198.0                      | 206.0                       | 169.8        |
| Cancer                            | 203.0                      | 213.5                       | 163.2        |
| Chronic Lower Respiratory Disease | 39.0                       | 62.0                        | 42.1         |
| Accidents                         | 20.0                       | 31.4                        | 39.4         |
| Stroke                            | 46.0                       | 51.6                        | 36.2         |
| Alzheimer's Disease               | 22.0                       | 42.8                        | 23.5         |
| Diabetes                          | 27.0                       | 26.9                        | 21.2         |
| Influenza and Pneumonia           | 21.0                       | 18.7                        | 15.9         |
| Kidney Disease                    | **                         | 27.9                        | 13.2         |
| Suicide                           | **                         | **                          | 12.6         |
| Liver Disease                     | **                         | **                          | 10.2         |

Source(s): CDC/NCHS, National Vital Statistics System, Mortality 2013 (2014); North Carolina County Health Data Book - N.C. Department of Health and Human Services (2016); unadjusted per 100,000

Red areas had death rates higher than the state. The leading causes of death in Wilson County and NC was cancer followed by heart disease, whereas in the U.S. the leading cause of death is heart disease followed by cancer. Lagging behind as causes of death were stroke, chronic lung disease, diabetes, Alzheimer's Disease, influenza and pneumonia and accidents.

| Leading Causes of Death by Percentage | Percentage |
|---------------------------------------|------------|
| Cancer                                | 25.2%      |
| Heart Disease                         | 20.3%      |
| Stroke                                | 4.0%       |
| Lower Respiratory Disease             | 3.8%       |

| Cancer Incidence | All   | Lung | Colo-Rectal | Breast | Prostate |
|------------------|-------|------|-------------|--------|----------|
| 2009-2013        |       |      |             |        |          |
| Wilson           | 454.4 | 71.5 | 38.3        | 143.6  | 108.8    |
| Nash             | 448.1 | 72.0 | 40.4        | 154.6  | 109.5    |
| Edgecombe        | 477.6 | 68.5 | 36.3        | 146.1  | 155.5    |
| Lenoir           | 512.7 | 73.4 | 45.2        | 157.1  | 145.7    |
| North Carolina   | 483.4 | 71.5 | 38.5        | 157.9  | 130.6    |

#### NC State Center for Health Statistics

Wilson County's cancer incidence ranks lower than statewide averages for most sites. However, in the next table Wilson ranks higher than statewide averages for cancer mortality. This comparison may indicate a need for earlier detection of the disease process. This could also indicate a need for more community cancer screening programs.

| Cancer Mortality | All   | Lung | Colo-Rectal | Breast | Prostate |
|------------------|-------|------|-------------|--------|----------|
| 2009-2013        |       |      |             |        |          |
| Wilson           | 196   | 54.6 | 17.5        | 28.8   | 26.6     |
| Nash             | 186   | 56.5 | 16.9        | 26.1   | 24.7     |
| Edgecombe        | 191.4 | 50.8 | 16.6        | 29.8   | 34.0     |
| Lenoir           | 186   | 56.5 | 16.9        | 26.1   | 24.7     |
| North Carolina   | 171.7 | 50.6 | 14.1        | 21.6   | 21.5     |

NC State Center for Health Statistics

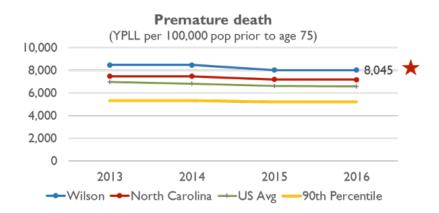
| Heart Disease* |       |       |       |  |
|----------------|-------|-------|-------|--|
|                | 2012  | 2013  | 2014  |  |
| Wilson         | 224.8 | 242.4 | 201.5 |  |
| Nash           | 206.9 | 217.7 | 227.9 |  |
| Edgecombe      | 235.9 | 257.3 | 238.5 |  |
| Lenoir         | 280.3 | 252.9 | 247.9 |  |
| North Carolina | 177.3 | 180.9 | 176.5 |  |

\*Rate per 100,000 persons NC State Center for Health Statistics

Wilson County shows a marked improvement in the heart disease rate in 2014. While lower than peer counties, Wilson continues to be higher than the statewide average.

#### Health Outcomes (Length of Life and Quality of Life)

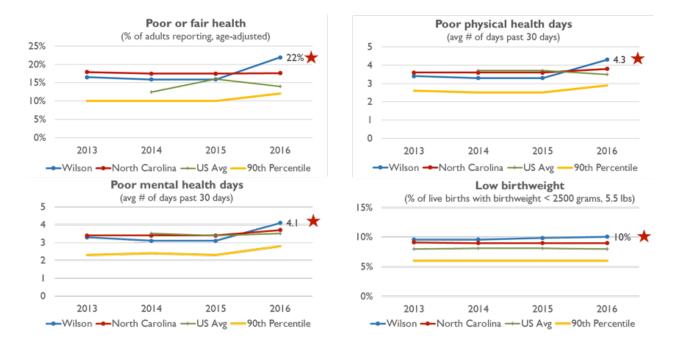
Health Outcomes are a combination of length of life and quality of life measures. Wilson County ranked 72nd in Health Outcomes out of 100 North Carolina counties. Length of life was measured by years of potential life lost (YPLL) per 100,000 population prior to age 75. Wilson County ranked 57th in length of life.



Source: County Health Rankings; National Center for Health Statistics – Mortality File 2011-2013

In the following graphs, Wilson County will be blue, North Carolina red, U.S. green and the 90th percentile gold.

**Quality of Life:** Quality of life was measured by: % reporting fair or poor health, the average number of poor physical health days and poor mental health days in the past 30 days, and % of live births with birthweight less than 2500 grams (5lbs 8ozs). Wilson County ranked 80th out of 100 counties for quality of life.



Source: County Health Rankings; Behavioral Risk Factor Surveillance System (BRFSS) 2014 Source: County Health Rankings: National Center for Health Statistics – Natality files (2007-2013) \*indicates a change in the Behavioral Risk Factor Surveillance System Survey calculations of results. 2016 cannot be compared to prior year results.

#### Strengths

• Wilson County was in the second lowest quintile for suicide mortality rates in NC.

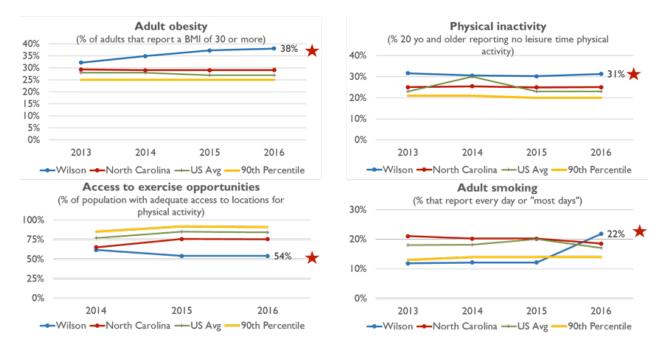
#### **Opportunities**

- Years of potential life lost (YPLL) per 100,000 population prior to age 75, was higher in Wilson County, 8,045 years, higher than North Carolina and the U.S.
- The percentage in poor or fair health was higher than NC and the U.S.
- The number of poor physical and mental health days in the last 30 days was higher than NC and the U.S.
- The percent of low birthweight babies, less than 5.5 pounds, was higher in Wilson County than NC and the U.S. at 10%.
- The percent of cancer deaths was higher in Wilson County than NC. Wilson County was in the second highest quartile of cancer mortality rates in NC. The primary cancer death by site was lung/bronchus at 30%, 8% colon/rectum, 7% female breast, and 6% prostate and pancreas. However, the highest number of cancer cases was female breast, followed by lung/bronchus, prostate and colon/rectum.
- Wilson County was in the second highest quartile for infant mortality rates in NC.

#### **Health Factors or Determinants**

Health factors or determinants were comprised of measures related to health behaviors, clinical care, social & economic factors, and physical environment. Wilson County ranked 91st in North Carolina for health factors. Health behaviors are made up of nine measures. Health behaviors account for 30% of the county rankings. Wilson County ranked 92nd out of 100 counties in North Carolina in health behaviors.

#### **Health Behaviors**

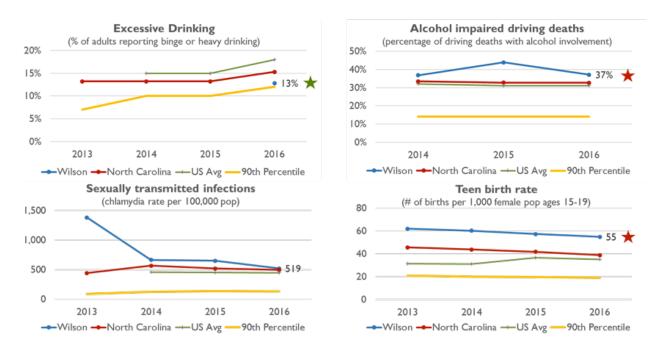


Source: Obesity, physical inactivity - County Health Rankings; CDC Diabetes Interactive Atlas, 2012 Source: Access to exercise opportunities - County Health Rankings; ArcGIS Business Analyst, Delorme map data, ESRI and US Census Tigerline Files, 2013

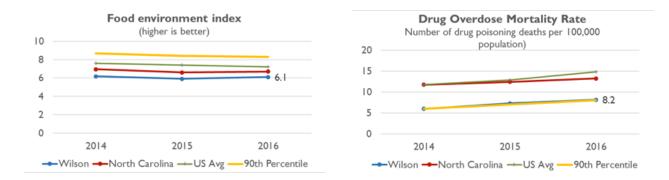
Source: Smoking - County Health Rankings; Behavioral Risk Factor Surveillance System (BRFSS)

| County         | 2016 Obesity Rate |
|----------------|-------------------|
| Wilson         | 38%               |
| Nash           | 31%               |
| Edgecombe      | 39%               |
| Lenoir         | 36%               |
| North Carolina | 29%               |

In the 2016 Robert Wood Johnson county rankings, obesity rates for Wilson and peer counties are higher than statewide averages. Much work is needed to ensure Wilson County citizens understand the importance of physical activity and nutrition, and the link of obesity to chronic disease.



Source: Excessive drinking - County Health Rankings; Behavioral Risk Factor Surveillance System (BRFSS), 2014 Source: Alcohol-impaired driving deaths - County Health Rankings; Fatality Analysis Reporting System, 2010-2014 Source: STDs - County Health Rankings; National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2013 Source: Teen birth rate – County Health Rankings; National Center for Health Statistics – Natality files, 2007-2013



The food environment index is a comprised of percent of the population with limited access to healthy foods and percent of the population with food insecurity. Limited access to foods estimates the percent of the population who are low income and do not live close to a grocery store. Food insecurity is the percent of the population who did not have access to a reliable source of food during the past year.

Source: County Health Rankings; USDA Food Environment Atlas, 2012-2013 Source: County Health Rankings; CDC WONDER mortality data, 2012-2014

| Adolescent Pregnancy 15-19* |      |      |      |  |
|-----------------------------|------|------|------|--|
|                             | 2013 | 2014 | 2015 |  |
| Wilson                      | 45.1 | 44.6 | 42.1 |  |
| Nash                        | 41.6 | 40.4 | 39.5 |  |
| Edgecombe                   | 65.4 | 50.6 | 50.5 |  |
| Lenoir                      | 50.4 | 42.6 | 37.4 |  |
| North Carolina              | 35.2 | 32.3 | 30.2 |  |

#### \*Rates per 1,000 women

Wilson County adolescent pregnancy rates have shown a steady decline over the past several years. However, the rates continue to be significantly higher than the statewide average and some peer counties. There is work to do in order to reach rates that are lower than the statewide average.

#### Wilson County Live Births

Wilson County had 971 live births in 2015; 347 were to white mothers, 417 to African American mothers and 192 to Hispanic mothers.

| Low Birth Weight* |      |      |      |  |
|-------------------|------|------|------|--|
| 2013 2014 2015    |      |      |      |  |
| Wilson            | 10.7 | 11.6 | 11.1 |  |
| North Carolina    | 8.8  | 8.9  | 9.2  |  |

\* Per 1,000 Live Births - NC State Center for Health Statistics

Wilson Counties low birth weight babies continue to exceed statewide averages. NC ranks 40th out of the 50 states for numbers of low birth weight babies.

| Infant Mortality Rates* |      |      |      |  |
|-------------------------|------|------|------|--|
|                         | 2012 | 2013 | 2014 |  |
| Wilson                  | 15.3 | 6.4  | 4.3  |  |
| Nash                    | 9.9  | 7.2  | 8.7  |  |
| Edgecombe               | 7.4  | 12.7 | 6.7  |  |
| Lenoir                  | 9.2  | 7.6  | 10.3 |  |
| North Carolina          | 4.4  | 7.0  | 7.1  |  |

#### \* Per 1,000 Live Births

Infant mortality is an area where Wilson County has been consistently lower than the statewide averages and below peer counties. 2012 was an outlier with a rate of 15.3.

| Gonorrhea Rates* |       |       |       |  |
|------------------|-------|-------|-------|--|
|                  | 2013  | 2014  | 2015  |  |
| Wilson           | 192.4 | 244.5 | 358.6 |  |
| Nash             | 195.8 | 203.7 | 258.7 |  |
| Edgecombe        | 318.8 | 358.8 | 369.3 |  |
| Lenoir           | 214.1 | 265.4 | 278.8 |  |
| North Carolina   | 143.4 | 150.6 | 169.7 |  |

#### Sexually Transmitted Disease Infection Statistics include:

#### \*Rates per 100,000 persons

Gonorrhea rates have increased by 53% over the last three years for Wilson County and are noted as a concern.

| Syphilis Rates* |      |      |      |  |
|-----------------|------|------|------|--|
|                 | 2013 | 2014 | 2015 |  |
| Wilson          | 1.2  | 17.2 | 29.4 |  |
| Nash            | 2.1  | 12.7 | 29.8 |  |
| Edgecombe       | 12.6 | 16.4 | 44.3 |  |
| Lenoir          | 23.8 | 22.3 | 27.5 |  |
| North Carolina  | 7.0  | 11.4 | 12.3 |  |

#### \*Rates per 100,000 persons

Syphilis is an area of great concern for Wilson County as the rates have increased significantly over the past two years. This is also a statewide trend.

| Chlamydia Rates* |       |        |        |  |
|------------------|-------|--------|--------|--|
|                  | 2013  | 2014   | 2015   |  |
| Wilson           | 596.8 | 658.5  | 593.5  |  |
| Nash             | 618.2 | 645.1  | 642.0  |  |
| Edgecombe        | 992.4 | 1014.6 | 1078.5 |  |
| Lenoir           | 683.2 | 678.1  | 640.2  |  |
| North Carolina   | 499.9 | 502.6  | 541.5  |  |

#### \*Rates per 100,000 persons

While Chlamydia rates for Wilson County decreased from 2014 to 2015, the rates continue to be above statewide averages. Even though Wilson County outcomes are better than peer counties, improvement is needed.

HIV: There are currently 348 persons living in Wilson County with HIV. This is the 11<sup>th</sup> highest number out of the 100 counties in North Carolina.

Data above obtained from State Center for Health Statistics and Communicable Disease Report

# Strengths

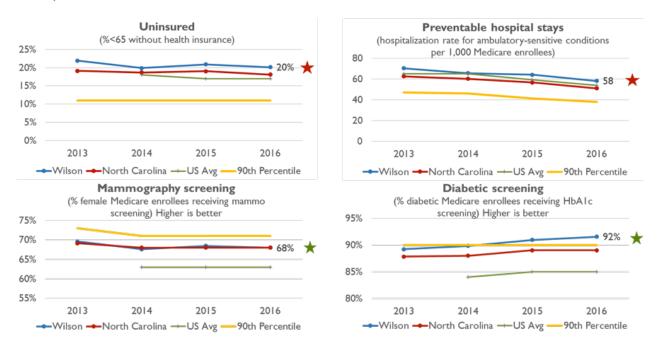
- The lower percentage of excessive drinking was lower than the U.S. and NC approaching the top 10% of counties in the U.S.
- Lower number of drug poisoning deaths per 100,000 population than NC and the U.S. Wilson County was in the 5th (lower) out of eleven categories for age-adjusted death rates for drug poisoning by county in NC.

# **Opportunities**

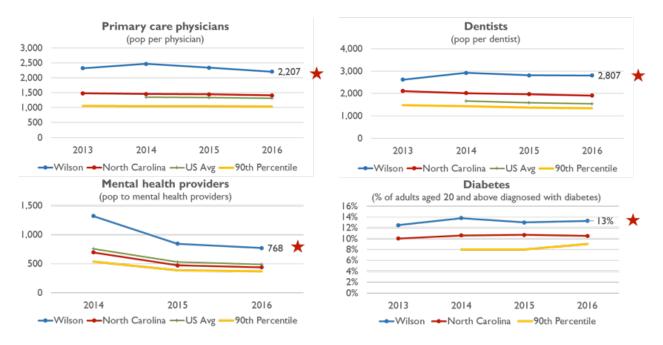
- Thirty-eight percent of adults in Wilson County were obese. Obesity puts people at increased risk of chronic diseases: diabetes, kidney disease, joint problems, hypertension and heart disease. Obesity can cause complications in surgery and with anesthesia. It has been implicated in Alzheimer's. It often leads to metabolic syndrome and type 2 diabetes. It is a factor in cancers, such as ovarian, endometrial, postmenopausal breast cancer, colorectal, prostate, and others.
- Adult smoking in Wilson County was higher than NC and the U.S. The Healthy People 2020 goal is 12%. Each year approximately 443,000 premature deaths can be attributed to smoking. Cigarette smoking is identified as a cause of various cancers, cardiovascular disease, and respiratory conditions, as well as low birthweight and other adverse health outcomes.
- The percentage of driving deaths with alcohol involved was higher than NC and the U.S.
- Physical inactivity was higher in Wilson County than NC and the U.S.
- The percentage of the population with adequate access to locations for physical activity was lower in Wilson County than NC and the U.S.
- The adolescent birth rate in Wilson County was higher than NC and the U.S., but the trend is declining. Wilson County was in the top 25% in adolescent pregnancies in NC.
- The food environment index was lower than NC and the U.S. The index is a blend of access to healthy food and food insecurity.

# **Clinical Care**

Clinical care ranking is made up of eight indicators, and they account for 20% of the county rankings. Wilson County ranked 57th out of 100 North Carolina counties in clinical care.



Source: Uninsured - County Health Rankings; Small Area Health Insurance Estimates, 2013 Source: Preventable hospital stays, mammography screening, diabetic screening - County Health Rankings; Dartmouth Atlas of Health Care, 2013



Source: Pop to PCP - County Health Rankings; Area Health Resource File/American Medical Association, 2013 Source: Pop to Dentists - County Health Rankings; Area Health Resource File/National Provider Identification file, 2014 Source: Pop to mental health provider (psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health) County Health Rankings; CMS, National Provider Identification, 2014

Source: County Health Rankings; CDC Diabetes Interactive Atlas, 2013

Wilson County is a designated health professional shortage area (HPSA) for primary care and dental care.

#### Strengths

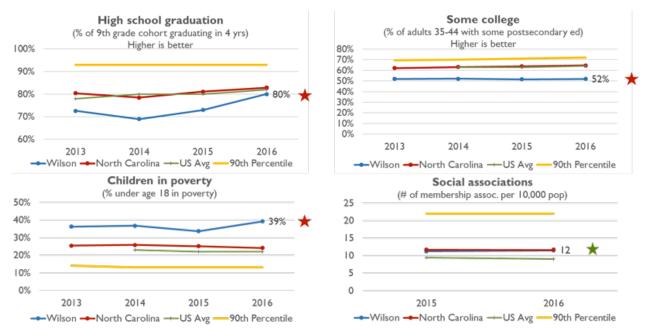
- The percent of diabetic Medicare enrollees receiving screening was higher in Wilson County than NC and the U.S.
- Mammography screening was higher in Wilson County than NC and the U.S.

#### **Opportunities**

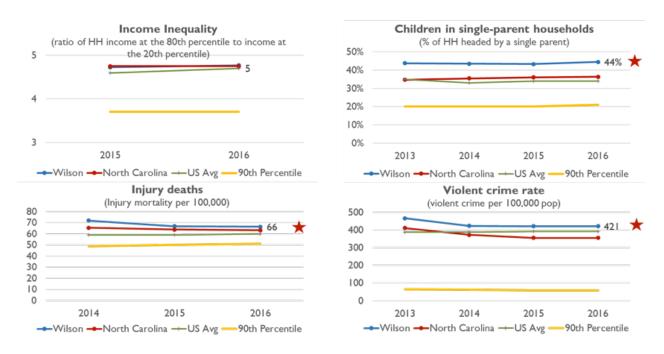
- The percent of population under sixty-five without health insurance was higher in Wilson County than NC and the U.S.
- The hospitalization rate for ambulatory-sensitive conditions per 1,000 Medicare enrollees was higher than NC and the U.S.
- The population per primary care physician was higher in Wilson County than NC and the U.S.
- The population per dentists was higher in Wilson County than NC and the U.S.
- The population per mental health provider was higher in Wilson County than NC and the U.S.
- Thirteen percent of Wilson County had diabetes, which was higher than NC

# **Social & Economic Factors**

Social and economic factors account for 40% of the county rankings. There are eight measures in the social and economic factors category. Wilson County ranked 92nd out of 100 North Carolina counties in social and economic factors.



Source: High School graduation – County Health Rankings; States to the Federal Government via EDFacts, 2012-2013 Source: Some college - County Health Rankings; American Community Survey, 5-year estimates, 2010-2014 Source: Children in poverty - County Health Rankings; US Census, Small Area Income and Poverty Estimates, 2014 Source: Social associations - County Health Rankings; County Business Patterns, 2013



Source: Income inequality - County Health Rankings; American Community Survey, 5-year estimates 2010-2014 Source: Children in single parent households - County Health Rankings; American Community Survey, 5-year estimates, 2010-2014 Source: Injury deaths – County Health Rankings; CDC WONDER mortality data, 2009-2013 Source: Violent crime - County Health Rankings; Uniform Crime Reporting – FBI, 2011 - 2013

# Strengths

• Social associations were higher in Wilson County than NC and the U.S. Associations include membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, labor organizations, business organizations, and professional organizations. Poor family support, minimal contact with others, and limited involvement in community life are associated with increased morbidity and early mortality.

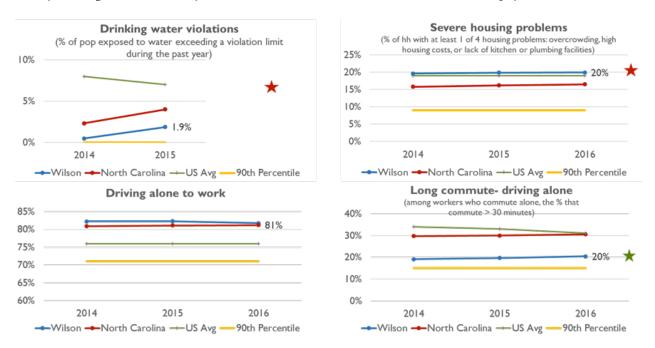
# **Opportunities**

- High school graduation was lower in Wilson County than NC and the U.S.
- The percent of adults with some college was lower than NC and the U.S.
- The percentage of children in poverty was higher in Wilson County than NC and the U.S. at 39%.
- The percent of children in single parent households, 44% was higher than NC and the U.S.
- Injury deaths were higher than NC and the U.S.
- Violent crime rate per 100,000 population was higher in Wilson County than in NC and the U.S.
- Wilson County had lower median household income than NC and the U.S.
- Wilson County had higher poverty than NC and the U.S.

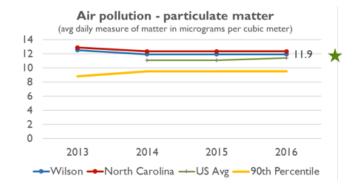


# **Physical Environment**

Physical environment contains five measures in the category. Physical environment accounts for 10% of the county rankings. Wilson County ranked 59th out of 100 North Carolina counties in physical environment.



Source: Drinking water violations – County Health Rankings; EPA, FY 2013-2014 Source: Severe housing problems – County Health Rankings; HUD Comprehensive Housing Affordability Strategy data, 2008-2012 Source: Driving alone to work and long commute – County Health Rankings: American Community Survey, 5-year estimates, 2010-2014



Source: Air pollution - County Health Rankings: CDC WONDER environmental data, 2010

# Strengths

- Wilson County did not have long commute times or drive alone to work, at or lower than the top 10% of counties. A 2012 study in the American Journal of Preventive Medicine found that the farther people commute by vehicle, the higher their blood pressure and body mass index. Also, the farther they commute, the less physical activity the individual participated in. Source: County Health Rankings: [1] Hoehner, Christine M., et al. "Commuting distance, cardiorespiratory fitness, and metabolic risk." American journal of preventive medicine 42.6 (2012): 571-578.
- Wilson County had fewer air particulate matter in micrograms per cubic meter than NC and the U.S.

# **Opportunities**

- There were drinking water violations in Wilson County. The U.S. statistics are prior to the Flint, MI water crisis.
- Wilson County had a higher percentage of severe housing problems than NC and the U.S.

#### There were four broad themes that emerged in this process:

- Wilson County needs to create a "Culture of Health" which permeates throughout the cities, employers, churches, and community organizations to engender total commitment to health improvement.
- There is a direct relationship between health outcomes and affluence (income and education). Those with the lowest income and education generally had the poorest health outcomes.
- While any given measure may show an overall good picture of community health, there are significantly challenged subgroups such as the census tracts just east and south of Wilson.
- It will take a partnership with a wide range of organizations and citizens pooling resources to meaningfully impact the health of the community. Many assets exist in the county to improve health.



Photo credit: Andrew Walker



# Phase Five

Determining Health Priorities: Results of the CHNA: Community Health Summit Needs

# Prioritization of the Most Significant Health Needs for Wilson County

At the Community Health Summit, the attendees identified and prioritized the most significant health needs in the community for the next three-year period. The group used the criteria below to prioritize the health needs.

| Magnitude/scale of the problem | How big is the problem? How many people does the problem affect, either      |  |
|--------------------------------|--|--|
|                                | actually or potentially? In terms of human impact, how does it compare t     |  |
|                                | other health issues?   |  |
| Seriousness of Consequences    | What degree of disability or premature death occurs because of this          |  |
|                                | problem? What would happen if the issue were not made a priority? What       |  |
|                                | is the level of burden on the community (economic, social or other)?         |  |
| Feasibility                    | Is the problem preventable? How much change can be made? What is the         |  |
|                                | community's capacity to address it? Are there available resources to address |  |
|                                | it sustainably? What's already being done, and is it working? What are the   |  |
|                                | community's intrinsic barriers and how big are they to overcome?             |  |

The following needs were prioritized and goals and actions were brainstormed by the table groups at the Community Health Summit and formed the foundation of Wilson County's health initiatives. Using a nominal group technique, each attendee received three sticky notes and selected their top three health needs and posted their ideas on paper at the front of the room. The results of the activity are below with higher numbers indicating the number of "votes" or priority by topic. The bullets below the health need are the actual comments received on the sticky notes.

# 1. Obesity - 49

- Obesity (31)
- Overweight/obesity (2)
- Obesity (particularly youth)
- Diet and exercise
- Outdoor physical activities (accessibility)
- Few sidewalks
- 2. Mental health 34
  - Mental health (30)
  - Mental health services
  - Mental health care
- 3. Substance abuse 26
  - Substance abuse (10)
  - Alcohol/substance abuse (10)
  - Drug abuse/overdose (2)
  - Substance abuse disorders

- Obesity/diet and exercise (3)
- Poor built environment
- Obesity access to resources
- Obesity overweight adults and children (4)
- Obesity access to healthy food
- Mental health increase resources
- Mental health especially towards high school youth
- Opioid use prevention
- Substance/drug abuse
- Smoking assistance with cessation

#### 4. Access/affordability/disparities - 15

- Affordable healthcare (3)
- Access to care (2)
- Primary care access
- Affordable & accessible healthcare for all (children, adults, including seniors)
- Health disparities (chronic diseases)

#### 5. Aging – 8

- Aging population (7)
- 6. Socioeconomics 7
  - Poverty (3)
  - Expanding education
  - Lack of transportation choices
- 7. Adolescent pregnancy/STD's-5
  - Adolescent pregnancy/STDs (5)
- 8. Cancer 4
  - Cancer (4)
- 9. Miscellaneous
  - Parental involvement
  - Gangs

#### Populations at Risk

The 2016 Community Health Needs Assessment identified vulnerable populations with multiple risk factors that create complex health challenges. Among these health risk factors are aging and minorities living below poverty level. Factors impacting these populations include: low income, lack of affordable health insurance/ coverage, social isolation, mental health problems, substance abuse problems, poor nutrition, sedentary lifestyle, sexual risk behaviors (including adolescent pregnancy and STD's), and tobacco use.

# 2013 Healthcare Foundation of Wilson, Wilson County Health Department and Wilson Medical Center: Implementation Plan/Impact Evaluation

Healthcare Foundation of Wilson, Wilson County Health Department and Wilson Medical Center adopted implementation plans in 2013 and 2014.

#### 2013 WMC CHNA and Implementation Plan Evaluation Written Comments

No written comments were received on the 2013 CHNA and implementation plan.

- Access to healthcare for the uninsured
- Uninsured
- Disparities
- Demographic/economic disparity issues
- Preventative medicine
- Preventable hospital stays (2)
- Falls
- Wages
- Food insecurity

• Infection prevention/ flu pneumonia



Photo credit: Andrew Walker

# Phase Six

Determining Health Priorities with Community Engagement and Transparency We are pleased to share the results of the Community Health Needs Assessment with our community in hopes of attracting more advocates and volunteers to improve the health of the community. This document contains key findings of the data collection of the CHNA. We hope you will take the time to review the health needs of our community as the findings impact each and every citizen in one way or another; and join in the improvement efforts. The comprehensive report including data analysis may be obtained via a PowerPoint on the websites or by contacting Healthcare Foundation of Wilson, the Wilson County Health Department or Wilson Medical Center.





# Phase Seven

Dissemination of the Plan

- Healthcare Foundation of Wilson board of directors approved this assessment and the implementation plan on December 7, 2016.
- The Wilson County Health Department board of health approved this assessment and the implementation plan on December 13, 2016.
- The Wilson Medical Center board of trustees approved this assessment and the implementation plan on October 25, 2016.

Starting on December 31, 2016, this report will be made widely available to the community via:

Healthcare Foundation of Wilson

www.healthcarefoundationofwilson.org, 2505-A Nash Street NW, Wilson, NC 27896, 252.281.2105

Wilson County Health Department

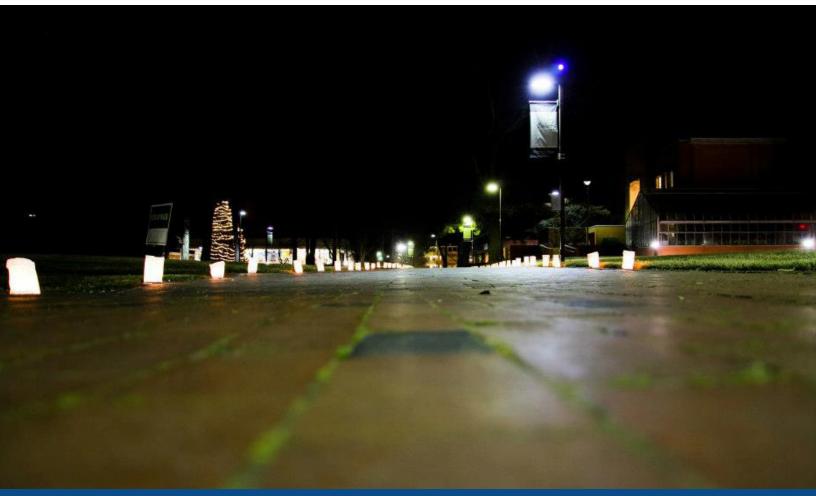
www.wilson-co.com/85/Health-Department, 1801 Glendale Drive, Wilson, NC 27893, 252.237.3141

Wilson Medical Center

www.wilsonmedical.com, or 1705 Tarboro St W, Wilson, NC 27893, 252.399.8040

Paper copies are available free of charge at the above addresses.

Photo credit: Barton College





A separate document that includes implementation/action plans accompanies this document.

# Phase Eight Development of Implementation Action Plans



# Inventory of Resources

The CHNA results indicate that today's community health challenges are too complex for any single organization or sector to address on their own. Improving community health will require attention to health promotion, prevention, and community support services in addition to health care services.

Below are a list of the health and county resources that can help improve the health of the community and assist with the implementation plans:

# **Business and Industry**

City of Wilson 112 Goldsboro Street Wilson, NC 27893 252.399.2200

Upper Coastal Plain Council of Governments 121 Nash Street W Wilson, NC 27893 252.234.5950 Wilson Chamber of Commerce 200 Nash Street NE Wilson, NC 27893 252.237.0165

Wilson Economic Development Council 405 Nash Street, NE, Suite 210 Wilson, NC 27894 252.237.1115

Wilson 2020 Community Vision P.O. Box 1764 Wilson, NC 27894-1764 252.290.0355

# Crime Prevention/Law Enforcement/Victim Assistance

City of Wilson Police (Several Satellite offices throughout city) 120 Goldsboro Street, N Wilson, NC 27893 252.399.2323

Wilson County Sheriff's Department (Several satellite offices throughout county) 100 Green Street, E Wilson, NC 27893 252.237.2118

NC Highway Patrol 1822 Goldsboro Street, SW Wilson, NC 27893 252.243.6439 Wilson Crisis Center P.O. Box 8026 Wilson, NC 27893 252.237.5156

Black Creek Police Department 112 W. Center Street Black Creek, NC 27813 252.243.6439

Stantonsburg Police Department 114 E Commercial Ave Stantonsburg, North Carolina 27883 252.238.3534



# **Wilson County Schools**

- B.O. Barnes Elementary School
- Beddingfield High School
- Charles H. Darden Middle School
- Elm City Elementary School
- Elm City Middle School
- Fike High School
- Forest Hills Middle School
- Gardners Elementary School
- James Hunt High School
- John W. Jones Elementary School
- Lee Woodard Elementary School
- Lucama Elementary School
- Margaret Hearne Elementary School
- Milton Daniels Learning Center
- New Hope Elementary School
- Rock Ridge Elementary School
- Speight Middle School
- Springfield Middle School

# Wilson County Schools Average SAT Scores

- Stantonsburg Elementary School
- Toisnot Middle School
- Vick Elementary School
- Vinson-Bynum Elementary School
- Wells Elementary School
- Winstead Elementary School
- Charter Schools/Specialty
- Eastern NC School for the Deaf
- Sallie B. Howard School
- Wilson Preparatory Academy
- Wilson Early College Academy
- Private / Specialty Schools
- Community Christian School
- Greenfield School
- Wilson Christian Academy
- Colleges
- Barton College
- Wilson Community College

| 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|------|------|------|------|------|------|------|------|
| 964  | 961  | 958  | 961  | 957  | 953  | 950  | 939  |

# Percentage of Wilson County Juniors Scoring 17 or Higher on ACT

| 2013-2014 | 2014-2015 | 2015-2016 |
|-----------|-----------|-----------|
| 56.6%     | 56.1%     | 53.1%     |

# **Major Employers**

- Branch Bank & Trust Financial
- Wilson County Schools Education
- Bridgestone Americas Manufacturing
- Wilson Medical Center Healthcare Services
- S.T. Wooten Construction Co, Inc Construction
- City of Wilson Public Administration
- County of Wilson Public Administration
- Smithfield Foods, Inc, Manufacturing

- Kidde Aerospace/Fenway Safety Systems Manufacturing
- Merck Manufacturing Manufacturing
- Alliance One International Manufacturing
- NC Department of Health & Human Services
  Public Administration
- Wal-Mart Associates, Inc Trade, Transportation & Utilities
- Wilson Community College Education
- Barton College Education

#### **Medical Services**

#### **Carolina Family Health Centers**

Carolina Family Health Centers, Inc. is a Federally Qualified Community Health Center working to enhance the health of individuals and families by improving access to quality healthcare services. While maintaining a commitment to the underserved, CFHC offers a comprehensive scope of medical, dental and behavioral health services to a wide range of patients – including those with Medicare, Medicaid and most private insurance plans. They service the counties of Edgecombe, Nash, and Wilson. Two of the Carolina Family Health Centers utilized by Wilson County residents are the Wilson Community Health Center and Harvest Family Health Center. For more information, call 252.293.0013 (Wilson Community Health Center) or 252.443.7744 (Harvest Family Health Center).

#### Wilson County Health Department

Wilson County Health Department provides many health services including; Primary Care, Child Health, Social Work, Dental Varnishing, Women Infant and Children (WIC), Nutrition, Health Education, Environmental Health, Family Planning, Maternal Health, and Home Health. Wilson County Health Department also has a laboratory that analyzes for certain diseases and the Breast and Cervical Cancer Control Program promotes early diagnosis in women for treatment of breast and cervical cancer. For more information, call 252.237.3141.

#### Wilson Medical Center

Wilson Medical Center, a Duke LifePoint hospital, is located in Wilson, North Carolina and operates as a 294-bed facility providing comprehensive services to residents of Wilson County and surrounding communities. For more information, call 252.399.8040.

# Wilson County Emergency Medical Services (EMS)

Wilson County Emergency Medical Services provides emergency paramedic level care and transportation to approximately 81,000 people in Wilson County, including all municipalities and the City of Wilson.

#### Vidant Health Center

Vidant Health Care is one (1) of four (4) academic medical centers located in North Carolina. Vidant is a regional resource for all levels of health services and information. Vidant Health Center is also a teaching hospital for the Brody School of Medicine at East Carolina University. The hospital is a tertiary referral center and provides acute, intermediate, rehabilitation, and outpatient health services to more than 1.3 million people in twenty-nine (29) counties. For more information, call 252.847.4100.

#### Wake Medical Center

WakeMed Health & Hospitals is a three-hospital, 919-bed private not-for-profit health system based in Raleigh, North Carolina. WakeMed is the leading provider of health care services in Wake County, and the only hospital system based in Wake County.

For more information, contact 919.350.8000.

#### Longleaf Neuro- Medical Treatment Center

Longleaf Neuro-Medical Treatment Center is located in the city of Wilson, North Carolina and serves up to two hundred thirty three (233) individuals. Longleaf Neuro-Medical Treatment Center serves two types of patients: (1) Adults with severe and persistent mental illness that also have long-term medical conditions requiring residential, medical and nursing care. These patients are referred solely from the State psychiatric hospitals. (2) Adults with diagnosis of Alzheimer's or other related dementia that's assaultive and combative behavior has resulted in denial of care in a traditional nursing home setting. This patient may come from anywhere in the eastern half of North Carolina.

The Longleaf Neuro-Medical Treatment Center (formally known as the North Carolina Special Care Center) is a state multi-purpose facility operated within the North Carolina Department of Health and Human Services, Division of State Operated Healthcare Facilities who cannot be placed in traditional nursing care locations due to having serious psychiatric and physical illnesses. For more information call 252.399.2112 ext 32.

# **Physician Practices:**

As noted in the statistical data, the population per primary care physician was higher in Wilson County than NC and the US, indicating the need for additional primary care physicians in Wilson County. While there is a need for additional physicians in Wilson County, the number of physicians currently practicing in Wilson County by practice area are:

- Cardiology 4
- Family Medicine 3
- Gastroenterologists 3
- General Surgery 3
- Hematology / Oncology 2
- Internal Medicine 17
- Neurology 3
- Obstetrics/Gynecology 5

- Ophthalmologists 5
- Orthopedics 7
- Otolaryngology 2
- Pediatrics 5
- Physician Medicine & Rehabilitation 2
- Pulmonologist 1
- Radiation Oncologist 1
- Urology 2

A physician directory may be located at

www.wilsonmedical.com/Content/Uploads/Wilson%20Medical/files/PhysDirectory16(1).pdf

Mental Health counseling services are also available. Details are available at www.unitedwayofwilson.org/wp-content/uploads/2016/03/United-Way-Community-Resource-Guide\_3.15.2016.pdf.

# Fire Safety/Rescue Services:

Station 3:

6111 Ward Blvd Wilson, NC 27893

252.399.2891

# City of Wilson Fire Departments/Rescue Services:

| Station 1:   | Station 4:   |
|--|--|
| 307 Hines Street W   | 109 Forest Hills Rd, NW                                    |
| Wilson, NC 27893   | Wilson, NC 27893   |
| 252.399.2890   | 252.399.2897   |
|  |  |
| Station 2:   | Station 5:   |
| <b>Station 2:</b><br>1807 Forest Hills Rd. W                     | <b>Station 5:</b><br>3530 Airport Blyd                     |
| <b>Station 2:</b><br>1807 Forest Hills Rd, W<br>Wilson, NC 27893 | <b>Station 5:</b><br>3530 Airport Blvd<br>Wilson, NC 27896 |
| 1807 Forest Hills Rd, W  | 3530 Airport Blvd  |

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#### County of Wilson - Volunteer Fire Departments (VFD):

**Bakertown VFD** 6505 Webb Lake Road Elm City, NC 27822 252.291.2535

**Black Creek VFD** Center Street Black Creek, NC 27813 252.291.8373

**Contentnea VFD** 4146 NC Hwy 42 W Wilson, NC 27893

**Crossroads VFD** 102 Grove St Lucama, NC 27851

**East Nash VFD** 4117 US Hwy 264 Alt E Wilson, NC 27893

**Rock Ridge VFD** 6501 Rock Ridge School Rd Wilson, NC 27893

# Wilson County Elected Officials

Mayor Bruce Rose

Chief of Police Thomas P. Hopkins

Sheriff Calvin Woodard, Jr.

#### Wilson City Council

**District 1** – A.P. Coleman

District 2 – Michael Bell

District 3 – William "Tom" Fyle

District 4 – James M. Johnson

**Sanoca VFD** Hwy 222 Saratoga, NC 27873 252.238.2392

**Silver Lake VFD** 5207 Hornes Church Rd Wilson, NC 27893 252.237.2780

Sims VFD 6217 US 264 Alt W Sims, NC 27880 252.243.0680

Stantonsburg-Moyton VFD 105 N. Saratoga St. Stantonsburg, NC 27883 252.238.2112

**District 5** – Donald Evans

**District 6** – Logan Liles

**District** 7 – Derrick Creech

# Wilson County Board of Education

| District 1 – Debora Powell              | <b>District 5</b> – Beverly Boyette  |
|---|--------------------------------------|
| District 2 – Velma Barnes               | <b>District 6</b> – Gary Farmer      |
| District 3 – Dr. Christine Fitch, Chair | District 7 – Robin Flinn             |
| District 4 – Henry Mercer, Vice Chair   |                                      |
| Wilson County Commissioners             |                                      |
| District 1 – Leslie Atkinson            | District 5 – Rob Boyette, Vice Chair |
| <b>District 2</b> – Sherry Lucas        | District 6 – Chris Hill              |
| <b>District 3</b> – Bobbie Jones, Chair | District 7 – Bill Blackman           |
|   |                                      |

# **District 4** – Roger Lucas

#### Transportation

#### Amtrak

Amtrak travels all the way to New York City. Both the Piedmont and the Carolinas will transport passengers to and from the Queen City of Charlotte and the state capital of Raleigh.

#### Wilson Industrial Air Center

The Wilson Industrial Air Center is located five miles from I-95. Wilson Industrial Air Center offers onsite industrial lots with taxi-way access available for immediate development. Zoned for light industrial, a flexible site plan has been developed for the Air Center. The runway has three 4,500 foot runways, one which is lighted, the airport is used extensively by industrial, commercial, governmental, medical, law enforcement, military, and recreation. Businesses in Wilson County like the idea of having the proximity of the Wilson Industrial Air Center because of saving time and money.

Frequently the North Carolina Department of Commerce uses the facility to bring industrial prospects to visit Wilson. Aerial tours of sites and buildings, as well as of the city itself, are taken from the Air Center. "The Wilson Industrial Air Center," according to former Governor Jim Hunt is a tremendous asset for this community and benefit to any company that locates here.

#### Wilson Transit System

Wilson Transit System, or WTS, operates fixed- route buses and provides taxicab shuttle services within the city of Wilson. Hours of operation are 6:30 am to 6:30 pm., Monday through Friday, with limited service on Saturday. Wilson County Transportation Service has a fleet of fourteen vehicles, including nine specially modified vans to accommodate the elderly and handicapped, four standard vans and one mini van. These services are currently available to citizens twenty-four hours per day, three-hundred sixty-four days per year, closing only on Christmas Day.

Services include the following sites:

- Wilson County Department of Social Services
- Diversified Opportunities
- Wilson Transit System
- Wilson County Office of Senior Citizens Affairs
- Wilson County Services for the Blind

#### Highway Systems:

- U.S. Highways include: US 117, US 264, US 264 Alt, US 301
- State Highways include: NC 42, NC 58, NC 111, NC 222, NC 581
- Interstates: I-95, I-795

#### Raleigh Durham International Airport

Raleigh Durham International Airport is conveniently located forty-five minutes west of Wilson, NC.

For a complete Resource Guide go to **www.unitedwayofwilson.org**. Hard copies are available at the Wilson County Health Department and Wilson Community Health Center. A link to the Resource Guide is also located on the Wilson County Health Department's website.

#### Attachments:

- Copy of CHNA Survey
- Community Resource Guide www.unitedwayofwilson.org/wp-content/uploads/2016/03/United-Way-Community-Resource-Guide\_3.15.2016.pdf
- Physician Directory www.wilsonmedical.com/Content/Uploads/Wilson%20Medical/files/PhysDirectory16(1).pdf



Summary

This community health needs assessment represents a great collaboration of work between Health Care Foundation of Wilson, Wilson County Health Department, Wilson Medical Center and many of our community partners. Through a comprehensive process of gathering survey data from our county residents and assessing our county health statistics we have chosen the following health priorities as our focus for the next three years:

- Obesity
- Mental Health
- Substance Use
- Adolescent Pregnancy
- Sexually Transmitted Diseases

Now the real work begins. Each of the three organizations will put together an action or implementation plan. While all of the priorities will be addressed, the actions plans may differ in terms of the organizations top three or four choices. This document and the action plans will serve as our guide for the next three years and we will be tracking our progress along the way. Our next Community Health Needs Assessment will be completed in 2019.

We would like to express our thanks to all of the community partners and citizens whose efforts made this document possible.