2011

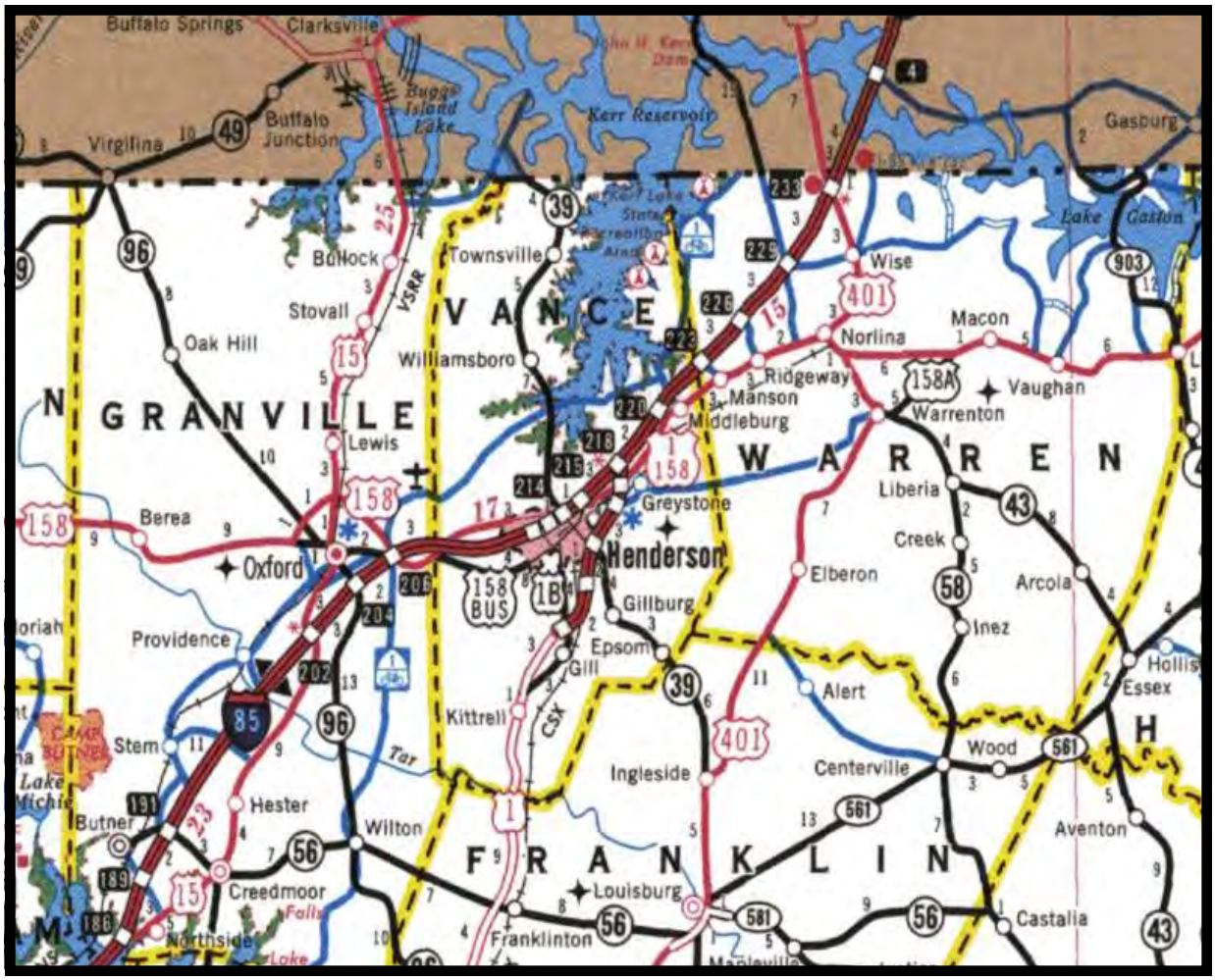
Granville and Vance Counties Community Assessment

Vance-Granville Community College

Produced by
Granville-Vance District Health Department

In collaboration with:
Franklin Granville Vance Partnership for Children
Granville County Economic Development
Granville County Government
Granville County Schools
Granville County United Way
Granville Health System
Granville-Vance District Board of Health
Henderson Police Department
Henderson-Vance Parks and Recreation Department
Leslie H. Perry Memorial Library
Maria Parham Medical Center
NC Center for Public Health Preparedness
NC Cooperative Extension Center—Granville County Center
NC Cooperative Extension Center—Vance County Center
Oxford Police Department
PBH—Five County Community Operations Center
Rural Health Group of NC
UNC Gillings School of Global Public Health
Vance County Chamber of Commerce
Vance County Cooperative Extension Center
Vance County Department of Social Services
Vance County Schools
Vance-Granville Community College

Granville and Vance Counties
Community Health Assessment
April 2012



Acknowledgements

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METHODS AND OUTCOMES

Overview

Local health departments are required to complete a Community Health Assessment (CHA) every four years as part of their consolidated contract with the North Carolina Department of Health and Human Services and to meet state accreditation requirements. Through this process county health departments, Healthy Carolinian Partnerships, and community partners are encouraged to come together to create a picture of their community's health: its assets, strengths, and concerns. In April 2011, the Granville-Vance District Health Department assembled a team of stakeholders from both Granville and Vance Counties to accomplish this task. In the past 10 years, 4 assessments have been published with the collaboration of community partners. In 2002, Granville County was the focus and Vance County was in 2004. In both however, the reviewed statistical data addressed both counties as well as Franklin County and the state overall. With this in mind, the District Health Department requested and was granted permission to publish subsequent assessments as single documents covering both counties. The data for each county is reviewed independently and progress analyzed in comparison with previous years, the other counties and North Carolina as a whole. In the intervening years between comprehensive assessments a State of the County Health (SOTCH) Report is released with an update on basic data and priority issues that are identified through the assessments.

Gathering Data

Two kinds of data are used in the health assessment process: primary data (which the team collects itself) and secondary data (which the team obtains from another resource). For its primary data , the team elected to administer a *Health Opinion Survey* to learn how residents feel about various issues concerning their lives and life in their county. The NC Center for Public Health Preparedness provided the expertise and equipment for teams of workers to interview representative samples of residents in both counties. The survey was developed by the former State Office of Healthy Carolinians and Health Education, and offered in English or Spanish to

residents 18 years or older. Although the questions were the same, the survey was administered separately in each county to assure that the responses would correspond with the county of residence for the respondents. Confidentiality of the participants was assured—no personal identifying information was linked to any responses. However, questions about gender, age, race education, income, marital status, and job field were asked in order to assess how representative the respondents were of each county's overall demographics. A summary of the survey results along with the responses themselves begins on page 116 of this document. Local data was also gathered on community water systems and food establishments; and a list of resources and service providers in the counties which is located in Appendix A was compiled by the team.

For past assessments the secondary data has covered a wide variety of topics—from physical, social, behavioral and environmental health to the economy, demographics, education, and crime. After reviewing the categories and breadth of data included in the last assessment along with *2020 Health Objectives in Healthy North Carolina 2020: A Better State of Health,* produced by the North Carolina Institute of Medicine (NCIOM) in 2011, the team determined that the usefulness of this document would be enhanced by aligning the health data gathered for this assessment with the forty 2020 Health Objectives discussed in the above document . *An introductory section that addresses demographic, economic, and social characteristics remained structured as it has been in the past.*

The advantages of adopting this approach were perceived as many. In addition to enhancing awareness of the NC objectives, the local viewpoint would become immediately more "in tune" with them, the data resources were defined for each objective, the survey tool was cross-referenced with them, and the background work on disparities and strategies for the 13 focus areas would be available to inform any priorities adopted locally. Further, the data gathered would also be coordinated with North Carolina's Prevention Action Plan— a resource with evidence-based strategies that can be used to guide local direction, published by NCIOM in 2009. All these factors aligning of course to achieve more improved health outcomes for the residents of our counties.

One disadvantage was not discovered until it was too late in the process to accommodate many adjustments. For many of the 40 objectives, data was only available for the state as a whole; nothing could be found at the county level. In these instances, whenever possible, data that was closely related was used. This was not so possible though for topics for which the resource was a survey such as the Behavioral Risk Factor Surveillance System (BRFSS) or the Youth Risk Behavior Survey (YRBS). While local survey responses could help inform these topic areas, the questions did not always completely align with the objective and its goal nor, being the first year, was it possible to view trends over time. As such, for several objectives, data is reviewed only for the region and the state, but includes the breakdown for gender and race over the course of multiple years. Where local data was available, Vance and Granville Counties are compared with their neighbor Franklin County (which shares borders with the counties) and NC as a whole, over multiple years. With this additional detail, it was felt that the Assessment Team would have enough information to determine priorities, and the community would still benefit from the data for grant proposals, program planning, and policy making.

The resources used for this document are varied and include the US Census Bureau; Log Into North Carolina (LINC);the NC Office of State Budget and Management; NC Department of Commerce; NC Department of Labor, NC Child Advocacy Institute; NC Department of Public Instruction; NC Department of Transportation; NC Department of Environment and Natural Resources, NC Immunization Registry, NC Institute of Medicine, NC Division of Medical Assistance; the Employment Security Commission of NC, the Cecil B. Sheps Center for Health Services Research; the Annie E.Casey Foundation *Kids Count* Data Center, the Substance Abuse and Mental Health Services Administration, the MATCH Project's County Health Rankings, and the Centers for Disease Control.

Most importantly were the NC Department of Health and Human Services (DHHS) resources, which were invaluable and included the NC State Center for Health Statistics (NC SCHS), in-

cluding its Health Statistics Pocket Guides, County Health Data Books, Behavioral Risk Factor Surveillance System, Vital Statistics Unit, and Pregnancy Risk Assessment Monitoring System; the NC Division of Public Health's (DPH) Epidemiology and Oral Health Sections; and Physical Activity and Nutrition (PAN), and Tobacco Prevention and Control Branches, and the NC Division of Mental Health. A complete list of references begins on page 168.

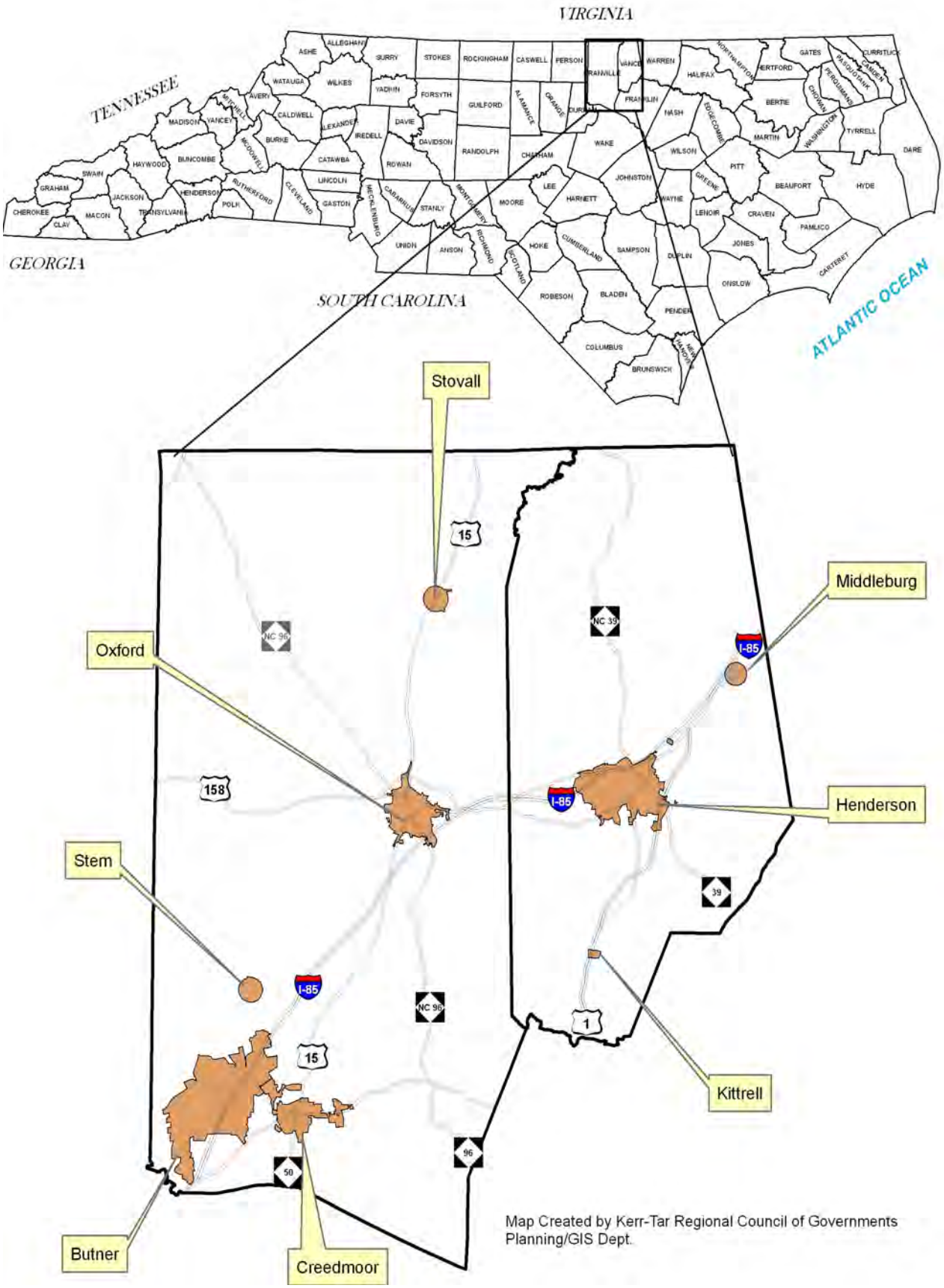
Determining Priorities.

When attempting to determine which issues from among the many deserve to be considered a priority and therefore merit addressing before others, three primary issues should be considered: the magnitude of the problem (how many are affected), the seriousness (overall impact), and the feasibility of addressing it (is there the capacity to correct it)? The Assessment Team raised another concern as well: whether it would be possible to track progress with local data. The Team began by reviewing the Health Opinion Survey—the final version of the results enabling team members to review both counties' responses side by side during several meetings before considering the support data for the Health Objectives. With both in hand, the Team considered using a rating system or nominal group process along with discussion to determine priorities for the two counties. In the end, neither was needed for there was clear consensus among the group that overarching priorities should be framed to "cover" both counties, and that during the action planning process details specific to either county would be fleshed out.

As such, 3 priority themes were identified for the two counties, in no particular order:

- Chronic Disease and Related Lifestyle Issues
- Reproductive Health and Pregnancy Outcomes
- Success in School

In the coming months, the Team will be holding additional discussions and seeking input as part of the action planning process which should be completed by Summer 2012.

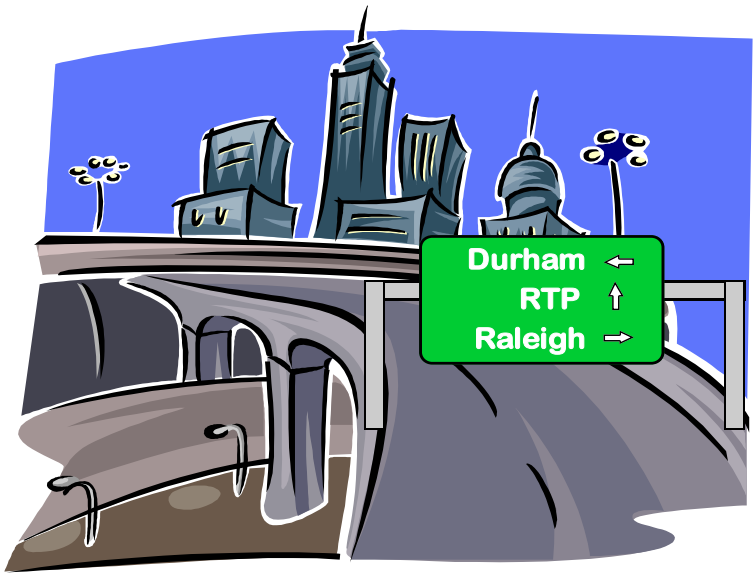

VIRGINIA
TENNESSEE
GEORGIA
SOUTH CAROLINA
ATLANTIC OCEAN
Stovall
Middleburg
Oxford
Henderson
Stem
Kittrell
Butner
Creedmoor
15
NC 96
NC 39
I-85
158
39
1
50
96
Map Created by Kerr-Tar Regional Council of Governments
Planning/GIS Dept.

COUNTY DEMOGRAPHICS

LOCATION

Granville and Vance County, North Carolina are located in the Northern Piedmont region of the state and share their respective western and eastern borders. While both border rural Virginia to the north, their southern neighbors differ somewhat. Granville County stretches 32 miles to the south where it adjoins metropolitan Durham and Wake counties. It borders rural counties Person to the west and Franklin to the southeast. Granville County is roughly half as wide as it is long, measuring about 16 miles from east to west and covers about 531 square miles of land.

Vance County is also bordered by rural areas, with Virginia in the north and Franklin County to the south. Granville and Warren Counties are to the west and east, respectively. Vance County, like Granville is also approximately twice as long as it is wide but is significantly smaller than its neighbor– measuring about 24 miles at its longest and 12 miles at its widest points. Its land mass is approximately 253 square miles. Vance county is also home to the largest man-made lake East of the Mississippi, Kerr Lake. Kerr Lake reaches across the North Carolina-Virginia border and offers 800 miles of beautiful shoreline. Each year, over 1.6 million people visit this lake destination for camping, boating, fishing, swimming, hiking, and picnicking (VC Chamber of Commerce).



Another important entity located nearby in central North Carolina is Research Triangle Park (RTP), a large research complex. From Granville County it is about a 30-minute drive, while Raleigh-Durham International Airport takes only 15 minutes longer to reach by car. However, if leaving from Vance county it will take about 10 minutes longer to reach either destination.

The county seat of Granville County is Oxford, while the county seat of Vance County is Henderson. For travel, Interstate 85 runs diagonally through the lower portion of Granville County accessing local towns at six different interchanges. Interstate 85 also runs diagonally through the center portion of Vance county accessing local towns at seven different interchanges. In addition, Granville County is served by NC Highways 96, 56, and 50, and US Highways 15 and 158. Vance County is served by NC Highway 39 and US Highways 1 and 158.

SCHOOLS

August 2011 brought the opening of the new Tar River Elementary School to Granville County to address the growth that is being seen in the southern end of the county. Granville County school system serves over 8,700 children through its 19 schools and 1 alternative school. One private school, Christian Faith Academy, is located in Creedmoor. South Granville consists of 2 separate co-located "small" schools, while Webb High School has 1 small school co-located with a "traditional" school. Although South Granville originally had 3 small schools, an effort to improve focus and enhance outcomes led to a redesign several years ago and the creation of the School in Integrated technology and Leadership. In the fall of 2009 a partnership between Granville County Schools and Vance-Granville Community College produced the opening of Granville Early College High School. Early college high schools are schools designed so that students can earn both a high school diploma and an Associates Degree, or up to two years of credit towards a Bachelors Degree, in 5 years.

Granville County Public Schools

Butner-Stem Elementary
CG. Credle Elementary
Creedmoor Elementary
Joe Toler-Oak Hill Elementary
Mount Energy Elementary
Stovall-Shaw Elementary
Tar River Elementary
West Oxford Elementary
Wilton Elementary
Butner-Stem Middle
GC Hawley Middle
Mary Potter Middle
Northern Granville Middle
Granville Central High
Granville Early College High
JF Webb High
JF Webb High School of Health & Life Sciences
South Granville High School of Health & Life Sciences
South Granville High School of Integrated Technology & Leadership
Center for Innovative Learning (CIL)

Vance County's school system serves over 7,400 children through its 15 schools and 1alternative school. There are 3 private schools: Crossroads Christian School, Kerr Vance Academy, and Victory Baptist Church School; along with 2 charter schools: Vance Charter and Henderson Collegiate. The latter opened in 2010 with one 4th grade and will add a 4th grade class every year until serving children through grade 12. Clarke Elementary also opened in 2010, serving 565 students as compared with the 180 served by the neighborhood Clark Street Elementary School it replaced In the fall of 2008 Vance County Schools and Vance-Granville Community College partnered to open Vance County Early College High School. Early college high schools have the potential to not only improve high school graduation rates but to also prepare students for high-skill careers. VC Early College HS was named a School of Distinction for the 2009-2010 school year while Henderson Collegiate was so named for the 2010-11 year.

Vance County Public Schools

Aycock Elementary
Carver Elementary
Clarke Elementary
Dabney Elementary
EM Rollins Elementary
EO Young Elementary
LB Yancey Elementary
New Hope Elementary
Pinkston Street Elementary
Zeb Vance Elementary
Eaton Johnson Middle
Henderson Middle
Northern Vance High
Southern Vance High
Western Vance High
Vance County Early College High

Well-respected Vance-Granville Community College serves a four county area; the Granville County branch is in the southern end between Butner and Creedmoor and the Vance County branch is located between Oxford and Henderson, just east of the Vance County line. Four major universities are located within an hour's drive for county residents; Duke University and NC Central (Durham); NC State (Raleigh); and UNC-CH (Chapel-Hill). Many more smaller colleges and schools are also within easy driving distance including; Louisburg Junior College, Shaw University, Meredith College, Southeast Baptist Theological Seminary, Watts School of Nursing, Wake Technical College, Durham Technical College, and St. Augustine College. With the hopes of attracting and retaining more students the former Peace College underwent a name change in the latter part of 2011 and is now known as William Peace University.

GOVERNMENT

Granville County is governed by a 7-member board of commissioners and a county manager. It is home to 2 cities: Oxford, the county seat (pop. 8,515) and Creedmoor (pop. 4,138), and 3 incorporated towns: Butner (pop. 7,615), Stem (pop. 465), and Stovall (pop. 419). A mayor and a board of commissioners govern each, while Oxford, Creedmoor, and Butner each have municipal managers. Butner, formerly owned by the state of NC was incorporated in 2007, is also home to several major institutions: Murdoch Center, Federal Correctional Institution, Central Regional Psychiatric Hospital, C.A. Dillon Youth Development Center, Whitaker School, R. J. Blackley Alcohol and Drug Abuse Treatment Center, and Polk Correctional Institution (Umstead Correctional Center closed down in 2009). As state or federal institutions their populations (~7000) do not figure into Butner's census total, but do count towards the county's population, although many are unlikely to vote. Although not government-related, Oxford is also home to the Masonic Home for Children and Central Children's Home of NC which provide residential group care for children and youth who, for various reasons, cannot remain at home.

A 7-member board of commissioners and a county manager govern Vance County. It is home to the city of Henderson (pop. 15,368) and two other municipalities: Kittrell (pop. 468?) and Middleburg (pop. 133?). A mayor and 3 town council members govern both Kittrell, and Middleburg, while Henderson has a mayor, an 8 member city council, and a city manager. Both county and municipal boards are augmented by various boards and committees that serve the needs of their respective jurisdictions (see Appendix B) (http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/muniestbycounty_2010.html for population data above).

Note—For consistency in wording with respect to reported statistics, the term minority is used in this document to describe those who are not white. In some instances, non-whites are actually the majority of the population. At the same time, any people of African or Latin-American descent prefer to be identified as black, African American, Hispanic, Latino, person-of-color, bi-racial or multi-racial. While we want to be respectful of populations that may not be "minority" and want to identify them according to preferred terms, for purposes of clarity, we coordinate the terms we use for groups in the narrative with the terms as they were specified in the statistics we gathered.

POPULATION

Although in the past Granville and Vance Counties populations have been similar (1990 - GC = 38,345; VC = 38,892), they have gradually diverged over the years, In 2000, the Census reported that Granville County had 5544, or 12.9%, more people than Vance. According to the most recent 2010 census data, Granville County's population was 15,070 or 33.1% greater than Vance's (see Appendix C for more census information). Further, the projection for 2020 shows a difference of 21,825 or 45.9%, between the two counties. Granville (and Franklin) County's burgeoning populations are most likely due to their proximity to Durham and Wake counties. Sprawl from these metropolitan counties naturally flows to bordering ones. Indeed, the 2010 population increases in Granville County have occurred principally in the southern municipalities. Granville County offers more affordable housing and a rural quality of life within easy driving distance of employment and entertainment. Vance County, not directly bordered by either metropolitan county, appears to be a bit too distant to experience population in-migration for this reason.

TABLE 1

Population Growth and Projections by County and Year

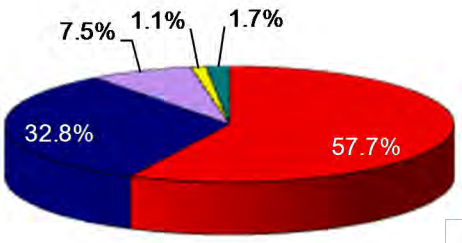
http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/countygrowth_cert_2010.html
http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/countygrowth_2020.html
http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/countygrowth_2030.html

	2000	2010	2020	2030	Growth 2000-2010	Growth 2010-2020 Projected	Growth 2020-2030 Projected
Granville	48,498	59,916	69,359	78,167	23.5%	15.8%	12.7%
Vance	42,954	45,422	47,534	49,595	5.6%	4.6%	4.3%
Franklin	47,260	60,619	74,697	88,330	28.3%	23.2%	18.3%
NC	8,046,813	9,535,483	11,062,090	12,491,837	18.5%	16.0%	12.9%

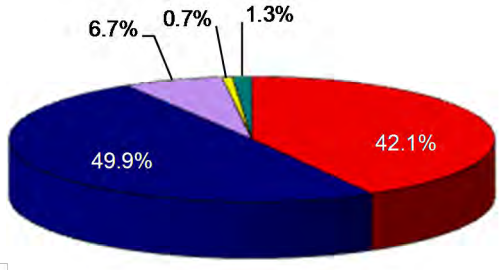
In an effort to address tax base and employment needs, Granville, Vance, Franklin, and Warren Counties created the Kerr-Tart Regional Economic Development Corporation and *Triangle North*, a network of 4 business and industrial parks—1 in each county, geared to attract businesses to locate in the Research Triangle Park region at a more affordable cost. Development of these sites could certainly impact and possibly alter the population projections in the table above.

Charts 1—4
Projected Racial Distribution of Population— 2010

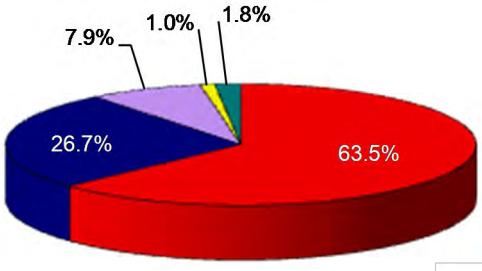
Granville County
http://quickfacts.census.gov/qfd/states/37/37077.html



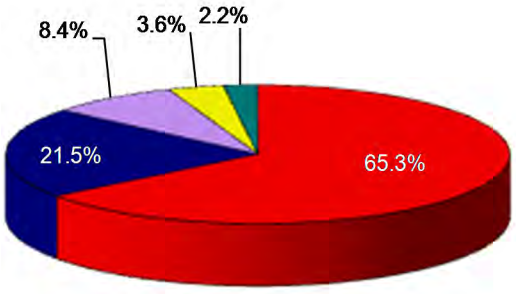
Vance County
http://quickfacts.census.gov/qfd/states/37/37181.html



Franklin County
http://quickfacts.censu.gov/qfd/stats/37/37069.html



North Carolina
http://quickfacts.census.gov/qfd/states/37/37077.html



When looking at 2010 census racial breakdowns of the populations as compared with those for 2000, one can see a downward shift in the white populations of Granville (-2.7%), Vance (-9.1%), and Franklin (-1.1%) counties as well as for the state (-7%). At the same time, Granville and Franklin Counties have also seen a decrease in the percent of population that is African American (GC—by 5.7%, and FC—by 11%), while that population has been stable statewide. The primary demographic increasing by comparison has been the Hispanic population, although in Vance County the African American population has also increased (by 4%). The 2000 census shows that the actual number of Hispanic residents was more or less 2000 for each of the counties. With such small numbers, a change of any reasonable size will be significant when measuring the percent difference. Such is the case here: the percent population that is Hispanic has increased 87.5% for Granville, 45.6% for Vance, 79.5% for Franklin, and 78.7% for North Carolina overall. However, when looking at actual numbers: Granville County gained 3054 Hispanic residents, Vance 1067, and Franklin 2710. At the same time, with a 23.5 % increase in population since 2000 for Granville, the actual number of white residents increased by 5,812 people even though as a percent of its overall population, they decreased. As local demographics change, it is important to remember that only American Indians are true natives—and that over the years this country has flourished from the diversity of thought and capacity that immigration has brought .

TABLE 2

Racial Distribution of Population by County—2010 Census

http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_00_SF1_DP1&prodType=table *Franklin County*
2007 Granville-Vance Community Assessment *GC, VC, NC*

	Granville	Vance	Franklin	North Carolina
Population	**48,498**	**42,954**	**47,260**	**8,046,813**
White	59.3%	46.3%	64.2%	70.2%
African American	34.8%	48%	30.0%	21.4%
Hispanic	4.0%	4.6%	4.4%	4.7%
Other	1.9%	1.1%	1.4%	3.7%

Population changes naturally impact population density as well. Table 3 below shows the changes in density since 2000, which are directly proportional to the percent changes in population described earlier. When looking at the population sorted by whether it lives in town (municipal) or not, it is interesting to note that although the municipal populations in Granville County increased slightly (by 1154 people), the overall percent of those did not, indicating a far greater population increase outside of municipal boundaries. At the same time, while statewide municipal land area has increased by 297 sq. miles, there have been no increases in Granville or Vance Counties, and only 0.484 sq. miles in Franklin County.

TABLES 3, 4, 5

Population Density by County and Year

http://quickfacts.census.gov/qfd/jndex.html *GC, VC, FC, NC 2010*
2007 Granville-Vance Community Assessment *GC, VC, FC, NC 2000, 2006*

	Granville	Vance	Franklin	North Carolina
2000	91.3	169.4	96.1	165.2
2006	101.4	173.2	112.4	181.9
2010	112.7	179.2	123.3	196.1

July 2006 and 2010 Municipal and Non-Municipal Population by County

http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/muninonmunipop_2010.html *2006 data from 2007 Community Assessment*

	Total Population 2010	Non-municipal 2010	Municipal 2010 (2006)	% Municipal 2010 (2006)
Granville	59,916	39,395	21,152 (19,998)	34.93% (37.14%)
Vance	45,422	29,490	15,987 (16,767)	35.15% (38.15%)
Franklin	60,619	53,066	7,912 (7964)	12.98% (14.40%)
North Carolina	9,535,483	4,296,071	5,290,156 (4,781,750)	55.18% (53.97%)

July 2006 and 2010 Municipal and Non–Municipal Land Area by County

http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/muninonmunila_2010.html

	Total Square Miles 2010	Non-municipal Square Miles 2010	Municipal Square Miles 2010 (2006)	% Municipal Square Miles 2010 (2006)
Granville	531.570	504.427	27.143 (28.869)	5.11% (5.44%)
Vance	253.517	244.237	9.280 (9.316)	3.66% (3.67%)
Franklin	491.682	484.531	7.151 (6.667)	1.45% (1.36%)
North Carolina	48,617.905	44,636.357	3,981.548 (3,684.716)	8.19% (7.56%)

EMPLOYMENT

Over 800 businesses call Granville County home, including approximately 51 manufacturers, as well as nearly 1500 workers that are self-employed within the area. Since 2007, 15 businesses have closed. Although Granville County has been fortunate to avoid multiple major business closings since the downfall of the economy, it has not be unscathed. Sandusky Athol was forced to enact a major layoff of approximately 400 people in 2007, Royal Home Fashions eliminated ~ 30 positions in 2009 and later closed, and Umstead Correctional Center shut its doors in 2009 losing 43 jobs. While the smaller businesses (mostly mom and pop stores) that have closed have not resulted in the same level of job loss (~70 total), their loss is no less a heartbreak for the owners, including the loss of a grocery store in downtown Oxford lost which was a resource and enhanced livability for those living in the surrounding neighborhoods.

"The days of 4% unemployment and plentiful low skilled jobs are gone and may not ever return. We are seeing a "new normal". Today's job seeker must be technologically savvy, ready to embrace change, and aware that their skills must be continuously improved in order to be competitive." Monica Satterwhite—Employment Security Commission

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At the same time, on a positive note, the Biofuels Center in Oxford was created in 2007 to implement NC's goal of replacing 10% of fuel imported into NC with locally grown and produced biofuels, the Israeli firm Shalag Nonwovens opened its first US plant in Oxford in 2009 and began expansion in 2011, and Ritchie Brothers, the world's largest industrial auctioneer, broke ground on a new site in Butner in 2011 as well (~ 80 jobs total). While a few other businesses have opened including StayOnline, which brought 25 jobs to Creedmoor in 2010, there has also been some job creation in the form of several projects and hirings at existing worksites. Butner constructed a new town hall in 2011 and is in midst of multiple recreation projects, and the Butner Institutions have seen a staffing increase of 15% or more. Creedmoor has seen some downtown renovation, as well as a new CVS, along with new water infrastructure and recreation projects. Granville County passed a library bond in 2008 to renovate/expand all of its 4 library branches and has completed 3 of the 4 projects, while Revlon in Oxford has added about 300 permanent and temporary positions (GC Economic Development and Employment Security Commissions, http://accessnc.commerce.state.nc.us/EDIS/demographics.html; http://esesc23.esc.state.nc.us/d4/AnnounceSelection.aspx)

For the NC Dept of Commerce profile on Granville and Vance Counties and statewide, go to Appendix D. http://www.thrivenc.com/accessnc/community-demographics

Over 800 businesses call Vance County home; of these, about 350 are retail and service businesses. According to the Vance County EDC, many products are manufactured in Vance County including: bedding, textiles, filters, glass containers, modular homes, metalworking, pet food, gourmet peanuts, flour, and aluminum docks. The county seat, Henderson, that serves as a large retail shopping center for the region, has been feeling the effects of the economy. From 1995 to 2005 the retail sales increased 34.9%, from nearly $418 million to nearly $563 million annually. From 2006 to 2010 the retail sales decreased in turn by 34.1%, from just over $615 million to just over $405 million annually. In addition to the sales decline, fourteen businesses (5 of them restaurants) have closed, and several lay-offs have resulted in job losses for nearly 500 people (http://www.vancecountyedc.com/pages.php?page_id=24; also id=57; http://esesc23.esc.state.nc.us/d4/AnnounceSelection.aspx).

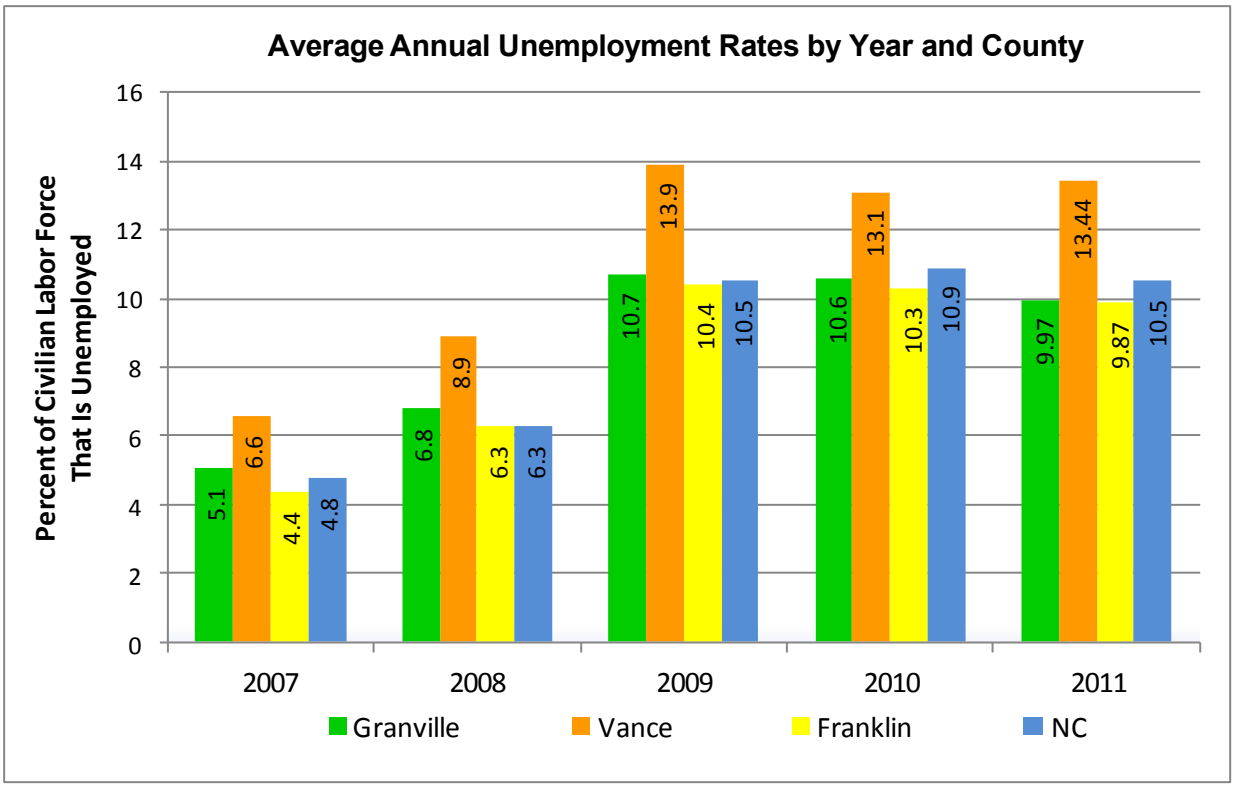
To counter the downturn, Semprius, an up and coming solar panel company announced its intention in 2011 to locate a manufacturing facility at Vance County's industrial park, creating 250 or more jobs within 5 years of opening (http://energy.gov/articles/solar-startup-semprius-create-250-jobs-north-carolina-cutting-edge-pilot-plant). Although data on business openings in 2007 could not be found, 5 other businesses have opened in Vance County since 2008,including Philips Optimum Lighting, which created approximately 100 jobs. Nearly 140 more have come with the openings of Jerry's Artarama, Save-A-Lot Grocery Store, Ribeyes Steakhouse, and Sheetz.

Further, "Opportunity North Carolina," or ONC, is a program begun in 2010 designed to bring together employers and job seekers to fill jobs in a new way for our state. Opportunity NC strives to serve individuals currently receiving unemployment insurance benefits who would like to volunteer for a training opportunity offered by a North Carolina employer. To create an opportunity, ONC will work with employers who are willing to offer training of up-to-six-weeks to an unemployment insurance recipient volunteering for the program. At the end of the training period, ONC businesses may offer a job to the program participants. (http://www.ncesc1.com/main/ONC.asp)

Looking at the unemployment rates in graph 1 below, it is clear that Vance County is bearing the greater burden of unemployment and therefore likely its associated ill-effects. A few trends are worthy of note. For each of the 2007—2009 years, Vance County's unemployment rate is ~ 30% higher than Granville's—ergo, while it "looks" like Vance's rate is increasing exponentially, that is so only because it started at a higher level. It is actually increasing at the same high rate as Granville's in 2008 and 2009 (~34% and 57% respectively). However, when Granville experienced a 0.9% decrease from 2009 to 2010, Vance actually realized a 5.8% decrease—not enough to offset the previous gains, but heartening all the same. Unfortunately, as Granville and Franklin continued to have decreases in unemployment through the 2011 year, Vance had a slight uptick of 2.6%. When looking at the span from 2007 to 2011, Granville appears the most resilient, with "only" a 95.5% increase in unemployment to end 5.1% lower than the NC rate in 2011. Vance County's rate increased by 103.6% in the same time, but remains 28% higher than the state rate (a slight improvement over the 37.5% gap in 2007). Franklin County experienced the greatest increase (124.3%) but remains 6% lower than NC in 2011, while the state overall saw an increase of 118.8% unemployment from 2007-2011, a sad verification that the difficult economic times are affecting so many.

GRAPH 1

http://eslmi40.esc.state.nc.us/ThematicLAUS/clfasp/clfsaay.asp



The economic indicators outlined in Table 6 below add another layer of color to the image of the residents of our counties and state. Comparing per capita income for years 2008 and 2004 indicates the prosperity of that era with incomes increasing 24% for Granville and Franklin Counties, 31% for NC overall, and quite surprisingly, nearly 45% for Vance County. Equally surprising is the precipitous drop that occurs during the 5 year period 2006-2010.**. Because this may also be related to a difference in data collection/reporting methods, no direct comparisons are made between the these years. The same discrepancy exists in the available data to view poverty trends. However, the 2 sources seemed more aligned—as such, some comparisons are proposed. Granville County's poverty rate appears to have decreased by 17.9% from 2004 to the 2006-10 period to be 23.2% lower than NC's rate. Vance's increased such that for the 5 year period it exceeded the state's rate by 77.4%.

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 imposed drastic changes on social service assistance programs. The Temporary Assistance for Needy Families (TANF) Program, called Work First, remains in place, but with limits to the length of

TABLE 6

http://www.schs.state.nc.us/SCHS/data/pocketguide/2009/table7b.html *Per Capita*
http://quickfacts.census.gov/qfd/states/37000.html *GC, VC, FC, NC Per Capita/Poverty*
http://www.ncdhhs.gov/dss/stats/docs/wfim/wfim1210.pdf *Work First*
http://www.ncdhhs.gov/dss/stats/docs/FNS_Participation_FFY2010_Q4.pdf *Food Stamps*
http://datacenter.kidscount.org/data/bystate/stateprofile.aspx?state=NC&cat

Income Indicators by County

Area	Per Capita Income			Percent Poverty		Percent With Work First (TANF)		Percent With Food Stamps		% Students with Free or Reduced Price School Meals	
	2004	2008	2006-2010**	2004	2006 - 2010*	Nov 2006	Dec 2010	Jan 2006	Sept 2010	2006	2010
Granville	$22,328	$27,761	$21,733	14.5	11.9	0.32	0.38	8	12.72	47.7	48.9
Vance	$20,923	$29,373	$17,622	20.7	27.5	1	0.78	21.2	31.4	80.6	96.6
Franklin	$23,276	$29,040	$21,331	13.6	15.0	0.23	0.23	10.2	16.32	52.7	56.1
NC	$26,882	$35,249	$24,745	13.8	15.5	0.33	0.52	9.6	15.48	48.4	53.7

*(**__Note__—The first category: per capita income uses 2 different resources — State Center for Statistics 2009 Pocket Guide and the Census Bureau's American Community Survey 5 year estimate, the latter is provided to include data on the most recent recession years occurring after 2008. The differences between the income levels are striking. However, without certainty that the data was compiled using the same methods, comparisons cannot be directly made between the 2 types of data. The Census Bureau further explains that since answers to income questions are frequently based on memory and not on records, many people tended to forget minor or sporadic sources of income and, therefore, underreport their income. Underreporting tends to be more pronounced for income sources that are not derived from earnings, such as public assistance, interest, dividends, and net rental income.*
http://quickfacts.census.gov/qfd/meta/long_INC910210.htm

assistance (24 months) and funding caps. These modifications caused a major decrease in the percent of population obtaining benefits. While public perception may be that many people are "on welfare" to meet their living expenses, the actual percent of the population receiving benefits at any given time is very small. Further the number decreased an average of 78% for the comparison counties and the state since 1995. However, given that the county populations' have increased since 2006, even a small change represents more numbers than would be expected with a stable population. Granville County's participation increased 18.8% while Vance decreased 22%. Perhaps the latter is related to the entrenched unemployment such that many of the same people were "still" out of work in December 2010, but the benefit time period had expired, and hence their eligibility.

When looking at Food Stamp use, the impact of the economy is again clear. Granville, Franklin, and North Carolina participation increased by 59%, 60%, and 61.2% respectively. However, Vance County's increased by "only" 48% from January 2006 to September 2010. Given that unemployment rates increased nearly commensurately for Granville and Vance Counties, it may be that this is related to the number of workers in low-wage jobs in Vance. If someone qualifies for Food stamps while working, there will be no impact on the participation rate if s/he loses the job. At the same time, with nearly 1/3 of Vance County residents receiving Food Stamps, the County doubles (102.8%) the state participation, while Granville's participation was nearly 18% lower than NC's in 2010.

Lastly, we look at percent of school children that receive free or reduced lunch—an indicator of the youth that are being impacted by limited finances. The change from 2006 to 2010 for Vance County is staggering: nearly 97% of children enrolled in school in 2010 met Federal Guidelines for Free or Reduced Meals (ex—for a family of 4, gross income for a free meal may not exceed $29,055 /$41,348 reduced cost http://www.fns.usda.gov/cnd/Governance/notices/iegs/IEGs11-12.pdf). While the percent of children participating across the state increased by 11%, NC is still just over 50%. Granville is under at 48.9% with a 2.5% increase since 2006, and Franklin's increase of 6.4% brought its participation to 56.1%. Vance County leads the way with a nearly 20% increase to bring participation to such a disturbing high.

Tables 7 and 8 look at employment categories and the average hourly wages paid as well as the number of people working in them in each county. Durham and Wake Counties are included in the comparison because they are near neighbors and can impact the flow of talent because of pay opportunities. This can be clearly seen by looking at the color coding on the table. Of the counties listed, Durham County offers the highest hourly wage for 50% of the job categories mentioned (7/14), while Vance County offers the lowest pay for 10 of the 14. Further, Durham County wages exceed both Granville and Vance's for one additional job type, while Wake and Franklin Counties exceed G/V pay in 9 and 6 of the 14 categories respectively. With consistent pay disparities, it is possible to see how local talent might travel to neighboring counties for higher salaries. However, as costs of gas continue to rise, the appeal of doing so may lessen. At the same time, Granville County has the highest wages in 3 areas:

TABLE 7

Average Hourly Wages by Occupation and Year

Bold Red = lowest pay in category of all counties, 2010 **Bold Green** = highest pay in category of all counties, 2010
Green = pay is higher than both Granville and Vance Counties
Red = pay has decreased from 2006 to 2010
Underline = Category employs largest number of workers for county for that year
NC Employment Security Commission—http://eslmi23.esc.state.nc.us/oeswage/

Industry	Granville		Vance		Franklin		Wake		Durham	
	2006	2010	2006	2010	2006	2010	2006	2010	2006	2010
Management	39.17	40.54	34.56	**37.41**	31.74	38.97	43.35	50.36	47.85	**60.46**
Community & Social Service Occupations	15.53	18.37	16.53	18.53	17.68	20.72	17.97	**17.87** >G/V	18.08	**21.32**
Education, Training & Library	16.87	19.01	14.67	**17.17**	15.31	17.29	18.93	23.26	26.13	**27.52**
Healthcare Practitioners & Technicians	25.72	30.04	30.63	**34.05**	27.21	**28.38**	26.76	33.04	27.30	30.30
Healthcare Support	10.39	11.23	9.54	**10.79**	13.76	10.86	11.79	**12.88**	11.15	12.46
Office & Administrative	13.13	14.60	11.97	**13.65**	14.13	14.86	14.52	16.01	15.56	**16.77**
Construction	13.53	16.74	12.44	**11.55**	15.82	**18.28**	15.87	17.56	15.82	16.49
Production	13.43	14.35	11.53	**12.39**	14.24	14.38	14.22	15.68	15.93	**17.20**
Transportation	14.36	**14.64**	11.62	13.54	11.84	13.53	12.78	13.48	12.27	**13.06**
Sales	10.85	12.59	13.23	**12.23**	11.53	15.28	16.70	17.93	15.98	**20.31**
Building & Grounds	8.74	10.95	8.90	**11.10**	9.14	**10.01**	10.46	11.08	9.23	10.78
Food Preparation & Serving	7.03	**10.71**	7.78	**8.07**	8.20	9.97	8.41	9.79	9.31	9.99
Personal Care & Service	12.32	11.64	7.86	**10.00**	9.11	12.62	10.69	12.67	11.10	**12.74**
Protective Services	15.66	**17.52**	13.63	**15.07**	15.77	15.10	14.77	16.79	15.60	17.21

Transportation, *Food preparation/Services*, and *Protective Services*, while Vance leads the way in pay for the categories of *Health Care Practitioners/Technicians* and *Buildings/Grounds*. In all counties, *Management* and *Health Care* are the areas with the highest pay, with *Food Preparation/Serving* offering the lowest. *Buildings/Grounds* is the next lowest on the pay scale for all but Vance County, where *Personal care* and *Health Care Support* edge out *Buildings/ Grounds.* The difference between high and low wage earners is striking: with pay ranging from 278% more in Granville County to 505% more in Durham County, managers' earnings far outpace those in food preparation and serving.

Granville	$10.71
Vance	$ 8.07
Franklin	$ 9.97
Wake	$ 9.79
Durham	$ 9.99

Granville	$ 40.54
Vance	$ 37.41
Franklin	$ 38.97
Wake	$ 50.36
Durham	$ 60.46

The table below shows the numbers that work in each occupation by county. Agriculture is not included, but as an employer, that category has dwindled to ~1% or less (see charts 5– 7 on page 35). With respect to the areas listed, one can see which engage the most workers and their potential impact on county-wide income data. *Production* and *Protective Services* employ the most in Granville (40.8%), while *Office/Administrative* and *Education/Training* employ the most in Vance County (29.6%). Further, the top 2 wage earners (*Management* and *Health Care Practitioners*) employ only 3.8% (GC) and 3.7% (VC) as a percent of those listed, while many more work in these high paying areas in Wake (13.5%) and Durham (23.6%) Counties. It is also telling to see the numbers employed by the lowest wage jobs. Only 6.8% of those listed are in *Food Preparation* or *Buildings/Grounds* work in Granville County, while 13.7% and 13.3% work in the same areas in Wake and Durham County respectively. At the same time, in keeping with the economic outlook for Vance County, 15.2% of those listed work in the lowest wage areas: *Food Preparation* and *Personal Care.*

TABLE 8
Employment by Occupation
Red = number of jobs in category has decreased from 2006 to 2010
Bold = Category employs largest number of workers for county for that year

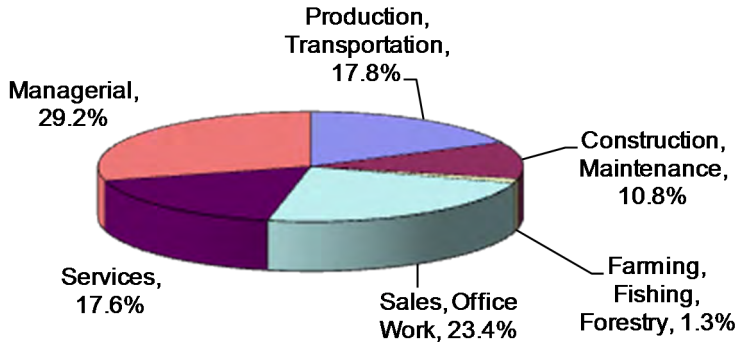
Industry	Granville		Vance		Franklin		Wake		Durham	
	2006	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**
Management	790	700	580	570	410	830	22,710	25,930	11,080	14,480
Community & Social Service Occupations	290	820	160	290	NA	280	4930	5840	1830	2920
Education, Training & Library	450	1360	1890	2090	**3230**	**7420**	22,760	24,100	10,240	12,160
Healthcare Practitio-ners & Technicians	510	920	780	970	180	830	18,730	20,850	12,310	17,740
Healthcare Support	410	1330	460	600	550	780	8000	11,740	4870	6370
Office & Administrative	2310	3320	**2990**	**2430**	1420	1920	**62,340**	**75,370**	**26,940**	**28,930**
Construction	1510	1150	970	610	830	210	21,450	19,450	4310	4540
Production	**4150**	**3820**	2350	1180	1540	1610	19,570	18,190	9850	6750
Transportation	1720	1800	2030	2040	1390	1120	23,580	23,360	7240	6140
Sales	1300	1270	1350	1590	1620	940	48,020	51,730	14,920	13,730
Building & Grounds	510	530	380	280	530	640	12,290	13,510	5830	5230
Food Preparation & Serving	2020	710	1560	1890	940	1440	30,960	33,930	9480	12,980
Personal Care & Service	160	190	210	430	110	380	8600	12,170	1450	2190
Protective Services	1840	3620	40	300	10	180	8130	10,790	2360	2440

Charts 5 –7

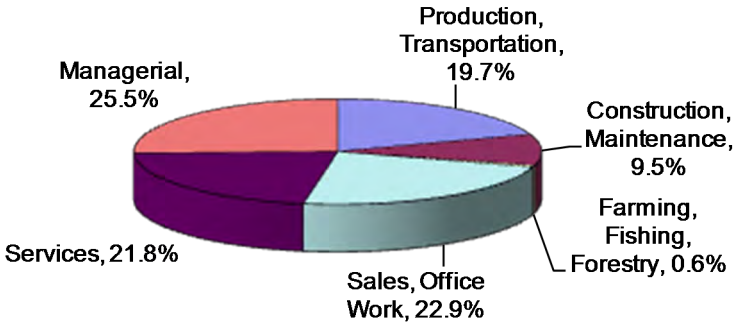
http://www.factfinder.census.gov - *Granville County*
http://www.factfinder.census.gov - *Vance County*
http://www.factfinder.census.gov - *North Carolina*

Employment by County and Type—ACS 2005-2009 Estimates

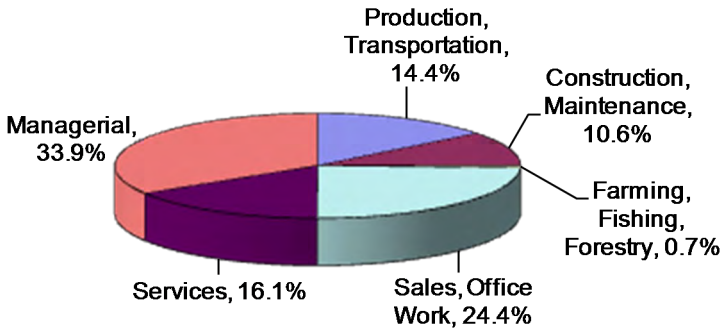
Granville County



Vance County



North Carolina



Data Review by Healthy North Carolina 2020 Focus Areas and Objectives

In addition to addressing the levels of death and disease in the population, North Carolina's 2020 Health Objectives also look at the physical, mental, social well-being of our residents, with the aim of improving the health of individuals and the overall population. Although the state has made strides since 2009 in our health ranking as compared with the rest of the nation, at number 32 we are still closer to the bottom tier, indicating plenty of room to move forward.

The 2020 Health Objectives were developed over a one year period on behalf of the Governor's Task for Healthy Carolinians. The NC Institute of Medicine (NCIOM) facilitated this work with strong collaboration from the Division of Public Health and related departments with the NC Department of Health and Human Services, statewide input from over 150 stakeholders, and financial support from the Duke Endowment, Kate B Reynolds Charitable Trust, and the NC Health and Wellness Trust Fund.

Building upon NCIOM's 2009 Prevention Action Plan, 13 focus areas and 40 objectives targeting the leading causes of death and disability and other significant public health problems were identified. By mobilizing others to use this common set of health objectives, NC aims to become one of the healthiest states in the nation.
(http://www.publichealth.nc.gov/hnc2020/ ; http://www.americashealthrankings.org/NC)

It is the aim of the Granville-Vance District Health Department and the 2011 Community Health Assessment team to be in step with the state's goals as we work towards improving the health of our residents. The data review for our counties aligns with the 2020 health objectives and is on the following pages.

Tobacco Use

"Tobacco use is the leading cause of preventable death in North Carolina. Approximately 30% of all cancer deaths and nearly 90% of lung cancer deaths—the leading cancer death among men and women—are caused by smoking. In addition, those who smoke have increased risks for heart attack and stroke. Other tobacco products pose additional health risks. Tobacco use is a costly problem in the state leading to medical expenditures of $2.4 billion (2004) of which $769 million were to Medicaid. In 2006, secondhand smoke exposure alone led to excess medical costs of ~$293.3 million in 2009 dollars."(Healthy North Carolina 2020: A Better State of Health)

Healthy North Carolina 2020 Objective

Decrease the percent of adults who are current smokers to 13.0%.

2010 BRFSS NC Statewide	**19.8 %**	CI = 18.5—21.1
2010 BRFSS Piedmont Region*	**18.9 %**	CI = 17.3—20.7
2003 BRFSS Piedmont Region*	23.3 %	
2003 BRFSS Franklin-Granville-Vance	24.9 %	
2011Granville Survey	**26.02%**	CI = 20—32.1
2011Vance Survey	**33.04%**	CI = 22.5—43.6

http://www.schs.state.nc.us/SCHS/brfss/2003/fgv/_rfsmok2.html plus 2003-2010 Piedmont Region and NC data
Note—CI stands for Confidence Interval

According to the NC Institute of Medicine, "an estimated 13,000 North Carolinians aged 35 and older died from a smoking -related cause each year from 2005-2009." North Carolina has made a noticeable improvement from 2003 to 2010 in overall smoking rates among NC adults with a decrease of 20% (see graph 2, p 37). And while the state has dropped from 14th (2008) to 16th highest (2010) in the nation, the percent of NC adults that smoke is still 14.4% higher than the 2010 national average of 17.3%, and 107% higher than the nation's lowest rate in Utah (9.1%).

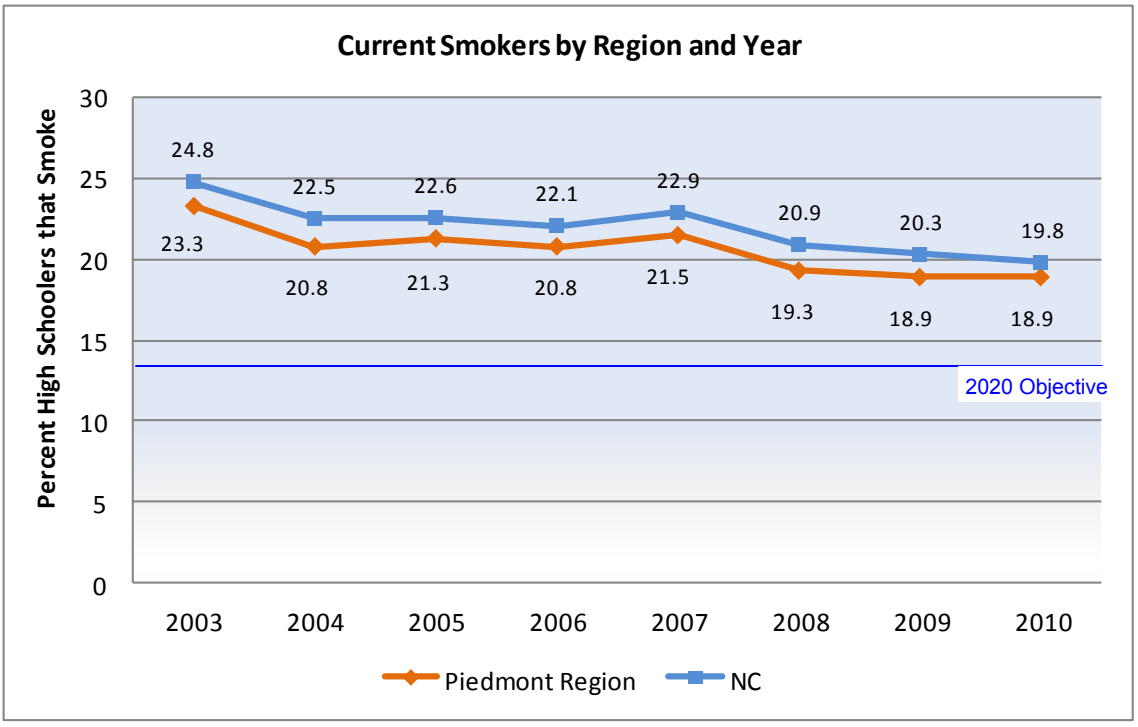
In 2003 the District Health Department partnered with Franklin County to cover the costs of using the Behavioral Risk Factor Surveillance System (BRFSS) to survey the 3 counties alone. However, with local resources being limited, this approach has not been repeated. The State Center for Health Statistics surveys the counties by region, with individual surveys completed for larger metropolitan areas and those counties that can afford it. Franklin, Granville, and Vance (FGV) Counties are included in the 24 county Piedmont region. In 2003 when data for the 3 counties could be compared with the region, the percent current FGV smokers was 6.9 % greater than the rate for the region. If this spread holds true, then conceivably the current rate for FGV would be ~20.2 percent. However, the Granville-Vance District Health Department, in conjunction with UNC's Center for Public Health Preparedness completed a Health Opinion Survey of residents in Granville and Vance Counties in June 2011. Of those responding, 26.0%

*A complete list of counties in the Region is on page 115

(95% confidence interval (CI) range 20—32.1 %) were current smokers in Granville and 33.0% (95% CI range 22.5—43.6%) were in Vance County. The confidence interval indicates how representative the responses are of the general county population: with 95% accuracy, we know that 20– 32.1% of Granville County residents and 22.5—43.6% of Vance County residents currently smoke. As such, if the percent smokers in both counties ranges low, then Granville and Vance Counties would have "only" 5.8% and 19% more smokers than the region (1% and 13.6% more than NC respectively). But if local numbers are actually higher, then the distance could increase to 69% for Granville and 130% greater for Vance County – a significant discrepancy worthy of concern.

Graph 2

http://www.schs.state.nc.us/SCHS/brfss/2010/pied/_rfsmok3.html 2003-2010 years for Piedmont and NC



To this end, shortly after the legislature allowed such action, the Granville-Vance District Board of Health (BOH) implemented a Public Health Rule for the 2 counties in 2009 to prohibit smoking in all government owned buildings, including a 50 foot "berth" around the perimeter of the Health Department and Social Service buildings. In October 2011, again after legislative restrictions were lifted, the BOH made the health department building *and grounds* completely tobacco free. The impact of such limitations can be seen in the graph above as schools systems, local hospitals, community colleges, and other facilities have become smoke-free as legislation required or allowed it. In January 2010, state law prohibited smoking in restaurants and bars with limited exceptions.

Healthy North Carolina 2020 Objective

Decrease the percent of high school students who report current use of any tobacco product to 15.0%.

2009 Youth Tobacco Survey Central Region* **24.6 %**

2009 Youth Tobacco Survey NC Statewide **25.8 %**

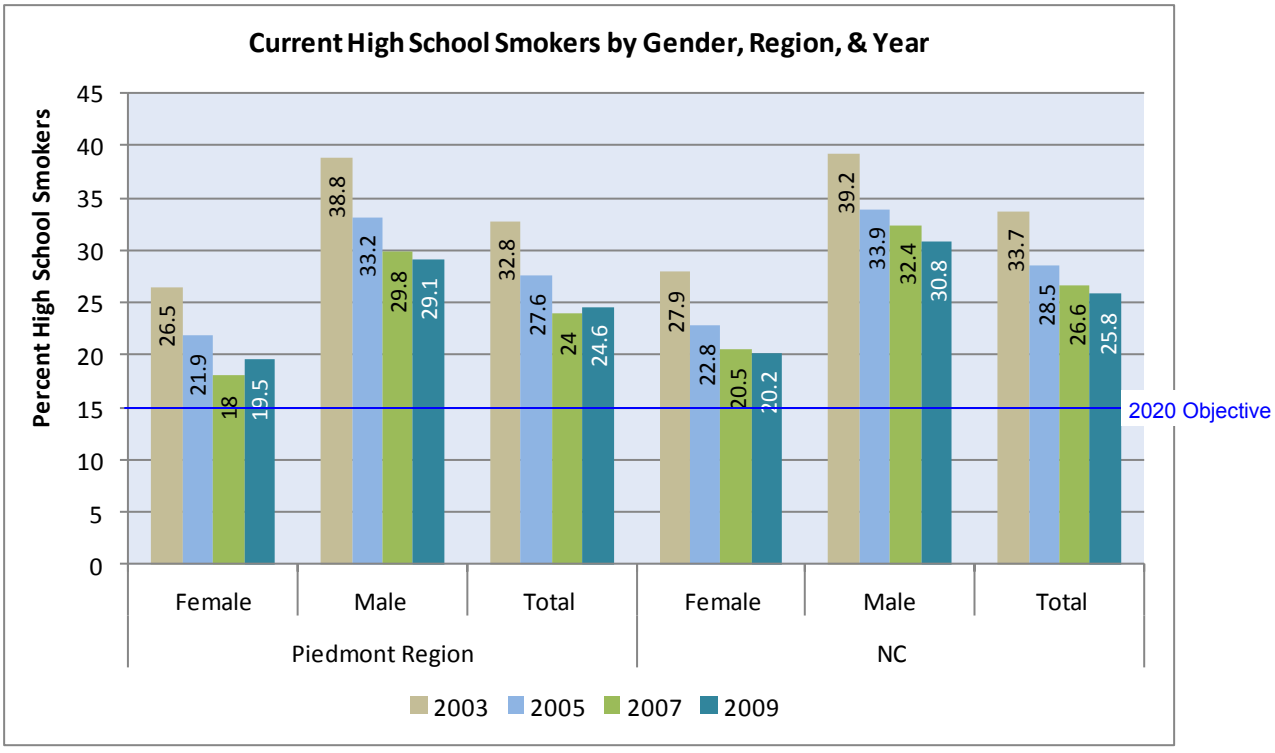
http://www.tobaccopreventionandcontrol.ncdhhs.gov/data/index.htm Youth Tobacco Survey

It follows naturally that to have long-term impact on adult smoking rates, tobacco use among youth need to be addressed. According to the NC Tobacco Prevention and Control Branch, "almost 90% of adult smokers become addicted to tobacco products at or before the age of 20." Unfortunately no county-specific data is available for youth smoking and tobacco use. Local middle and high schools administer the Youth Tobacco Survey to students every 2 years and submit the results to the state. However, the health department was not able to obtain the original data sets.

It is possible though to track the trends for the 37 county Piedmont region and the state. While we are far from the Healthy NC Objective of 15%, high school smoking rates in the region have decreased 25% from 2003 to 2009 and are slightly lower (4.6%) than the state rate. For more teen tobacco use data, see appendix E.

GRAPH 3

http://www.tobaccopreventionandcontrol.ncdhhs.gov/data/index.htm Youth Tobacco Surveys 2003-2009

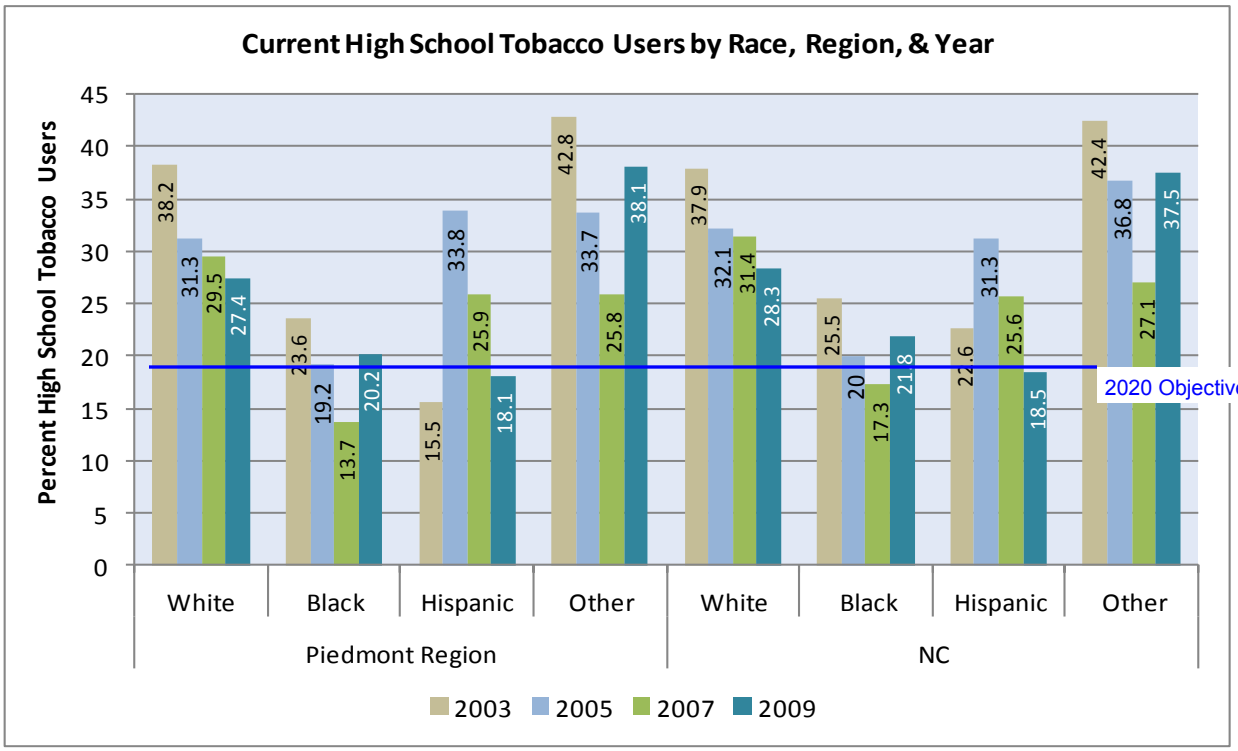


*A complete list of counties in the Region is on page 115

The percent of high school males in the region that used tobacco products in 2009 is 49% greater than the percent of females that do so. Since 2003, there has been a 28.3% decrease for whites; a 14.4% decrease for blacks, and a 46% decrease for Hispanics *from 2005*, but a 118% increase from 2003—2005 that is mirrored statewide. *Note—The "other" category represents American Indian, Alaskan Native, Asian, Native Hawaiian/Pacific Islander*. In Granville and Vance Counties, this accounts for 1.1% or less of the population—hence even a few smokers could represent a significant percentage of the class. The 95% confidence interval for this group is large (± 19.0) which when applied means the actual population numbers could range broadly from 19.1% to 57.1%. It is not clear what may account for the 47.6% rise from 2007 to 2009 for tobacco use among the "other" group—unless it is because the group is so small that even minor variations in responses lead to the wide variation in rates. That said, tobacco use otherwise is dominated by males and whites, the latter which exceed the rate for region blacks and Hispanics by 35.6 % and 51.1% respectively. Note that in the Piedmont region, tobacco use among Hispanics is "only" 20.6 % higher than the 2020 goal. Hopefully this population will not acquire more American traits and experience an upward shift with respect to its tobacco use habits. Since 2006 Vance County Schools' has operated the grant funded Tobacco Reality Unfiltered (TRU) program which trains 25-100 Peer Educators at two middle schools and two high schools yearly.

GRAPH 4

http://www.tobaccopreventionandcontrol.ncdhhs.gov/data/index.htm Youth Tobacco Surveys 2003-2009



Healthy North Carolina 2020 Objective

Decrease the percent of people exposed to secondhand smoke in the workplace (past 7 days) to 0.0%.

2010 BRFSS NC Statewide	**7.9 %**
2010 BRFSS Piedmont Region*	**7.5 %**

Percent of adults exposed to second hand smoke in the past year

Granville 2011 Survey	**51 %**
Vance 2011 Survey	**59 %**

http://www.schs.state.nc.us/SCHS/brfss/2010/pied/indoor.html

The third 2020 Tobacco objective addresses secondhand smoke because exposure to it causes heart disease and lung cancer. According to the CDC, secondhand smoke contains more than 7000 chemicals, of which about 70 can cause cancer. There is no risk-free level of exposure and the risk for non—smokers increases by ~20—30% for both heart disease and lung cancer. Secondhand exposure can occur anywhere, but one can be "captive" to the exposure if it occurs in the workplace because there is not necessarily the means to alter such exposure. As workers we are subject to the conditions of our employment , whereas in private life we can avoid or leave certain environments if we so choose. This is the benefit of the smoke-free restaurant and bars legislation—it protects both customers and workers, and decreases potential hazards for business owners.

Minimal local data for secondhand smoke is available. Although the state has been surveying residents on secondhand smoke exposure for years, the question format has not been consistent from year to year. Hence recent data to observe trends is available for the Piedmont Region and NC for only 2008 and 2010 (graph 5 on page 42). Yet the data are telling—a 42.8% decrease in workplace exposure for the Piedmont region and a 44.9% decrease for NC as a whole. This dramatic shift is likely the result of the significant legislation since 2008 which has allowed increased restrictions on smoking via tobacco–free buildings and grounds rules.

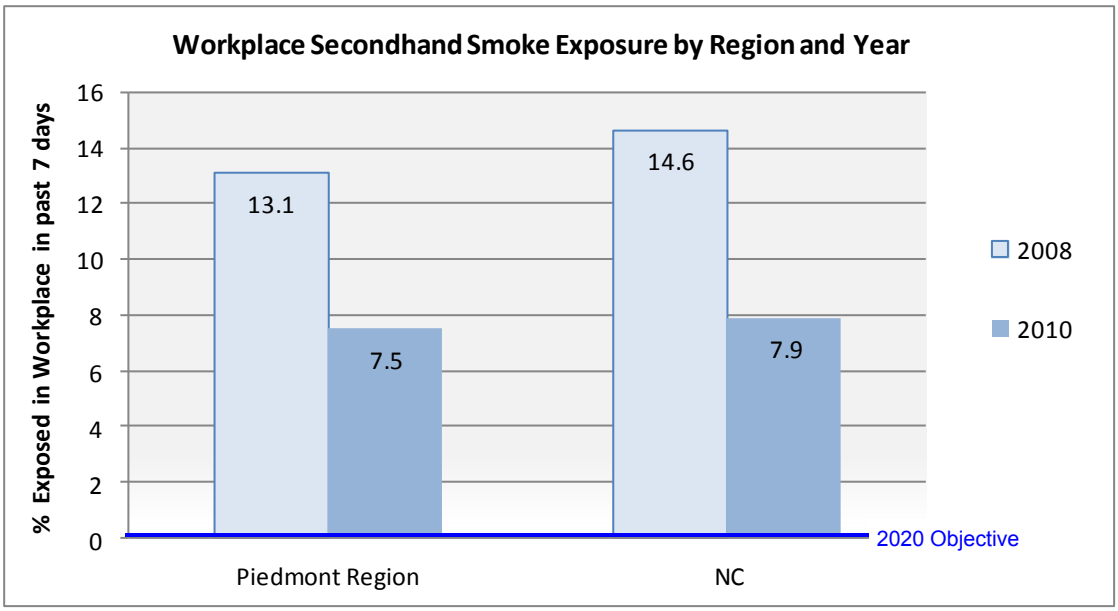
*A complete list of counties in the Region is on page 115

It is not possible to compare the Vance and Granville 2011 Survey results with the Healthy North Carolina 2020 goal for secondhand smoke because the local survey question addresses second hand smoke ***anywhere*** *in the past year* as compared with the goal which addresses smoke in the ***workplace*** *within the past seven days.*

GRAPH 5

http://www.schs.state.nc.us/SCHS/brfss/2010/pied/indoor.html

http://www.schs.state.nc.us/SCHS/brfss/2008/pied/indoor.html



Physical Activity and Nutrition

A person's weight can impact the risk for many chronic conditions including cancer, heart disease, stroke, diabetes, and arthritis. According to the 2011 Health Profile of North Carolinians by the NC Dept of Health and Human Services, North Carolina has the 12th highest obesity rate in the nation with obesity-related healthcare costs estimated to be an average of $4.3 billion by 2013. In 2009, 30.1% of adults were obese, an increase of 133% since 1990. In order to achieve a long-term impact on these disturbing trends, efforts must be directed not only at adults who are at health risk because of overweight and obesity, but at our youth whose weight status today is an indicator of weight and health status as an adult. According to the American Academy of Pediatrics, an obese teenager has an 80% chance of becoming an obese adult. Striving to Improve nutrition and activity behaviors (Eat Smart Move More North Carolina) is a two-pronged approach to achieving a healthy weight.

Healthy North Carolina 2020 Objective

Increase the percent of high school students who are neither overweight nor obese to	**79.2 %**
2009 YRBS Central Region*	**73.9 %**
2009 YRBS NC Statewide	**72.0 %**

http://www.nchealthyschools.org/data/yrbs/ Central and Statewide High School Report 2009

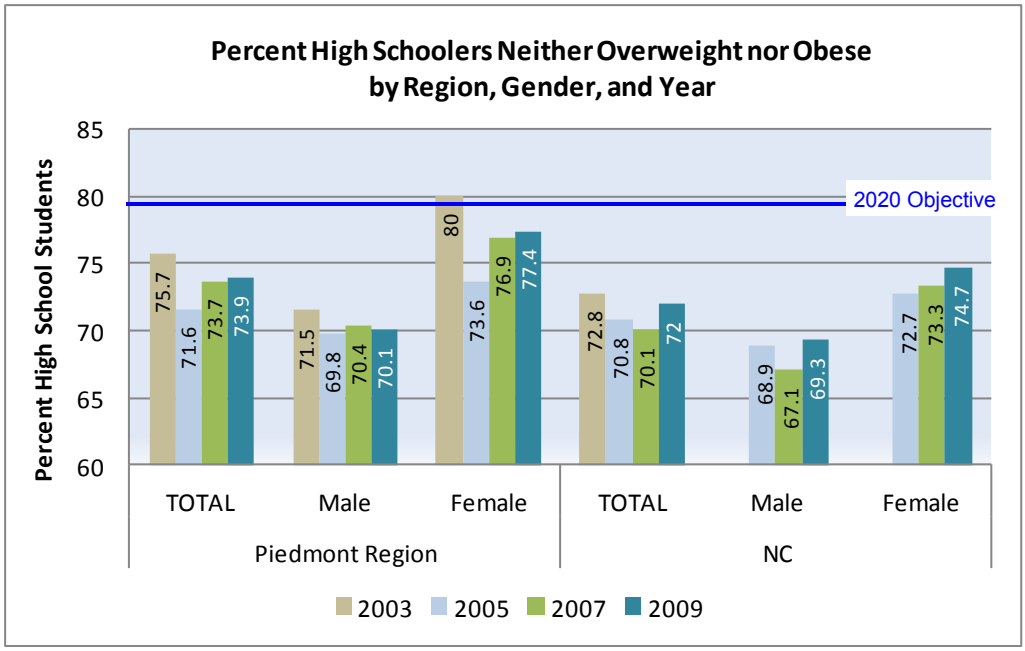
Although county-specific data for high school age weight status is not available, current status and trends can be monitored through the Youth Risk Behavior Survey results for the 37 county Central (Piedmont) Region and the state. Years or categories are not listed in the graphs if the number of responses was too small to consider them sufficiently representative of the group. Local trends reviewed on pp. 46 are available through NC NPASS (the NC Nutrition and Physical Activity Surveillance System which documents weight and height data on children according to age (rather than school grade) seen in public health departments and some school-based health centers.

*A complete list of counties in the Region is on page 115

In the following graphs, Piedmont Region numbers are slightly better than the state's with only 1-4% (not statistically significant) variation between them for both genders. More noticeable is that the percent of females in the desired weight range is 10.4% higher than the percent of males for the region. And although the 2009 rate has improved by 5.2% since 2005 (2.7% for NC females), it is still 3% below the 2003 level. Male weights are essentially stable with a 2% decrease in percent those not overweight since 2003.

GRAPH 6

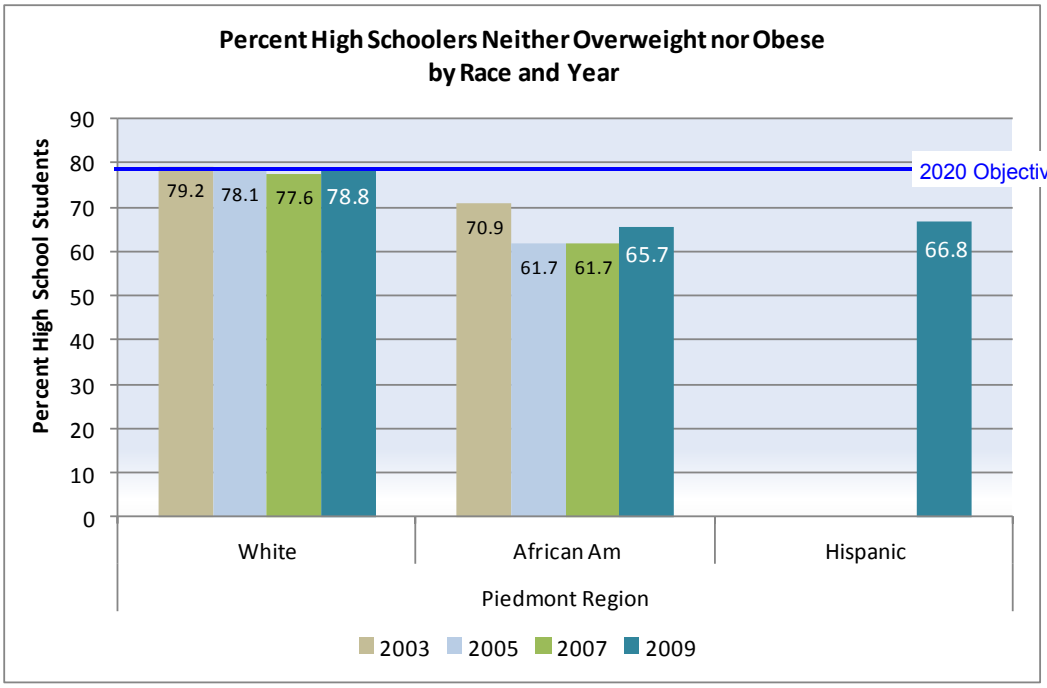
http://www.nchealthyschools.org/data/yrbs/ Central and Statewide High School 2003-2009



When looking at the graph on the next page and trends across the races, white students in 2009 are within 5 % of reaching the 2020 Health Objective. However, 16.6% less African American and 15.2% less Hispanic students are within the desired weight range (data for earlier years not available for the latter because of the small numbers). Although the percent of African American students at a healthy weight improved by 6.5 percent from 2007, it is still 17% less than the target. Efforts to impact the overall rate should consider carefully students of color.

GRAPH 7

http://www.nchealthyschools.org/data/yrbs/ Central and Statewide High School 2003-2009

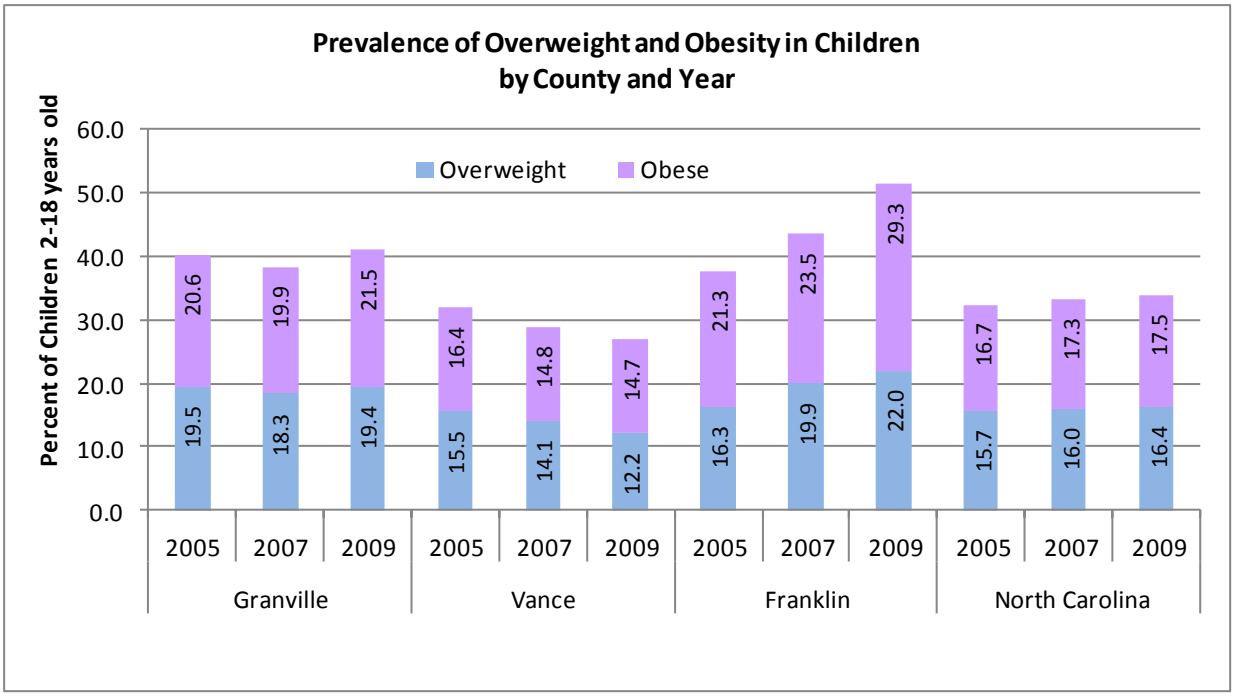


To get a clearer view of our counties specifically, data is available for children 2-18 years old that are seen in health departments and some school-based health centers. While these children are not necessarily representative of the county demographics as a whole, data about them does shed light on what is likely occurring locally. Graphs that follow on page 46 indicate how many are overweight (≥85th to ≤95th percentile of Body Mass Index for age) or are obese (≥95th percentile of Body Mass Index for age). When looking at the group overall, Granville County has remained essentially steady with ~40% of 2-18 yr olds overweight or obese; in 2009 this percent was 20.6% higher than the state's. In contrast, the percent of overweight/obese children in Vance County has decreased 15.7% from 2005 to 2009 such that it is 20.6% *lower* than the state's. Overweight/obesity among Franklin County's children has increased 36.4% to 51.3% in 2009, and is also exceeds the NC percent by 51.3%.

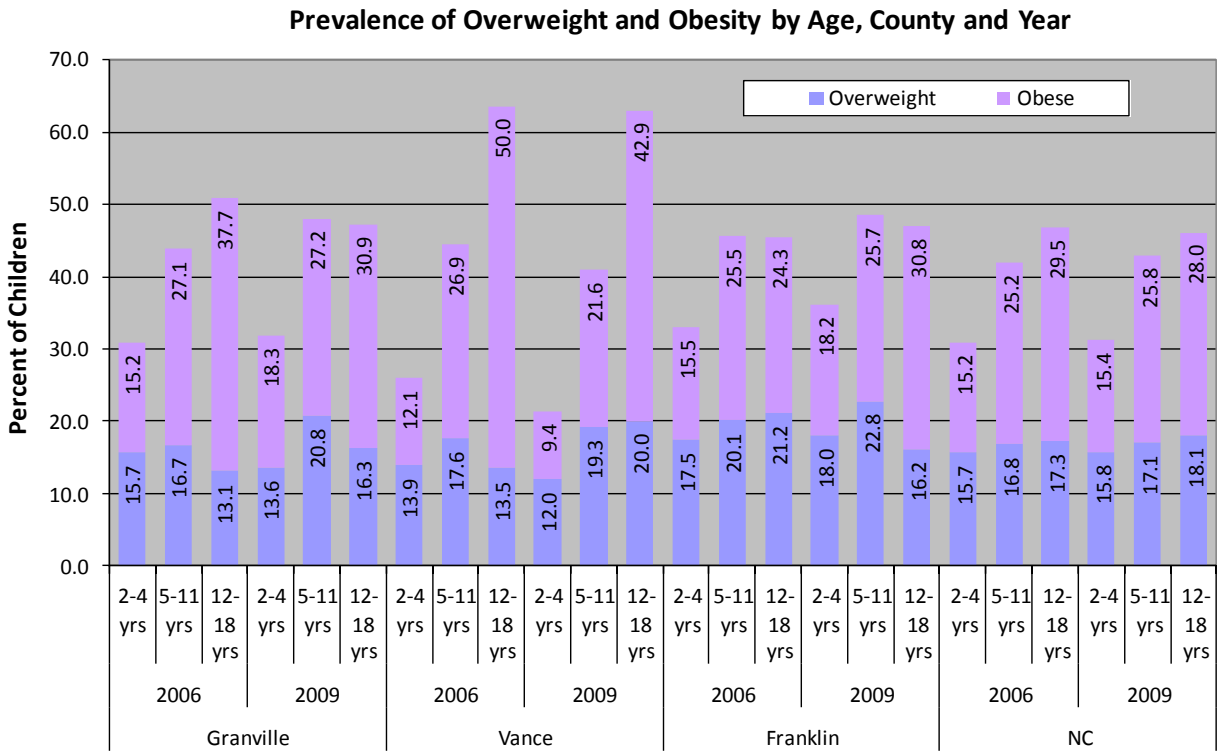
Note—Obesity trend data for children ages 2-4 and 5-11 years from 2000 to 2008 can be viewed in Appendix F Statewide and County Trends in Key Health Indicators. The 2010 CHAMP Report for NC Children's Physical Activity can be found in Appendix E.

GRAPHS 8 AND 9

http://www.eatsmartmovemorenc.com/Data/Texts/2005%20Ages%202%20to%2018.pdf
http://www.eatsmartmovemorenc.com/Data/Texts/2007%20ages%202%20to%2018.pdf
http://www.eatsmartmovemorenc.com/Data/Texts/NCNPASS%202009%20County%202-18%20Years.pdf



http://www.eatsmartmovemorenc.com/Data/ChildAndYouthData.html
County Specific BMI for ages 2-4, 5-11, and 12-18 2006, 2009



Healthy North Carolina 2020 Objective

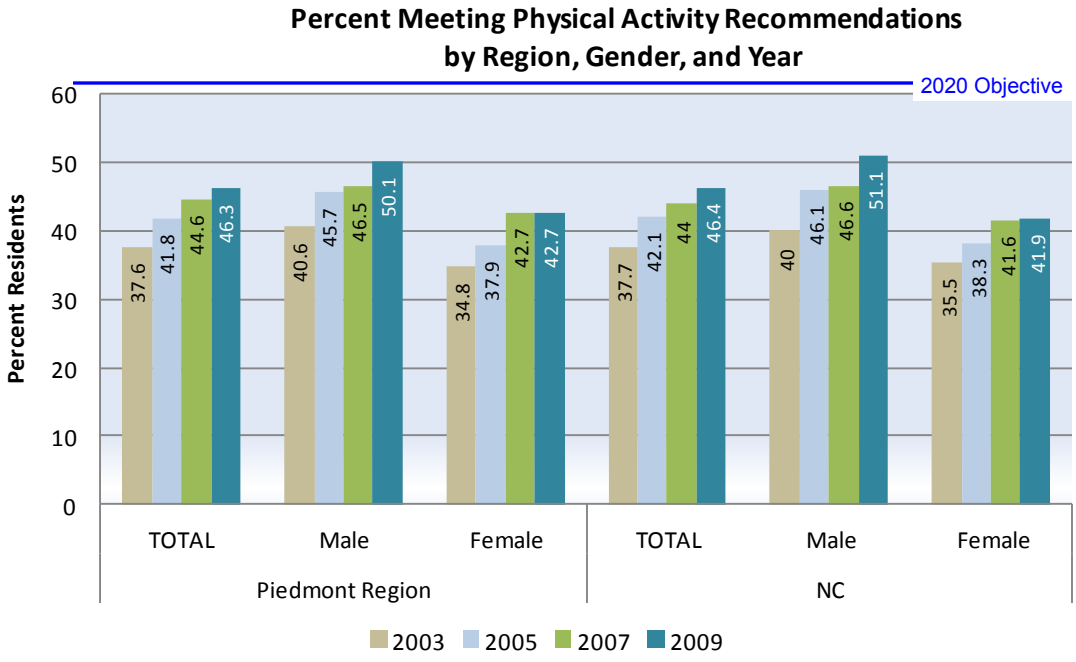
Increase the percent of adults who are getting the recommended amount of physical activity to	**60.6%**.
2009 BRFSS Piedmont Region*	**46.3%**
2009 BRFSS NC Statewide	**46.3%**
Percent of adults who exercise 4 or more times/week	
2011 Granville Survey	**36.7%**
2011 Vance Survey	**39.3%**

http://www.schs.state.nc.us/SCHS/brfss/2009/pied/_RFPAREC.html
http://www.schs.state.nc.us/SCHS/brfss/2009/nc/all/_RFPAREC.html
http://www.cdc.gov/physicalactivity/everyone/health/index.html

The benefits of regular physical activity are multi-fold. In addition to impacting risk for obesity, according to the CDC, being active can reduce the risk for heart disease, high blood pressure and stroke, diabetes, and certain cancers. It can also improve bone /muscle strength, arthritis symptoms and the risk for falls, as well as mental well-being. The Behavioral Risk Factor Surveillance system tracks this data for adults in the region and the state, while the Health Opinion Survey conducted in 2011 for Granville and Vance Counties assessed the number of times per week respondents were active for at least 30 minutes. Those exercising 4 or more times/week are the most likely to meet the recommended amount of physical activity of 150 minutes per week.

GRAPH 10

http://www.schs.state.nc.us/SCHS/brfss/2009/pied/_RFPAREC.html (also 2003, 2005, 2007)
http://www.schs.state.nc.us/SCHS/brfss/2009/nc/all/_RFPAREC.html (also 2003, 2005, 2007)

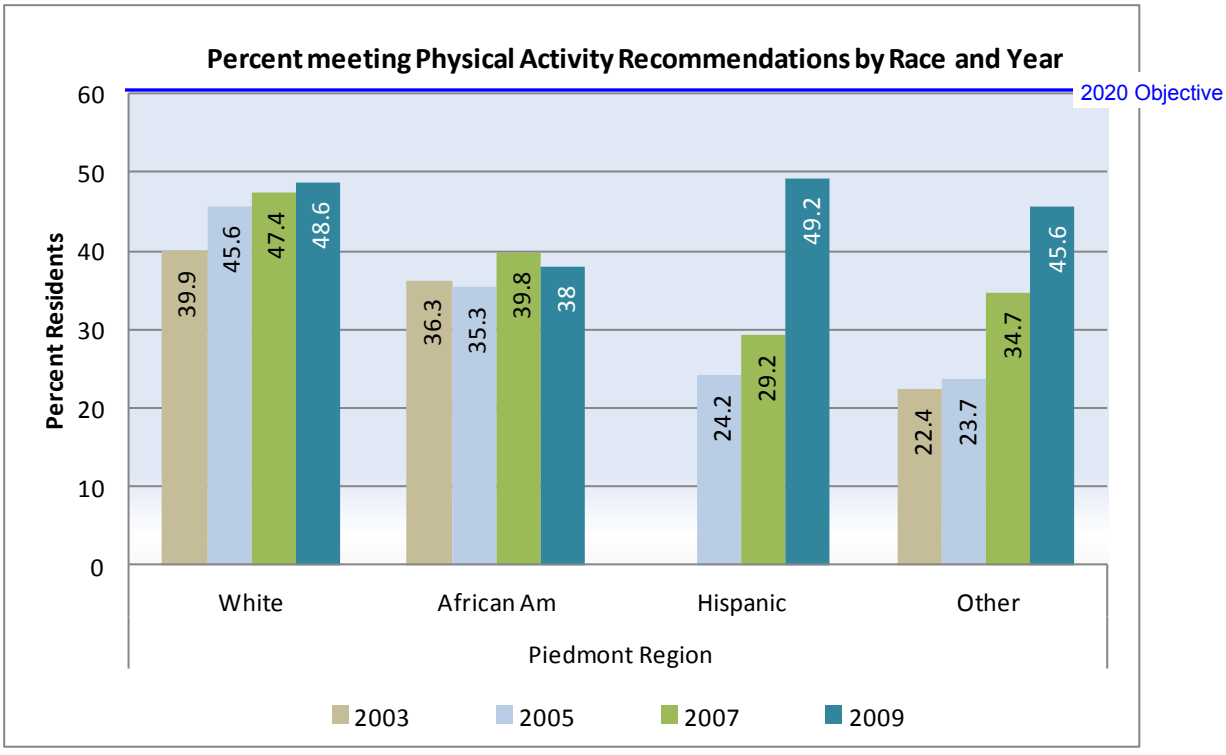


*A complete list of counties in the Region is on page 115

Since 2003, the percent of Piedmont and statewide adults meeting the recommendation has increased by 23%, and men and women comparably so. However 17% more Piedmont men are active than women (an interesting contrast to more high school males being overweight than females). When looking at trends across the races for the region, African Americans show only a 4.7 %increase in activity from 2003 to 2009, while Whites, Hispanics, and Other Races have increased by 21.8, 103, and 104 percent respectively. Further, in 2009 the percent of active African Americans (38%) is 17% lower than the average (46.3%) for the region. Locally, residents are considerably less active than the region as a whole: With 39.3% of respondents reporting being active 4 or more times/week, Vance County lags 15% behind the region, and Granville County, at 36.7%, is 20.1% lower than the area average.

GRAPH 11

http://www.schs.state.nc.us/SCHS/brfss/2009/pied/_RFPAREC.html (also 2003, 2005, 2007)
http://www.schs.state.nc.us/SCHS/brfss/2009/nc/all/_RFPAREC.html (also 2003, 2005, 2007)



Healthy North Carolina 2020 Objective

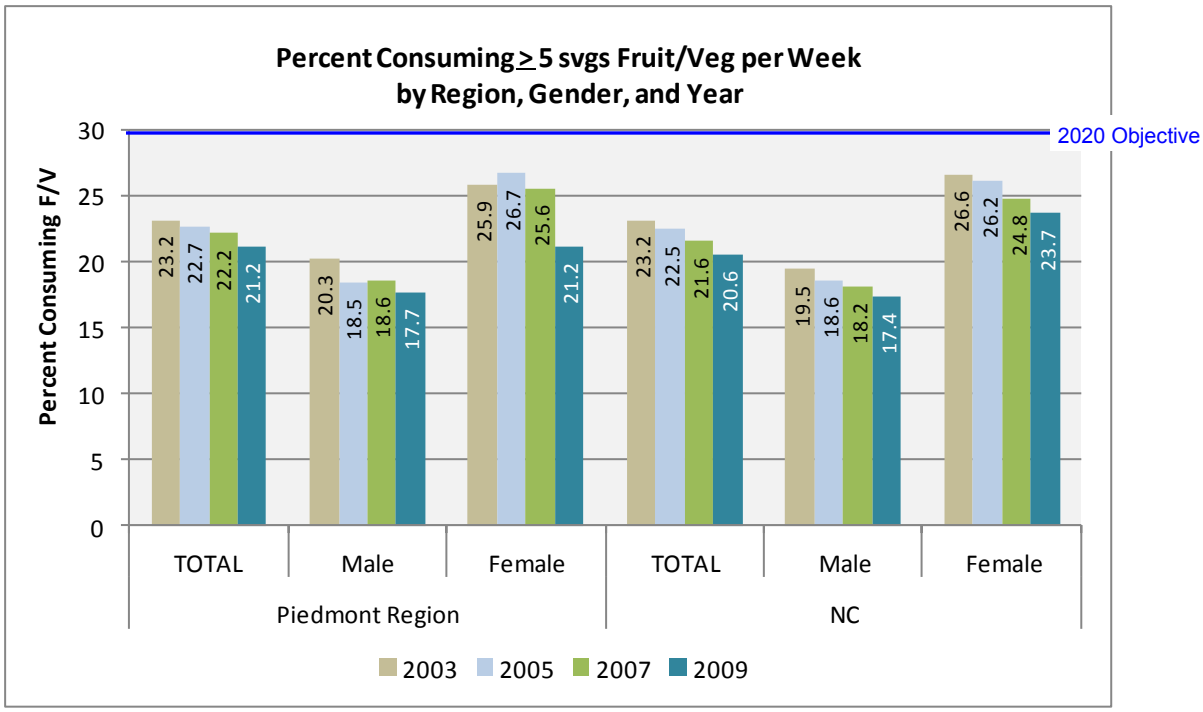
Increase the percent of adults who consume
≥ 5 svgs of fruits/vegetables per day to 29.3%.

2009 BRFSS Piedmont Region*		**21.2 %**
2009 BRFSS NC Statewide		**20.6 %**
*Percent of adults who eat more than 7 cups/week fruits or vegetables***		
Granville 2011 Survey	> 7 cup/wk fruit	27.8 %
	> 7 cup/wk veggies	39.1 %
Vance 2011 Survey	> 7 cup/wk fruit	30.8 %
	> 7 cup/wk veggies	41.1 %

Note—If 1/2 cup = 1 serving, then 7 cups/wk of each = 4 servings/day; more than 7 cups = 5 or more svgs/day
We cannot be sure that the same people are eating both fruits **&** veggies in this amount→can't draw conclusions
http://www.schs.state.nc.us/SCHS/brfss/2009/pied/_FV5SRV.html

Fruits and vegetables contain essential vitamins, minerals, and fiber that can boost immunity and may be protective against chronic disease, including stroke, possibly other cardiovascular diseases, and, certain cancers. Further, if eaten in recommended amounts as part of a healthy diet, they can supplant more calorie dense foods, leading to an intake that supports achieving a healthy weight. Unfortunately, consumption of fruits and vegetables is trending down in the region and for the state rather than up. The Piedmont and the state continue to be similar, falling 27.6% and 29.7% short of the 2020 objective respectively. Since 2003, North Carolinians' intake of fruits and vegetables has decreased by 11.2% and the region's has decreased by 8.6%. A possible cause...? According to the California Public Interest Research

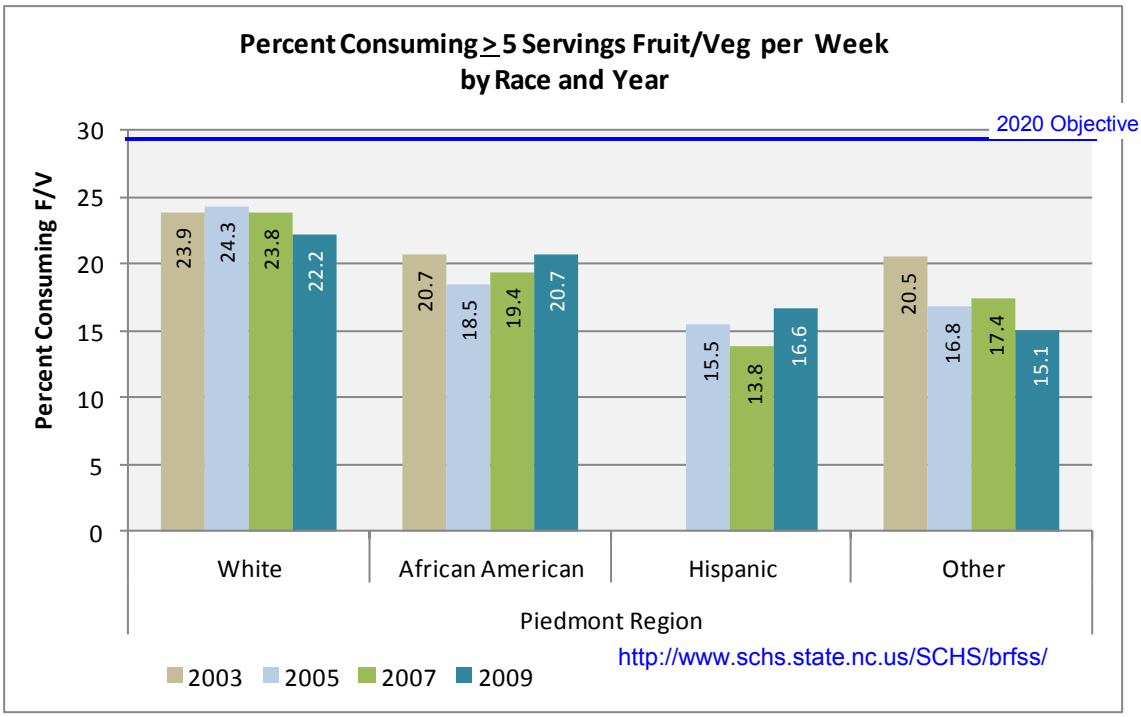
GRAPH 12
http://www.schs.state.nc.us/SCHS/brfss/



*A complete list of counties in the Region is on page 115

Group, subsidies for ingredients such as corn (syrup, oil etc), wheat, and soy that are a key part of junk food totaled $245 billion since the mid 1990's alone, keeping prices for foods like soda and snack foods artificially low. Meanwhile, costs for carrots, broccoli, and nearly every other type of US grown produce, continue to rise making it hard to fight against aggressive marketing combined with low prices and convenience. When looking at intake according to race, whites and blacks are very close: the latter's intake is just 6.7% lower than that of whites, with no net decrease from 2003 to 2009 (a 7.1% decrease among whites). In contrast, the intake for Hispanics , although increased 7.1% since 2003, is still 25.2% less than that for whites, while that for "Other" has decreased 26% and is 32% lower than the fruit/vegetable intake for whites.

GRAPH 13



Work has been underway in Granville and Vance Counties with multiple partners to combat obesity and its consequences because of community assessment findings. A greenway Master Plan has been written and is being implemented in Granville County, playgrounds have been constructed in Stem and Henderson, a movable PLAY Mobile created for Vance County Schools, policies and programs implemented by churches in both counties (some via the Faithful Families curriculum), mini-grant support and county recognition of organizations that work to create policy or environmental changes to support healthy behaviors, and an Eat Smart Move More Weight Loss Challenge that reaches ~1000 people annually. Lastly, Girls on the Run, a national program to empower girls through running fitness and an affirmation-based curriculum was implemented in Vance County in 2010, with a goal to reach underserved girls from 3rd to 8th grade. Plans to expand to Granville County are being explored.

Injury and Violence

Healthy North Carolina 2020 Objective

Reduce the unintentional poisoning mortality rate per 100,000 population to 9.9.

2010 Granville rate per 100,000	1.66
2010 Vance rate per 100,000	11.0
2010 Franklin rate per 100,000	3.29
2010 NC rate per 100,000	9.93

http://www.schs.state.nc.us/SCHS/deaths/dms/2010/northcarolina.pdf pp. 186, 192

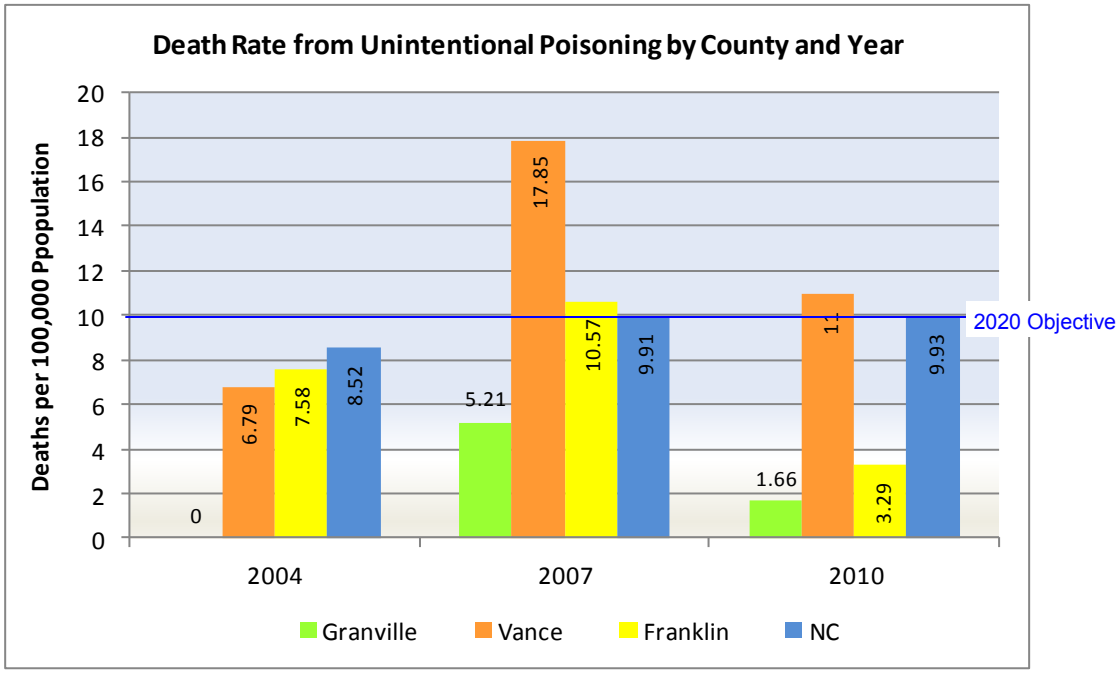
Injury and violence are significant and largely preventable public health problems, and injuries that cause deaths are only the tip of the iceberg. The portion below the tip consists of hospitalizations, emergency room visits, outpatient visits, and injuries that receive no medical attention but still impact health. According to the NC Injury and Violence Prevention Branch, in 2007 NC injuries resulted in more than 154,000 hospitalizations, 812,000 emergency visits, and 6200 deaths—a factor of 25 hospitalizations and 131 ED visits to 1 death. The annual cost of injury to the state is more than $27 billion. Since 2003, Granville County death rates from poisoning have been well below the 2020 goal and the state's—most recently, the GC 2010 rate is 83% lower than NC's, while the 2010 rate for Vance is 11% higher, and fully 562% and 243% higher than Granville and Franklin County's combined. At the same time, rates computed for numbers less than 20 must be interpreted with caution. In table 9 on the next page, the variation in death rates is due to differences of "only" 1-5 deaths.

http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm Detailed Mortality Statistics for 2004. 2007, 2010

http://quickfacts.census.gov/qfd/states/37000.html

http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/county_estimates.shtm 2004, 2007

GRAPH 14



Healthy North Carolina 2020 Objective

Reduce the unintentional falls mortality rate per 100,000 population to 5.3

2010 Granville rate per 100,000 3.33
2010 Vance rate per 100,000 11.0
2010 Franklin rate per 100,000 8.24
2010 NC rate per 100,000 8.95

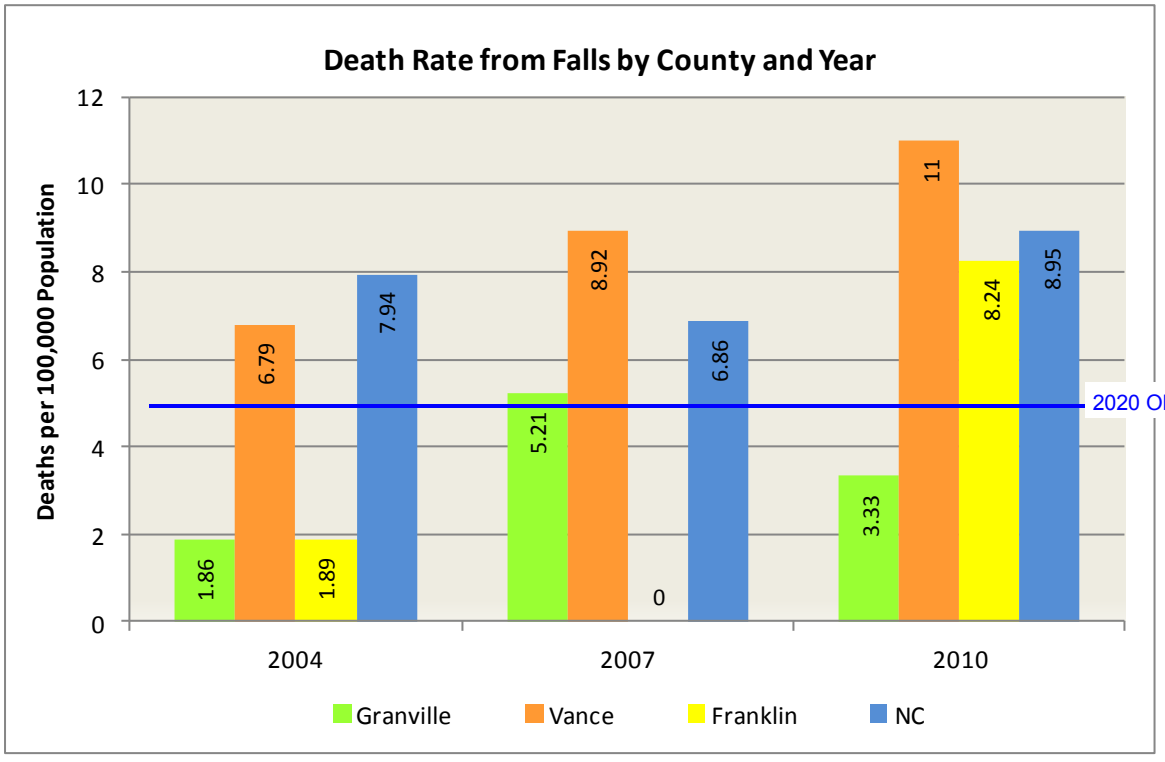
http://www.schs.state.nc.us/SCHS/deaths/dms/2010/northcarolina.pdf pp. 186, 192

The same small numbers continue to apply to death rates from falls with the total number in a county not more than five. Granville County is well below the 2020 goal, while Vance and more recently Franklin Counties' rates exceeded it by 107.5 and 55.5% respectively. Overall the rate for NC has increased by 12.7% and is now 68.9% higher than the 2020 objective. A Fact Sheet on falls is located in Appendix G.

TABLE 9 and GRAPH 15

http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm Detailed Mortality Statistics for 2004. 2007, 2010

	Granville		Vance		Franklin		North Carolina	
	Falls	Poisoning	Falls	Poisoning	Falls	Poisoning	Falls	Poisoning
2004	1	0	3	3	1	4	602	728
2007	3	3	4	8	0	6	624	901
2010	2	1	5	5	5	2	854	9547



Healthy North Carolina 2020 Objective

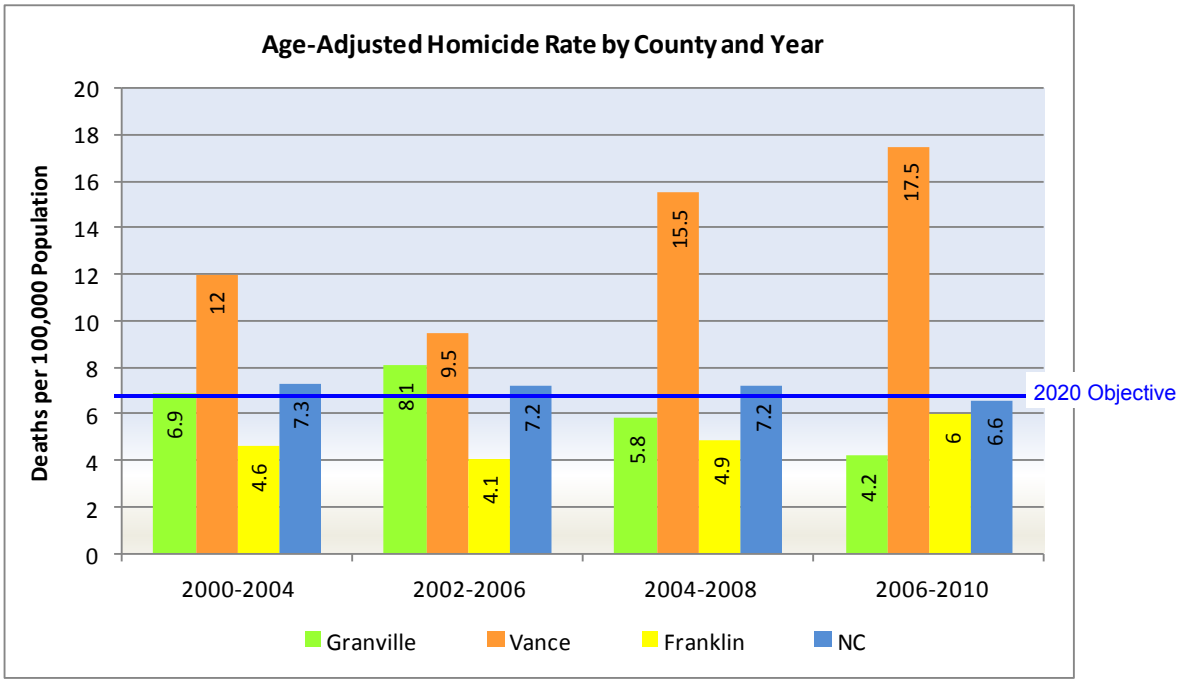
Reduce the homicide rate per 100,000 population to	**6.7**
2006-2010 Granville age-adjusted rate per 100,000 population	4.2
2006-2010 Vance age-adjusted rate per 100,000 population	17.5
2006-2010 Franklin age-adjusted rate per 100,000 population	6.0
2006-2010 NC age-adjusted rate per 100,000 population	6.6

http://www.schs.state.nc.us/SCHS/deaths/lcd/2010/homicide.html

According to the NC Violent Death Reporting System, arguments and "non-partner" conflict account for nearly 50% of homicides, while 31% were related to crimes such as burglary or drug trafficking. Intimate partner violence contributes to the remainder (18%) and drug use figured into 13% overall. Most importantly, homicide is a completely preventable cause of death and ought to be the most rare of causes. That being said, North Carolina's rate has decreased by 9.6% since the 2004-2008 5-year period such that it is now below the target level. In the same time period Granville County's rate has decreased by 39.1% and is now 37% less (better) than the goal. While Franklin County's rate has increased by 30% during the same period, it is still 10.4% lower than the 2020 objective. Sadly, Vance County has experienced an almost steady increase from the 2004-2008 to the 2006-2010 period, for which the rate is 161% greater than the goal. With homicide being the 2nd highest cause of death (2005-09) for VC 20—39 yr olds (mortality data in Appendix I), and affecting 3 times as many men as women in the 20-24 yr range and more blacks (51% are victims although only 25% of the general population), it is clear where at least some interventions might be targeted.

GRAPH 16

http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm 2004, 2006, 2008, 2009 for homicide



Maternal and Infant Health

Healthy Carolinians 2010 Objective

Reduce the infant mortality racial disparity between whites and African Americans (AA) to	**1.92**
2006—2010 Granville ratio (AA rate÷White rate)	1.38
2006—2010 Vance ratio (AA rate÷White rate)	2.17
2006—2010 Franklin ratio (AA rate÷White rate)	4.37
2006—2010 NC ratio (AA rate÷White rate)	2.25

Communication with Sid Evans, Statistician State Center for Health Statistics NC DHHS 2/6/12

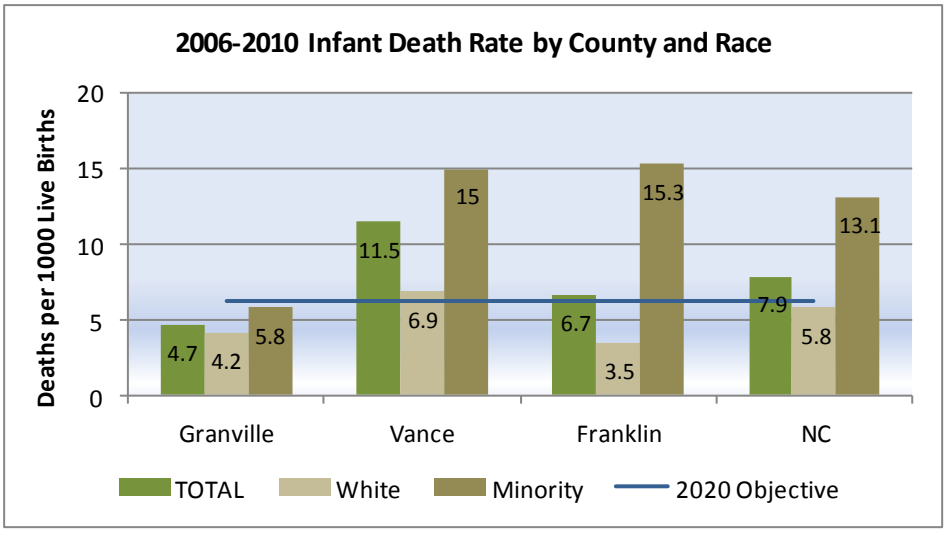
Infant mortality refers to death in the first year of life. Mortality rates at the beginning of life are a window into the general health of a region. The more dire the circumstances, the more likely the young and weak will succumb. Conditions related to pregnancy such as pre-pregnancy health, inadequate/lack of prenatal care, or unhealthy pregnancy conditions—whether due to substance use, poor nutrition, or acute/chronic illness—can all affect the birth outcome and the health of the fetus. Domestic violence, poor living conditions, inadequate nutrition, and exposure to disease or allergans can affect the health of a baby after birth.

The death rate for NC babies has historically been greater for non-whites than whites. According to the Office of Minority Health, the difference is greatest between white and African American (AA) babies. The level of disparity is computed by dividing the white infant death rate into the AA rate for a given time period.** It is important to note that the number of infant deaths is fairly small (usually less than 10) so even a change of *one* can make a sizeable impact on the rates. For this reason, rates spanning a 5 year period can give a better indication of trends by eliminating erratic year to year variations.

Graph 17

Communication with Sid Evans, Statistician State Center for Health Statistics NC DHHS 2/6/12

http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm Infant Mortality 2006, 2007, 2008, 2009, 2010

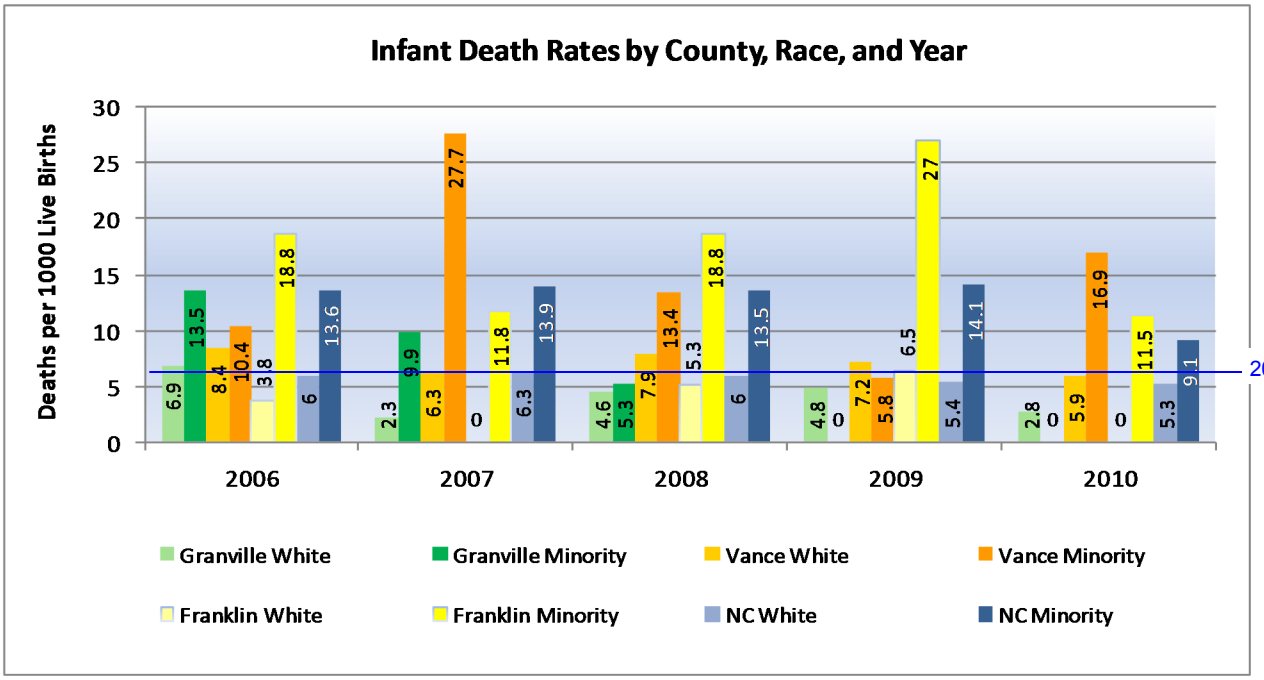


**Note: In 2009 and 2010, there were no AA deaths in Granville Co., so the ratio could not be calculated (can't divide *into* zero). In 2010, there were no white deaths in Franklin Co, so that ratio could also not be calculated (can't divide *by* zero). As such, rather than show a trend graph of ratios from 2006 through 2010 along with the 2020 objective, we have provided the 5 year death rates by race from which the disparity was calculated. Year to year rates are detailed in the graphs that follow.

Graphs 17 on the previous page and18 below show the rates by race. For the 2006-10 five year period, Granville County minorities fared comparatively well, with an infant death rate 61.1%, 62.1%, and 53.3% lower than Vance and Franklin Counties, and NC, respectively. Further (below), in Granville County, white deaths decreased 59.4% (3 to 1 death) from 2006 to 2010, while minority deaths decreased by 100% (3 to 0 deaths) from 2006 to 2009, indicating no current disparity for minorities. Vance County white infant deaths decreased from 3 to 1 to yield a death rate 29.8% lower in 2010 than 2006. Unfortunately there was a commensurate rate increase of 62.5% (from 4 to 6 deaths) for minority babies in the same time period. In 2010, the minority VC death rate was 85.7% higher than the state rate which had decreased 33.1% from 2006. While Franklin County's minority rate decreased 39.4%, the white rate decreased by 100% to 0 (zero), creating a significant gap between the races for that year.

Graph 18

http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm Infant Mortality 2006, 2007, 2008, 2009, 2010

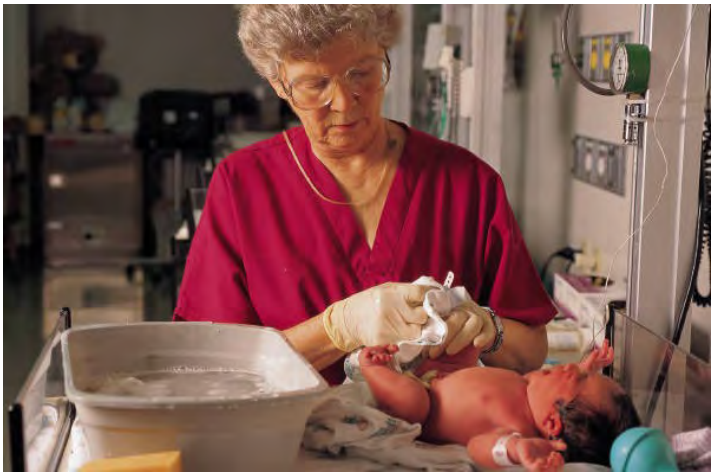


Healthy North Carolina 2020 Objective

Reduce the infant mortality rate (per 1,000 live births) to 6.3

2010 Granville rate per 1000 live births	1.6
2010 Vance rate per1000 live births	11.5
2010 Franklin rate per 1000 live births	1.5
2010NC rate per 1000 live births is	7.0

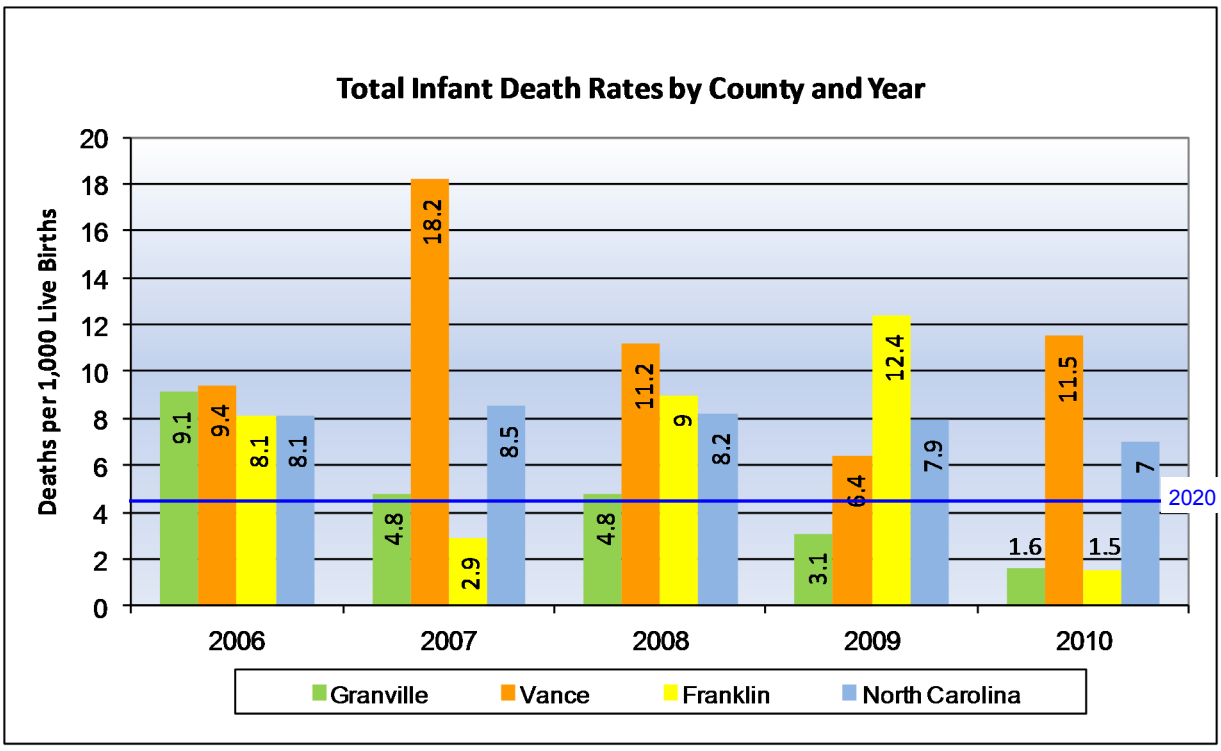
http://www.schs.state.nc.us/SCHS/deaths/ims/2010/2010rpt.html



Total death rates for both Granville and Franklin Counties are ~76% below the 2020 objective. However the benefit of the racial breakdown on page 55 is clear. If total rates were the only goal, Franklin County would have met it in 2007 and 2010; but the additional data by race indicates where work still needs to be done. At the same time, Vance County, whose disparity is lower, still has an infant death rate 82.5% greater than the 2020 objective

Graph 19

http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm Infant Mortality 2006, 2007, 2008, 2009, 2010



Healthy North Carolina 2020 Objective

Decrease the percent of women who smoke during pregnancy to 6.8%.

Smoked last 3 mo's of pregnancy

2006-08 PRAMS Survey PC Region IV NE Counties*	**8.6%**
2006-08 PRAMS Survey NC	**13.3%**

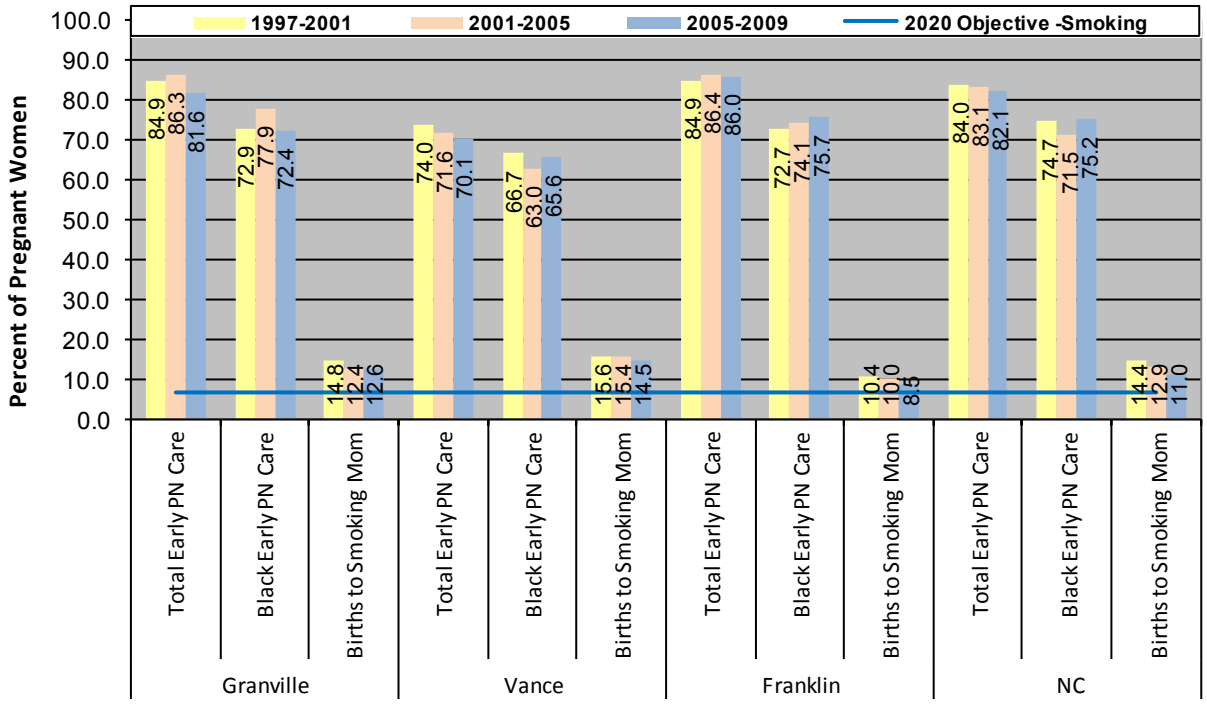
http://www.schs.state.nc.us/schs/prams/results.html

A woman who smokes during pregnancy is at risk of having a lower birth weight baby or a premature delivery both which can contribute to infant mortality. Further, according to the CDC, a baby whose mother smoked is also more susceptible to death from Sudden Infant Death Syndrome. County specific data for women who smoke is available only for those who received WIC services. However, shown below is county specific data on births to smoking mothers. One can see that the percent is decreasing slowly for all counties and NC. Franklin County's 2005-09 rate is the lowest with a decrease of 18.3% since the 1997-2001 period. Granville and Vance County's rates have decreased by 14.9% and 7.1% respectively, but they remain above the objective set for smoking mothers by 85.2% (GC) and 113.2% (VC). Another indicator of pregnancy outcomes is whether the mother has received adequate prenatal (PN) care. Early

GRAPH 20

http://www.schs.state.nc.us/SCHS/data/databook/2011/CD7%20PNC%201st%20trimester.html
http://www.schs.state.nc.us/SCHS/data/databook/2011/CD10%20mom%20smoked%20while%20preg.html

Percent Early Prenatal Care and Births to Smoking Mothers, by County and Year

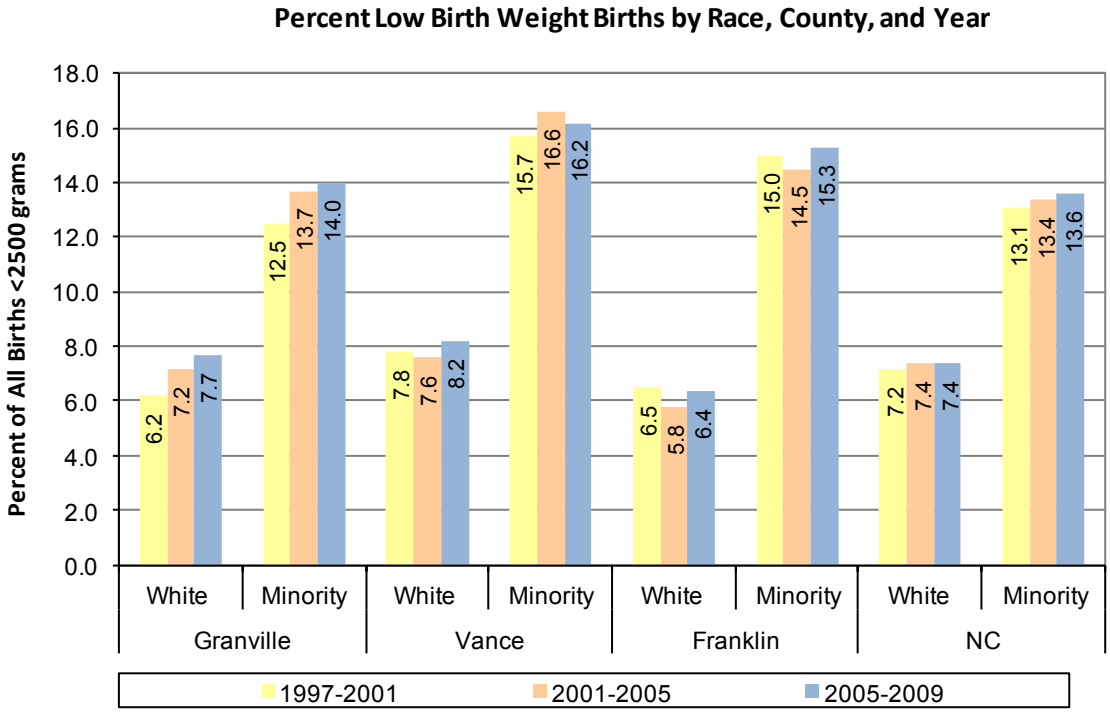


*A complete list of counties in the Region is on page 115

prenatal care is important for many reasons. Since the brain, spinal cord, and other vital organs develop in the first trimester of pregnancy, early medical care enables providers to monitor all aspects of the pregnancy including screening for behaviors that could be harmful to a baby and encouraging those which support health. Franklin County leads both counties and NC in both Total and Black Early PN Care with modest improvements since the 1997-2001 period. However, the percent of Granville blacks getting early care has decreased by 7.1% and the white percent has decreased by 5.4%. In contrast even though Vance percents are still lower than the state's and Granville County's, the percent of Vance black women receiving early PN care in 2005-09 has increased slightly (by 4.1%), as the percent of white's has decreased by 5.3 %

GRAPH 21

http://www.schs.state.nc.us/SCHS/data/databook/2011/CD5%20LBW%20VLBW.html



Whether a baby is born with a low birth weight or not can be an indicator of adequacy of prenatal care as well as a predictor of infant death or disease. Low Birth Weight (LBW) is defined as 1500-2499 grams, while Very Low Birth Weight is less than 1500 grams. The graph above indicates that with the exception of Franklin County whites, the percent of LBW births has increased for all jurisdictions and races since the 1997-2001 period. Surprisingly, although Granville County has seen a decrease in the disparity for infant mortality, the difference continues to persist in birth weights, for the minority percent is 81.8% higher than the white rate. Additional State and County Trend graphs for Infant Mortality, LBW births, Births to Mothers that Smoked, and Early Prenatal Care can be found in Appendix C.

Child Fatality Prevention Team Report

The NC Department of Health and Human Services requires all county health departments to lead a Child Fatality Prevention Team (CFPT) which, along with a Community Child Protection Team, reviews quarterly the causes of all local childhood (0-17 yrs old) deaths. Their goal is to determine whether deficiencies in service delivery could have contributed to any child's death, and to recommend changes that might prevent future child deaths. No service deficiencies were found in the 2010 review.

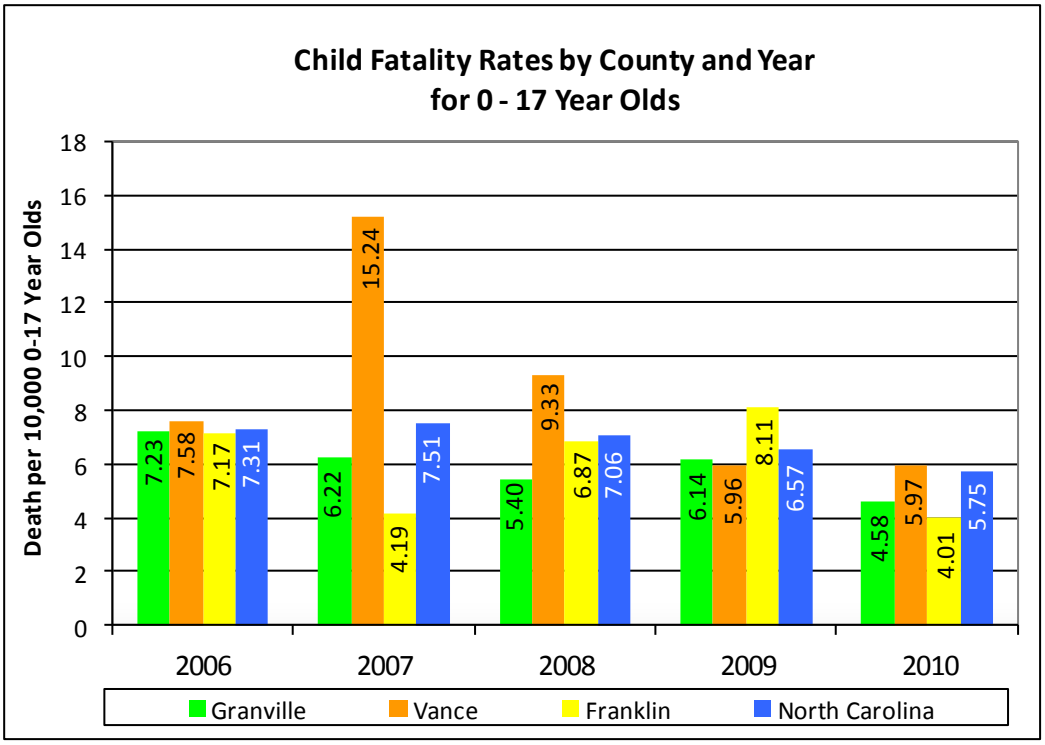
The earlier discussion of factors that can affect a healthy pregnancy and infant death rates dovetails well with this report. In 2010, all 7 child fatalities in Vance County occurred to infants. Of those, at least 4 mothers had inadequate PN care. Of the remaining 3, all infants were LBW, and 2 were premature. Of Granville County's 6 deaths in 2010, 1 was an infant, 4 were accidental, and 1 to asthma. With numbers less than 20, rates can vary year to year with small number changes. Vance County's 2007 spike represents 18 deaths and the current low, seven. The 25% decrease in the 2010 Granville rate from 2009 actually reflects an increase in county population, for the number of deaths in both years was six. The Vance CFPT is launching a "Safe Sleeping" campaign to focus on preventing co-sleeping and "Roll-Over" deaths, and GVDHD is partnering with Northern Piedmont Community Care to provide more education for parents on such as asthma, diabetes, and obesity. Education continues about early PN care, classes, and supplements, substance use during pregnancy, smoke detectors, proper child safety restraints and protective gear

For the complete report, go to "Community Efforts" at www.gvdhd.com

GRAPH 22

http://www.schs.state.nc.us/SCHS/deaths/child/CFbyCO2010.pdf

http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show
Population and Housing



Sexually Transmitted Disease and Unintended Pregnancy

"Sexually transmitted diseases (STDs), including human immunodeficiency virus (HIV) infection, and unintended pregnancy affect tens of thousands of North Carolinians every year". (Healthy North Carolina 2020). Not surprisingly, the burden of these falls primarily upon the young (>70% of Chlamydia cases occur in youth <24 yrs old) and can affect quality of life with respect to long-term health outlook, financial burdens, and prospects for future accomplishments.

Healthy North Carolina 2020 Objective

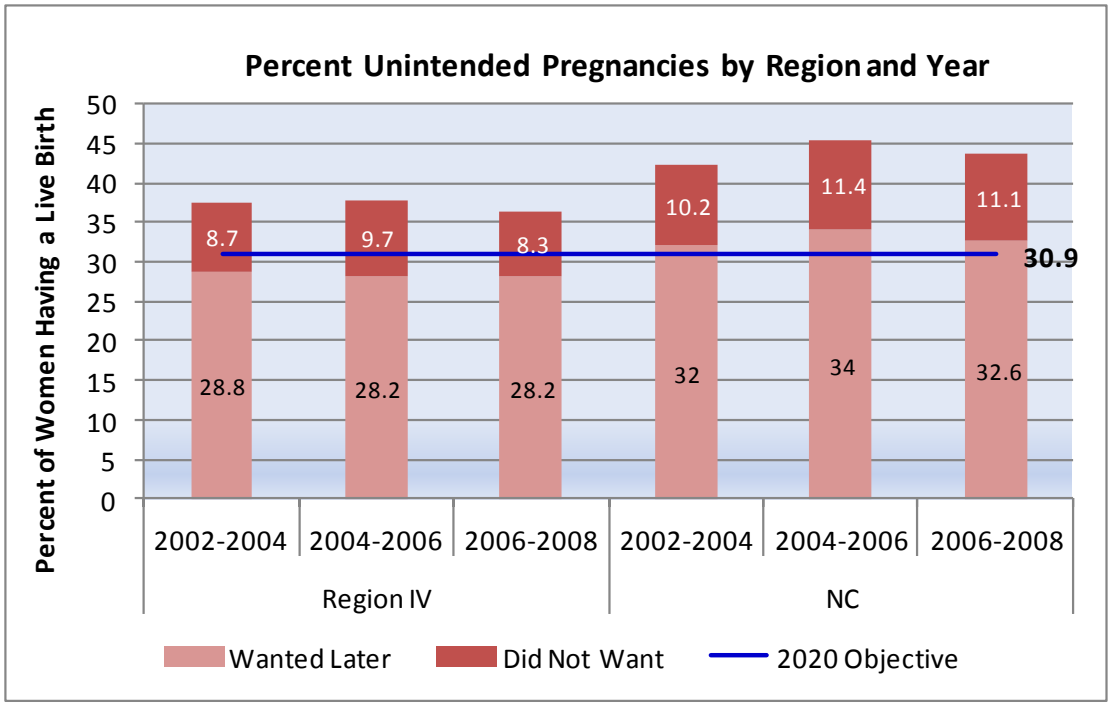
Decrease the percent of pregnancies that are unintended to	**30.9 %.**
2006-08 PRAMS Survey PC Region IV NE Counties*	**36.5 %**
2006-08 PRAMS Survey NC	**43.7 %**
2009 PRAMS Survey NC	**44.6 %**

http://www.schs.state.nc.us/SCHS/prams/2009/intend.html

An unintended pregnancy is considered to be one that was either not wanted *at all* or not wanted *at the time of conception*. In the 2006-2008 period more than 40% of NC pregnancies were unintended with, according to the NC Pregnancy Risk Assessment Monitoring System, most occurring to unmarried (65.3%), black (64.2%), women that were <20 yrs old (68.2%), and making less than $15,000/year (62.9%). The 2006-08 state rate has actually increased very slightly (3.7%), while the region has decreased equally slightly (2.7%), but is still 18% higher than the 2020 goal.

GRAPH 23

http://www.schs.state.nc.us/SCHS/pdf/PRAMS_SU_2_WEB.pdf



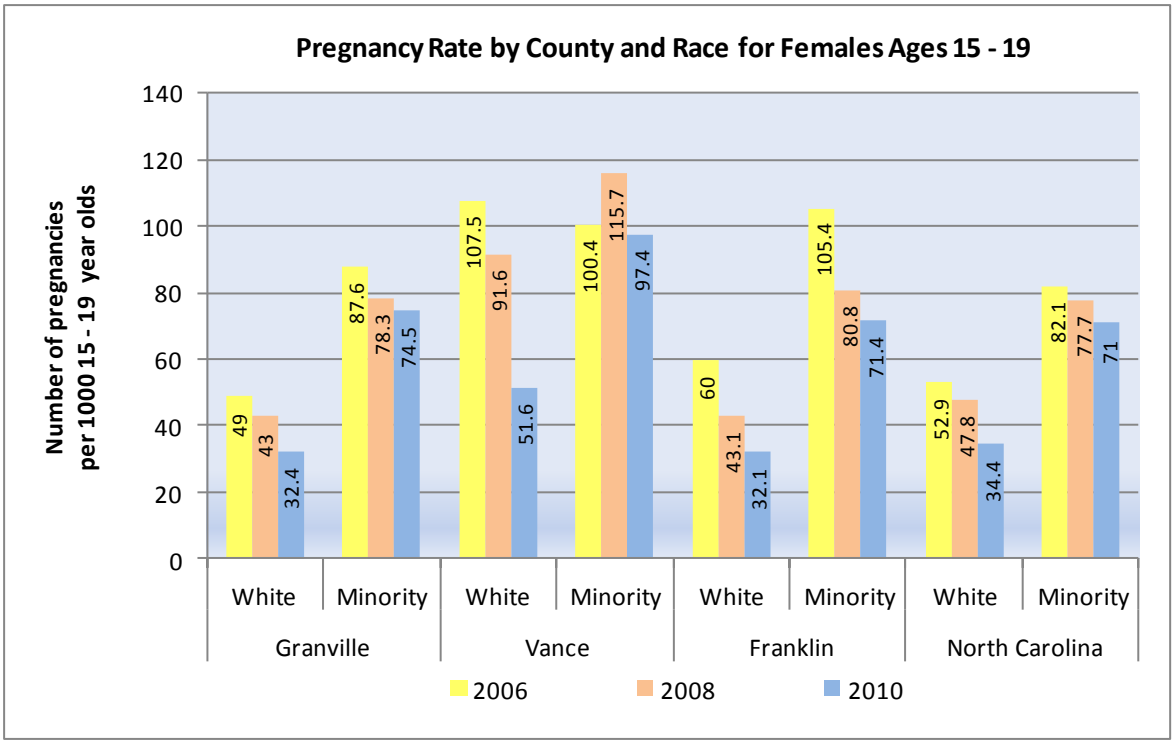
*A complete list of counties in the Region is on page 115

With no local data available on unintended pregnancies and the knowledge that nearly 70% occurred to women less than 20 years old, it is worthwhile to consider the teen pregnancy rates (per 1000 15—19 yr olds) in our counties. Graph 24 shows the rates from 2006 through 2010 broken out by race and county. All rates have been trending down since 2006, with the smallest change (3%) occurring for Vance minorities and the largest for Vance whites (a 52% decrease). It bears noting however that the rate for Vance minorities decreased 15.8% since 2008. White decreases exceeded minorities' for Franklin and Granville counties as well as for the state, and remain slightly below the state white rate.

Graph 25 on the next page illustrates trends in teen pregnancy from 2000 to 2010. While disturbing to see from the graph below that the decreases realized are not evenly spread across the races, it is heartening nonetheless to observe in the trend graph a narrowing of the gap

GRAPH 24

http://www.schs.state.nc.us/SCHS/data/pregnancies/2000/preg1519.pdf

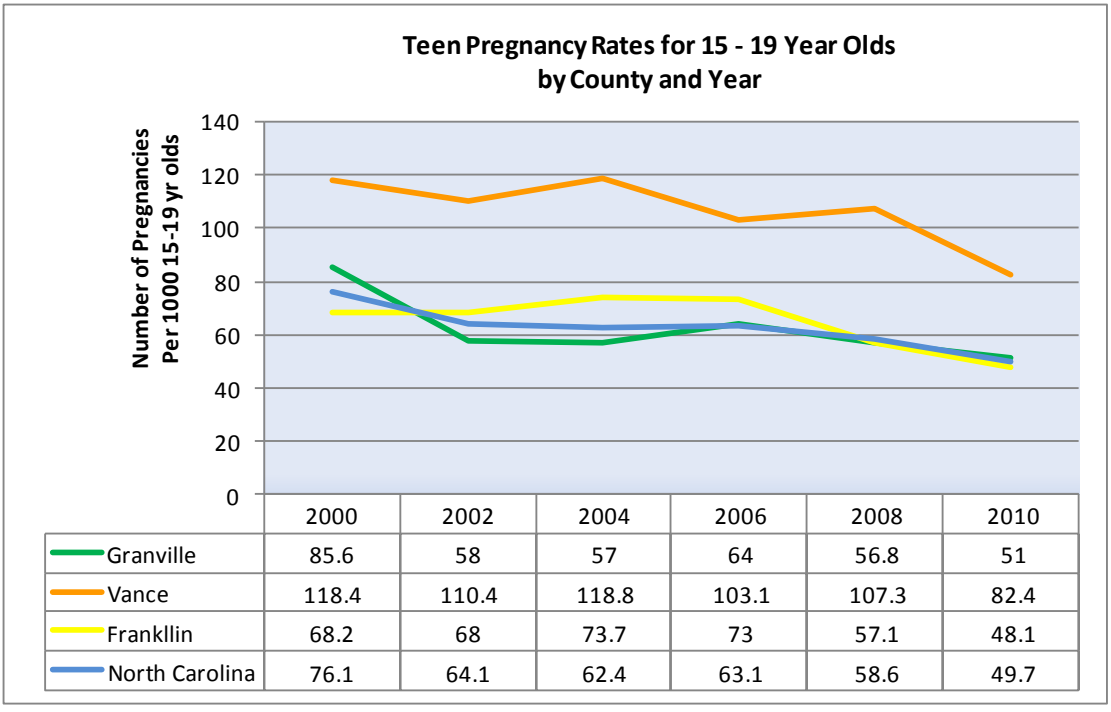


between Vance County and the state. Although the rate has dropped 30.4% since 2000, it is still 65.8% higher than NC's and the 2nd highest in the state. In the same time period, Granville County's teen pregnancy rate decreased by 40.4%, and is in line with the NC's and 38.1% lower than Vance County's.

One significant change that is likely impacting the rates is the passage of the Healthy Youth Act in 2009. The Act required schools starting in 2010-11 to offer medically accurate reproductive health education to 7th—9th grade students, in addition to the abstinence until marriage curriculum which has been the norm for the past 15 years. To meet the guidelines, Vance County Schools (VCS) implemented the evidenced-based curriculum *Making Proud Choices,* and in January 2011, partnered with GVDHD to offer Teen PEP (Prevention Education Program) funded by the state's Teen Pregnancy Prevention Initiative. Teen PEP is a for credit course for juniors and seniors that trains them to be effective sexual health advocates and role models for younger students and their peers. GVDHD also partnered with the YMCA and the Henderson Junior Women's Club to launch Girls on the Run (GOTR) in September 2010 , a positive youth development program for 3rd—8th grade girls, that combines an interactive curriculum with running to inspire self-respect and healthy lifestyles. Planning is underway to expand GOTR to Granville County, and to partner with Granville County Schools to offer *Parents Matter*, a curriculum that teaches parents how to talk about sexuality and risk reduction behaviors with their children.

http://www.schs.state.nc.us/SCHS/data/pregnancies/2000/preg1519.pdf

GRAPH 25



	2000	2002	2004	2006	2008	2010
Granville	85.6	58	57	64	56.8	51
Vance	118.4	110.4	118.8	103.1	107.3	82.4
Frankllin	68.2	68	73.7	73	57.1	48.1
North Carolina	76.1	64.1	62.4	63.1	58.6	49.7

Healthy North Carolina 2020 Objective

Reduce the percent of positive results among individuals aged 15-24 tested for Chlamydia to 8.7%

5 year rate for Chlamydia infection per 100,000 population.

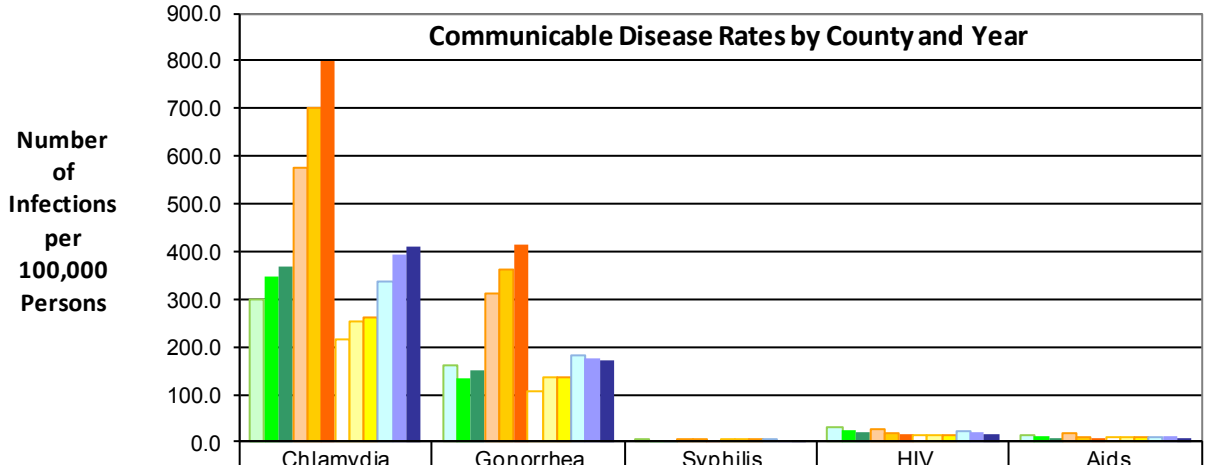
2006-2010 Granville Chlamydia cases per 100,000	**370.0**
2006-2010 Vance Chlamydia cases per 100,000	**800.0**
2006-2010 Franklin Chlamydia cases per 100,000	**259.6**
2006-2010 NC Chlamydia cases per 100,000	**410.6.**

http://epi.publichealth.nc.gov/cd/figures.html AIDS/HIV and STD Reports 2002-2010

As seen in the graph below, of the reportable STDs, Chlamydia has the highest rates. In 2010, 74% of NC cases occurred to those 15-24 years old, 47 % to blacks, and 80% to females. Often asymptomatic, it can cause infertility and pelvic inflammatory disease (PID) in females. Chlamydia increased from the 5-yr periods 2002-06 to 2006-10 in each of our counties and the state (GC - by 23.8%, VC - 38.7%, FC - 21.4%, and NC - 21.7%), affecting nearly 600 people in the Health District. Further, while Granville and Franklin Counties' 2006-10 rates are lower than NC's (9.9% and 36.8% respectively), Vance's rate is nearly double (94.8% higher). This disturbing trend is reflected in the gonorrhea rates for the same time period: Vance 's rate was 141% higher than NC's, while Granville's was 12.2% and Franklin's 19.4% lower.

GRAPH 26

http://epi.publichealth.nc.gov/cd/figures.html AIDS/HIV and STD Reports 2002-2010



	Chlamydia	Gonorrhea	Syphilis	HIV	Aids
Granville (2002-2006)	298.9	159.7	1.1	29.7	13.7
Granville (2005-2009)	345.5	135.4	1.1	25.2	11.3
Granville (2006-2010)	370.0	150.0	0.7	18.8	8.5
Vance (2002-2006)	576.6	313.8	4.6	28.9	20.2
Vance (2005-2009)	700.8	360.8	2.4	19.0	10.6
Vance (2006-2010)	800.0	412.6	3.7	17.7	7.9
Franklin (2002-2006)	213.8	107.5	1.1	14.2	9.0
Franklin (2005-2009)	253.1	134.3	1.7	14.8	8.1
Franklin (2006-2010)	259.6	137.8	1.7	14.5	8.6
NC (2002-2006)	337.6	182.2	2.8	21.9	12.2
NC (2005-2009)	392.7	175.5	3.9	21.4	11.1
NC (2006-2010)	410.6	170.9	4.1	18.5	9.7

Healthy North Carolina 2020 Objective

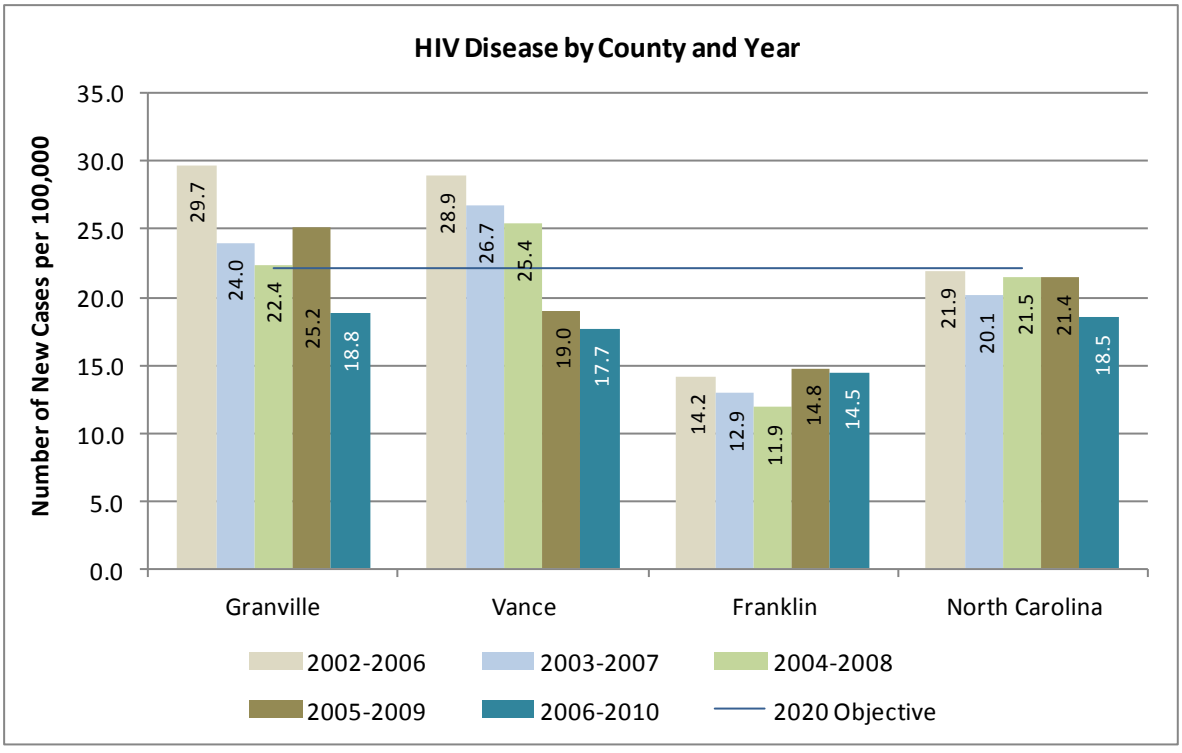
Reduce the rate of new HIV infection diagnoses per 100,000 population to	**22.2**
2006-2010 (5 yr average) Granville new HIV cases per 100,000	**18.8**
2006-2010 (5 yr average) Vance new HIV cases per 100,000	**17.7**
2006-2010 (5 yr average) Franklin new HIV cases per 100,000	**14.5**
2006-2010 (5 yr average) North Carolina new HIV cases per 100,000	**18.5**

http://epi.publichealth.nc.gov/cd/figures.html AIDS/HIV and STD Reports 2002-2010

The category of human immunodeficiency virus (HIV) infection diagnosis represents all new diagnoses with HIV regardless of the stage of the disease, in contrast to acquired immunodeficiency syndrome (AIDS) which represents those persons with HIV who have progressed to this later, more life threatening, stage of disease. Although there are medications that can dramatically slow the progression of the disease, there is still no cure for HIV/AIDS, and it remains transmissible whether being treated or not. In 2010, 76% of cases occurred in men, 66% to blacks, and 31% to those 20-29 years old. Fortunately, as can be seen in the graph below, the 5 year average rates show improvement since the 2002-2006 period, with all counties and the state falling below the 2020 objective during the 2006-2010 period. GC is 15.3% lower, VC is 20.3% lower, FC is 34.7% lower, and NC is 16.7% lower.

GRAPH 27

http://epi.publichealth.nc.gov/cd/figures.html AIDS/HIV and STD Reports 2002-2010



Substance Abuse

As stated in Healthy NC 2020, "Substance use and abuse are major contributors to death and disability in NC. Addiction to drugs or alcohol is a chronic health problem and those who suffer from it are at risk for premature death, [associated] health conditions, injuries, and disability."

Healthy North Carolina 2020 Objective

Reduce the percent of high school students who had alcohol on 1 or more day if the past 30 days to 26.4%

2009 NC YRBS Central Region High School Report* 34.9 %

2009 NC Statewide High School Report 35.0 %

http://www.nchealthyschools.org/docs/data/yrbs/2009/highschool/regional/central/summary-graphs.pdf

Along with tobacco, alcohol is considered a "gateway" drug for teens. According to the National Institute of Alcohol Abuse and Alcoholism, teens that start drinking before age 15 are 4 times more likely to develop an addiction than those that delay to age 21. Further, alcohol impairs judgment, increasing the likelihood of risk-taking behaviors, and 40% of all alcohol-related fatal car crashes are to teens (http://www.learn-about-alcoholism.com/effects-of-teenage-drinking.htm).

Each of these possible consequences of teenage drinking is a cause for concern on its own, the potential that they might occur in synchrony underlines the value of addressing this issue.

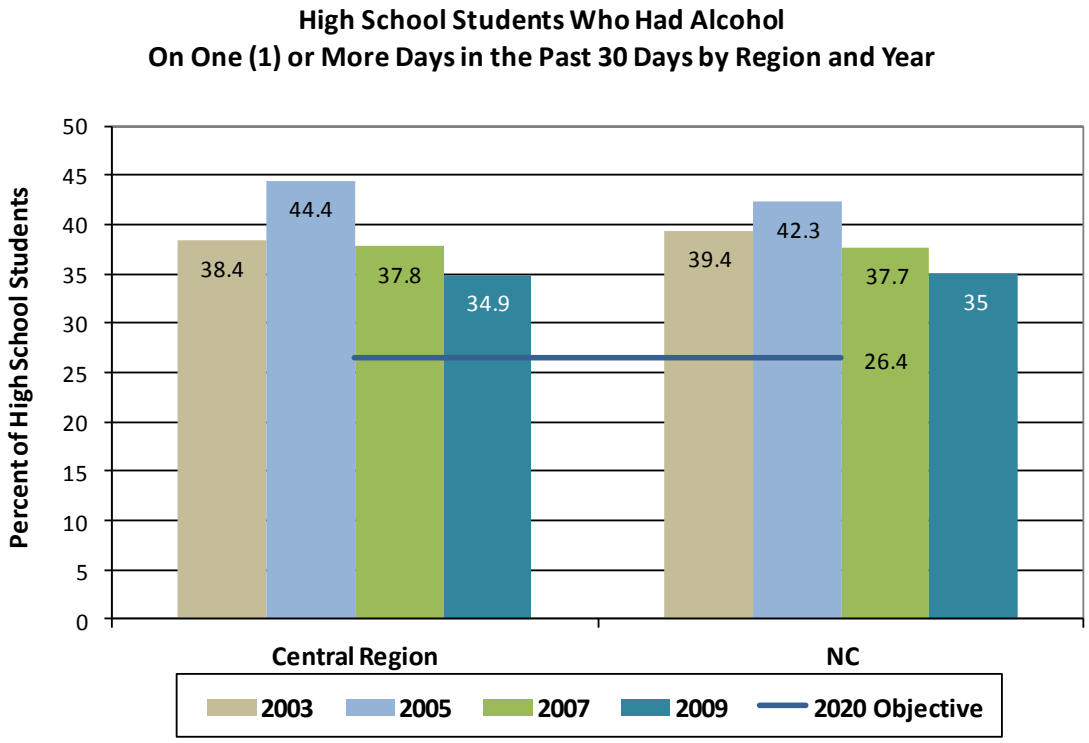
Our young people's education doesn't begin and end at the schoolhouse door; their success in school is critically linked to the support they have from the community. Graduation from high school and successful transition to employment or higher education for ALL our children should be everyone's goal. Laura Santos—Granville County Schools

*A complete list of counties in the Region is on page 115

While no local data is available, it is possible to view trends in the region and the state since 2003. After a spike in 2005, the percent of high school students that consumed alcohol within the past 30 days decreased 21.4% for the region and 17.2% for the state. As might be imagined, the percent of students that drink increases with age: ranging from 25.3% in the 9th grade to 45.6% in the 12th grade in 2009 for the region. In 2009 for the region, black students were the least likely to imbibe (26.2%) while Latino students (39.2%) were only 11% "behind" white students with the highest percent (39.2%) recently consuming alcohol. (http://www.nchealthyschools.org/docs/data/yrbs/2009/highschool/regional/central/tables.pdf p.24)

GRAPH 28

http://www.nchealthyschools.org/data/yrbs/
High School State and Central Region Reports for 2003, 2005, 2007, 2009



Healthy North Carolina 2020 Objective

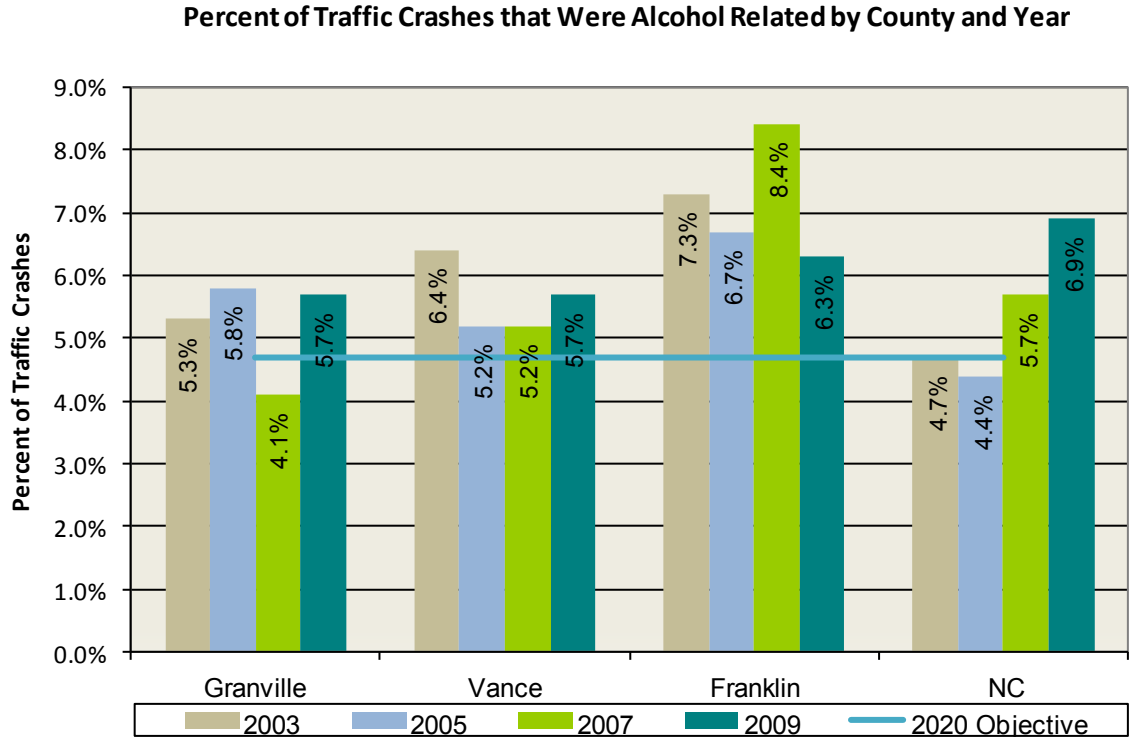
Reduce the percent of traffic crashes that are alcohol related to	**4.7 %**
2009 Granville rate: NC Crash Facts	5.7 %
2009 Vance rate: NC Crash Facts	5.7 %
2009 Vance rate: NC Crash Facts	6.3 %
2009 Vance rate: NC Crash Facts	6.9 %

http://www.ncdot.org/dmv/forms/default.html?s=REC

For the 2005-09 period, motor vehicle injury was listed as the leading cause of death for persons 20-39 years old for NC, Granville, and Franklin Counties (3rd for VC). For 0-19 yr olds it was the 1st cause of death for Granville, 2nd for Franklin and the state, and 5th for Vance County. In the earlier 2001-05 period, it was the leading cause for 20-39 year olds for both Granville and Franklin Counties as well as the state. The country roads with no shoulders that run throughout rural counties are a dangerous proposition when speeds are slightly high or attention is not focused. Add alcohol and/or young drivers to the mix and the risk increases. The graph below illustrates the percent of crashes that are alcohol related. Both Vance and Granville Counties are 21.3 % higher than the 2020 Objective, whereas Franklin County is 34% and the state is 46.8% higher.

GRAPH 29

http://www.ncdot.org/dmv/forms/default.html?s=REC



Healthy North Carolina 2020 Objective

Reduce the percent of individuals who are 12 years or older reporting any illicit drug use in the past 30 days to 6.6 %.

2006-2008 Annual averages North Central NC* **8.47 %**

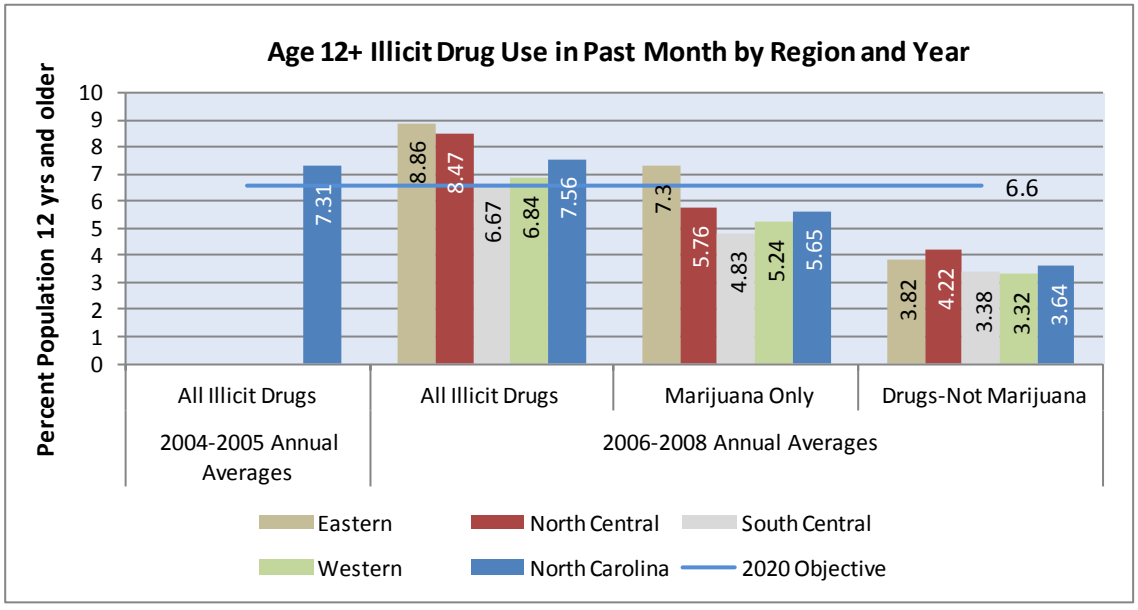
2006-2008 Annual averages NC Statewide **7.56 %**

http://oas.samhsa.gov/substate2k10/StateFiles/NC.htm

The data resource for this section is the National Survey on Drug Use and Health (NSDUH) administered by the Substance Abuse and Mental Health Services Administration (SAMHSA). The drugs considered include marijuana/hashish, cocaine/crack, heroin, hallucinogens, inhalants, and prescription-type psychotherapeutics used for nonmedical purposes. Not included is the non-medical use of over-the-counter drugs or new methamphetamine items. According to the CDC, marijuana is the most commonly used illicit drug among youth, which is borne out in the graph below. At the same time, while illegal drug use has declined among youth, rates of nonmedical use of prescription and over-the-counter medication (such as cough and cold medications containing the cough suppressant dextromethorphan) remain high (http://www.cdc.gov/HealthyYouth/alcoholdrug/index.htm). By excluding the latter from the NSDUH survey, it's possible that the totals in graph 30 are falsely low, especially for younger ages. Additional 2004-05 data for NC by age reveals that predominant use of illicit drugs in the past month occurred among 12-17 year olds (10.87%) and 18 –25 year olds (23.8%). Because of the potential for any drug use to become an addiction, it is particularly important to focus on prevention among our youth.

GRAPH 30

http://oas.samhsa.gov/substate2k10/StateFiles/NC.htm
http://www.samhsa.gov/data/2k5state/pdf/AppB.pdf

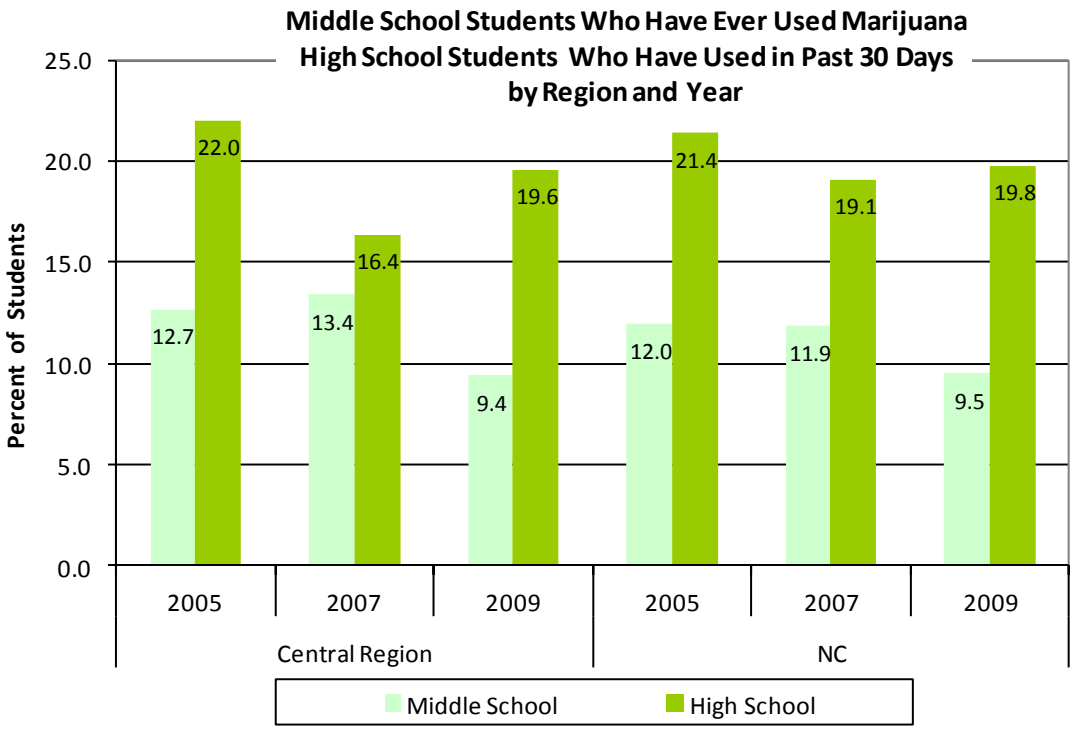


*A complete list of counties in the Region is on page 115

To shed light on area trends, available data on middle and high school marijuana use is included below. A principal difference between this and the data on the previous page is that the latter looks at ALL residents 12 years and over, while the data below focuses solely on the children from 7th to 12th grade. Further, the middle school data refers to *any* marijuana use at all, not specifically in the past 30 days. Yet it is included because middle school experimentation clearly lays the ground work for potentially more regular use in high school. While rates are decreasing for both middle and high school use in the Piedmont (by 26%) and the state as a whole (by 20.8%), it remains that about 1 in 10 middle schoolers has tried marijuana at least once. This rate doubles in high school—about 1 in 5 students in high school used marijuana in the 30 days before the survey. That being said, use is still trending down from 2005, by 10.9% for the Piedmont region and by 7.5% for NC overall.

GRAPH 31

http://www.nchealthyschools.org/docs/data/yrbs/2009/highschool/regional/central/tables.pdf
http://www.nchealthyschools.org/data/yrbs/ NC, High School Central Region



Mental Health

The health status of a community cannot be fully assessed without consider mental health (MH) issues which can impact functionality, productivity, physical health status, and overall family well-being. A strong system in place to address community MH needs as they become apparent is likely to reap benefits by intervening with problems before they attain crisis level. . As a cause of premature death among the young, suicide ranks heartbreakingly high.

Healthy North Carolina 2020 Objective

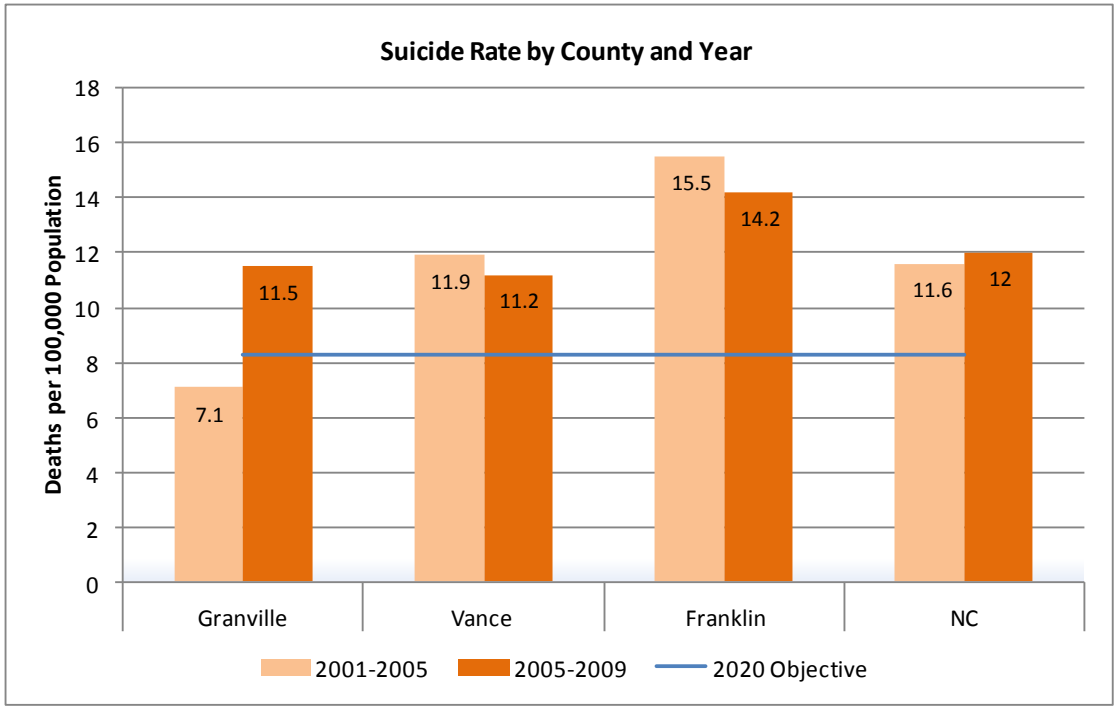
Reduce the suicide rate (per 100,000 population) to	**8.3**.
2005-2009 Granville age-adjusted rate per 100,000	**11.5**
2005-2009 Vance age-adjusted rate per 100,000	**11.2**
2005-2009 Franklin age-adjusted rate per 100,000	**14.2**
2005-2009 NC age-adjusted rate per 100,000	**12**

http://www.schs.state.nc.us/SCHS/data/databook/ 2011

For the 2005-09 period, it was the 3rd highest cause of death for 20-30 year olds in Granville and Franklin Counties and the state. As homicide and other injuries prevail in Vance County, suicide is the 5th highest cause of death among 20-39 year olds there. Granville County has seen a striking increase of 62% from the 2001-05 period to 2005-09, while Vance and Franklin Counties have seen slight decreases (5.9% and 8.4% respectively). Although slight (3.4%) North Carolina's rate overall has increased as well.

GRAPH 32

http://www.schs.state.nc.us/SCHS/data/databook/ 2007, 2011



Healthy North Carolina 2020 Objective

Decrease the average number of poor mental health days among adults in past 30 days to **2.8.**

Percent of adults with poor mental health days in past 30 days

2011 Granville Survey	22.6 %
2011Vance survey	16.2 %
2010 BRFSS Piedmont Region*	31.8 %
2010 BRFSS NC Statewide	31.3 %

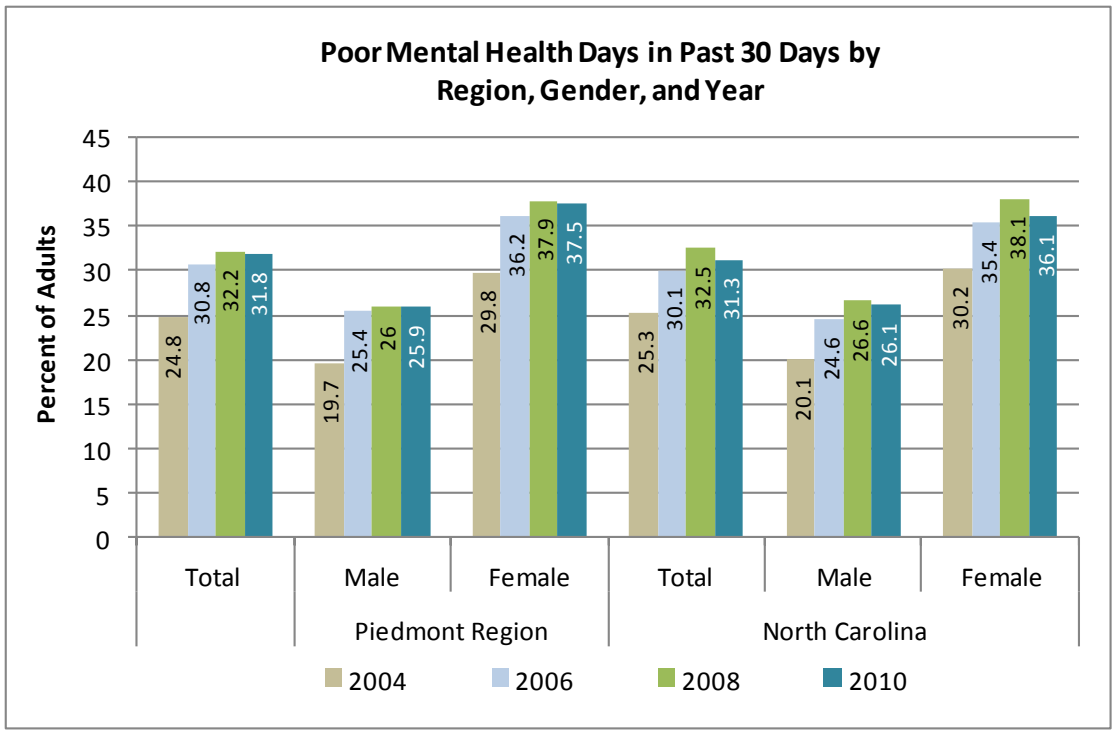
http://www.schs.state.nc.us/SCHS/brfss/2010/pied/topics.html

The BRFSS question cited above describes mental health as including "stress, depression, and problems with emotions". A measure of these feelings can be an indicator of one's quality of life as well as associated with issues of productivity, physical complaints, and the ability for self-care as well as care for others. Although the 2020 benchmark focuses on the *number of days* rather than the *percent of adults,* with no knowledge of how to calculate the days using available data, shown here is the percent of adults that reported 1 or more poor MH days within the past 30 days.

The only local data (versus regional) available is the results for the 2011 survey. Adults in both counties experienced fewer poor MH days than the state for 2010 (VC—48.2 % lower, GC—27.8% lower). Graph 33 shows that the percent with poor MH days has remained essentially stable from 2008 to 2010, with changes varying only by 2-4%.

GRAPH 33

http://www.schs.state.nc.us/SCHS/brfss/results.html *Healthy Days 2004, 2006, 1008, 2010*

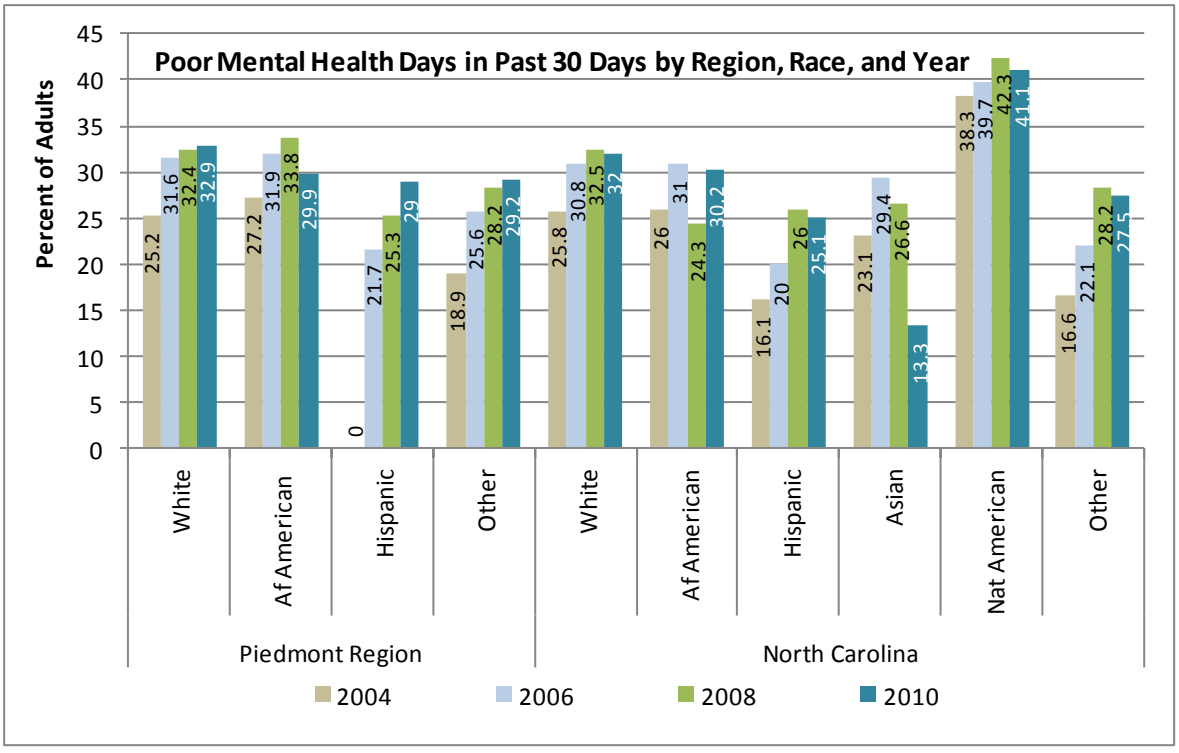


*A complete list of counties in the Region is on page 115

Graph 33 on page 71 reveals that women are suffering poor mental health days at a greater rate than men. In 2004, the spread was greatest with 50+% more Piedmont and NC women than men having 1 or more poor MH days. By 2010, the gap had narrowed slightly: to 44.8% more Piedmont and 38.3% more NC women suffering. Oddly, this contrasts the suicide data which (according to the 2010 detailed mortality statistics) indicates that 79.5% of 2010 deaths were to men. When looking at the racial breakdown for MH Days, in 2010 the statewide the burden was born by Native Americans who exceeded whites by 28.4%. For the Piedmont region, with the Native American population insufficient to generate statistics at the regional level, suicide affects more whites than other races. Since 2004, more people rather than less, have answered the poor mental health days question positively, with rates increasing as much as 50% (NC Hispanics) for the time period in question.

GRAPH 34

http://www.schs.state.nc.us/SCHS/brfss/results.html *Healthy Days 2004, 2006, 1008, 2010*



Healthy North Carolina 2020 Objective

Reduce the rate of mental health related visits to emergency departments (per 10,000 visits) to 82.8.

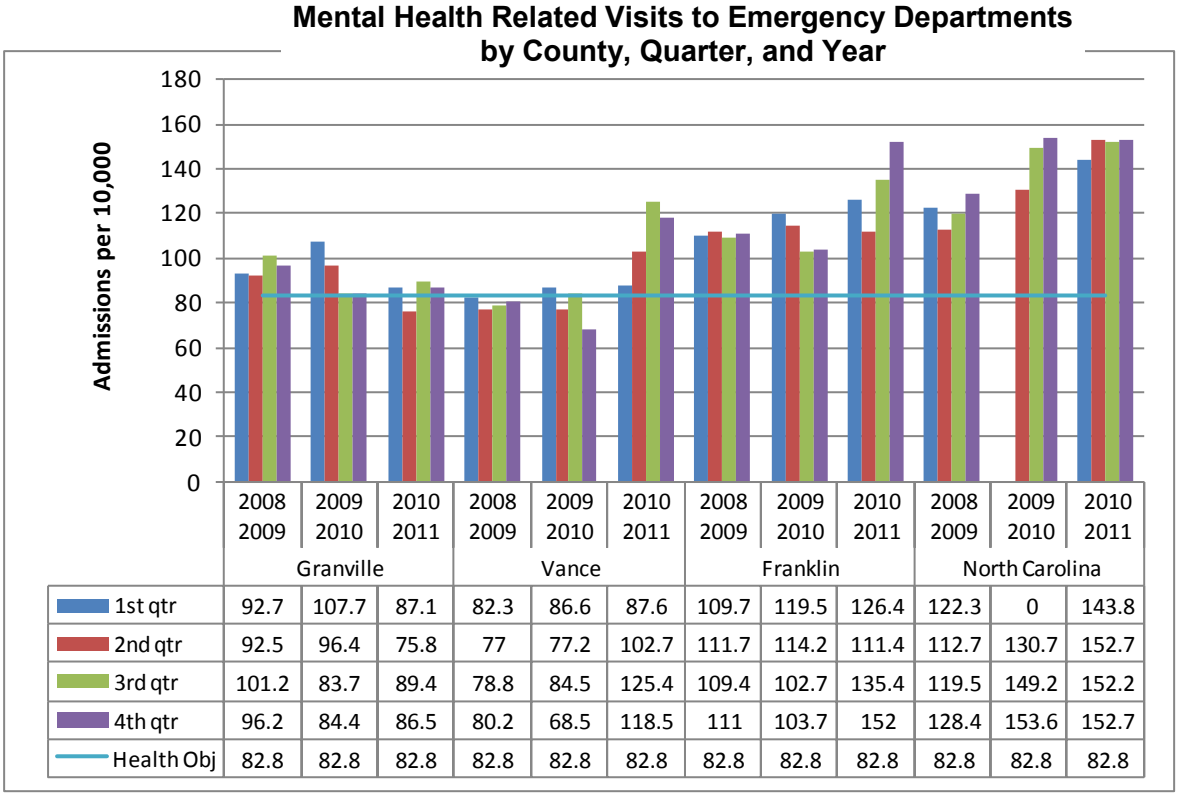
4th Quarter 2010-11 Granville rate **86.5**
4th Quarter 2010-11 Vance rate **118.5**
4th Quarter 2010-11 Franklin rate **152**
4th Quarter 2010-11 NC rate **152.7**

http://www.ncdhhs.gov/mhddsas/statspublications/Reports/DivisionInitiativeReports/qualitymgmt/EDadmissions/edadmissionsSFY10-11quarter4.pdf pp. 20-22

According to a study by the National Alliance on Mental Illness, 32 states have cut their mental health budgets since 2009, largely from outpatient services that keep people healthy and out of the ER. An understandable consequence can be that patients who lack "maintenance" care are more likely to experience crises and the need for urgent care. Unfortunately, emergency rooms which are geared to resolving physical crises are not the ideal resource for MH ones. Tracking 4th quarter performance alone, since the 2008-09 year, Granville County is faring the best—only 10.1% greater than the target goal. In contrast, Vance and Franklin Counties and the state are increasingly distant, exceeding the 2020 objective by 43.1%, 83.6%, and 84.4% respectively.

GRAPH 35

http://www.ncdhhs.gov/mhddsas/statspublications/Reports/lmes-providers/EDAdmissions/
All quarters SFYs 2008-09, 2009-10
Community Hospital Emergency Departments Admissions for Persons Diagnosed with a Mental Illness, Developmental Disability or Substance Abuse Disorder—All quarters SFY 2010-2011



	Granville			Vance			Franklin			North Carolina		
	2008 2009	2009 2010	2010 2011	2008 2009	2009 2010	2010 2011	2008 2009	2009 2010	2010 2011	2008 2009	2009 2010	2010 2011
1st qtr	92.7	107.7	87.1	82.3	86.6	87.6	109.7	119.5	126.4	122.3	0	143.8
2nd qtr	92.5	96.4	75.8	77	77.2	102.7	111.7	114.2	111.4	112.7	130.7	152.7
3rd qtr	101.2	83.7	89.4	78.8	84.5	125.4	109.4	102.7	135.4	119.5	149.2	152.2
4th qtr	96.2	84.4	86.5	80.2	68.5	118.5	111	103.7	152	128.4	153.6	152.7
Health Obj	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8

Oral Health

Dental disease is not usually covered in "standard" health insurance; consequently, preventive cleanings are not a priority for the uninsured Yet a long standing habit in this area of putting babies to sleep with a bottle in their mouths has contributed to a high level of tooth decay in our toddlers. If left untreated, these toddlers must deal with the effects of untreated decay as they start school. Untreated decay often are causes pain, problems with eating or chewing foods, and self-esteem if the front teeth are affected. Pain is also likely to affect a child's ability to concentrate and therefore to learn. Because the foundations for long-term success are aid down in the earliest years, it is critical children not fall behind at the start.

Healthy Carolinians 2010 Objective

Increase the percent of children aged 1-5 years enrolled in Medicaid who received any dental service during the previous 12 months to 56.4 %

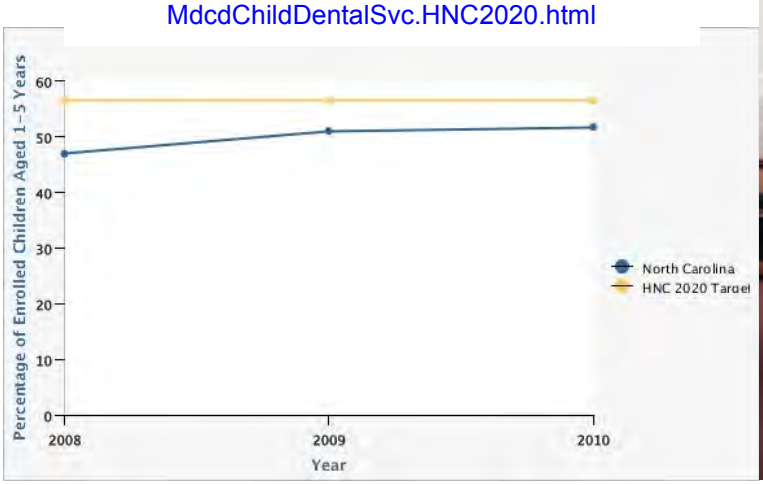
2010 Granville rate	42.8 %
2010 Vance rate	42.2 %
2010 Franklin rate	58.6 %
2010 NC statewide rate	51.7 %

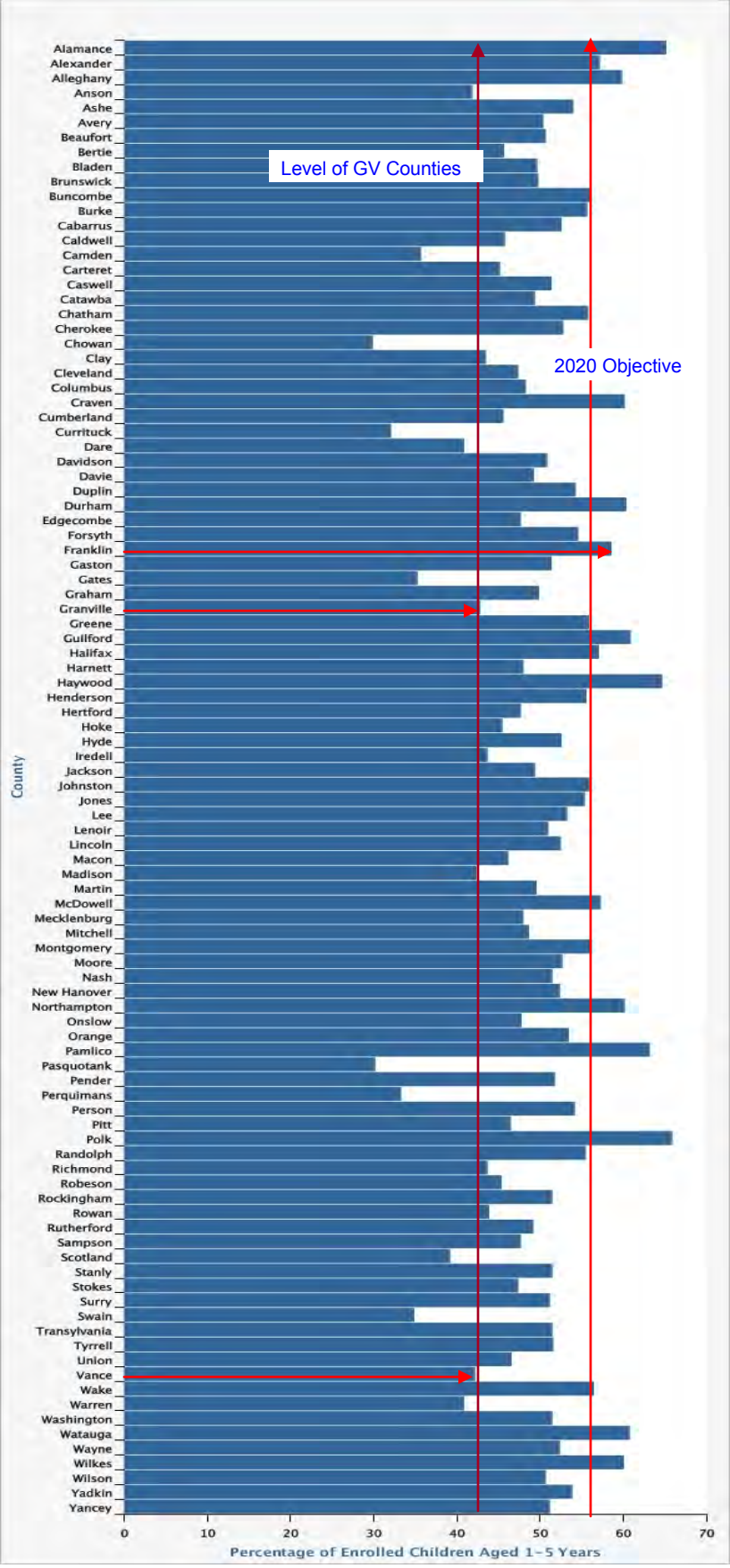
http://healthstats.publichealth.nc.gov/indicator/view_numbers/MdcdChildDentalSvc.HNC2020.html
http://healthstats.publichealth.nc.gov/indicator/view_numbers/MdcdChildDentalSvc.County.html

Specific data to measure progress in our counties and the state for this parameter has been limited. Therefore we are not able to present precise trend data for the counties for this objective. However, the graph on the following page does illustrates all 100 county measures for 2010, and the graph below does the same for the state. Red arrows highlight the columns for Franklin, Granville, and Vance Counties on the next page, as well as the 2020 Objective so they can be compared.

GRAPH 36
Percent of Medicaid 1 to 5 yr olds Receiving Dental Service During the Previous 12 Months by Year

http://healthstats.publichealth.nc.gov/indicator/view/MdcdChildDentalSvc.HNC2020.html





GRAPH 37

Percent of Children Age 1 to 5 yrs Enrolled on Medicaid Who Received Any Dental Service During the Previous 12 Months—2010

http://healthstats.publichealth.nc.gov/indicator/view/MdcdChildDentalSvc.County.html

Reviewing the graph to the left, Granville and Vance County Medicaid Children are receiving dental care at lower rates, with only 11 counties falling below ours. Franklin County has exceeded the state objective by 3.9%, and NC overall is moving closer, narrowing the gap from 16.8% below in 2008 to 8.3% in 2010. In contrast, Granville and Vance Counties lag behind the target by 24.1% and 25.2% respectively. It is important to note though that without data for other years, it is not possible to know whether our performance is stable, improving, or declining.

Healthy North Carolina 2020 Objective

Decrease the average number of decayed, missing, or filled teeth (d,m,f,t) among kindergarteners to 1.1

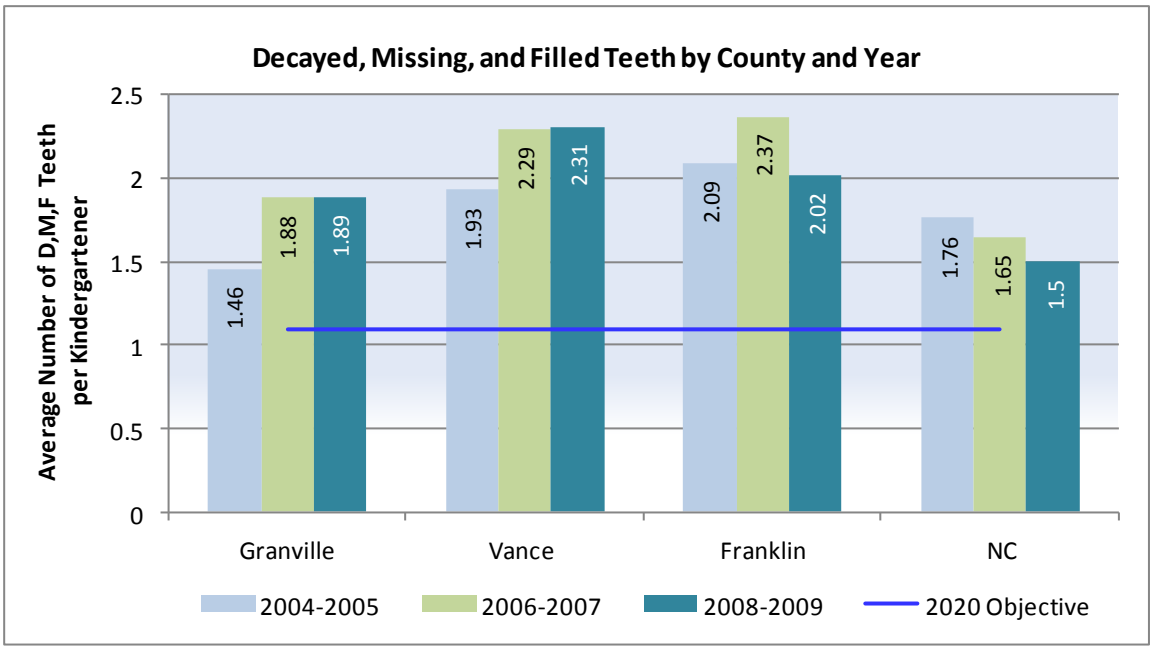
2008-09 Granville 1.89
2008-09 Vance 2.31
2008-09 Franklin 2.02
2008-09 NC Statewide 1.50

http://www.ncdhhs.gov/dph/oralhealth/stats/MeasuringOralHealth.htm 2004-05, 2006-07, 2008-09

By tracking the number of teeth that have been filled, have active decay, or have been pulled, we can measure the prevalence of decay among our children. In addition to those that do not get preventive dental care for lack of resources, those living without a fluoridated water supply are also more susceptible to decay. Unfortunately Granville County kindergarteners' teeth have worsened from 2004-05 to 2008-09, with an increase of 29.4% in the average number of decayed, missing, or filled teeth per child. In Vance County, the increase was 19.7% - however the Vance average is 110% greater than the 2020 objective. Granville's average is "only" 71.8 % greater than the average. Franklin County has seen a slight improvement (3.4%) since 2004-2005, but the 2008-09 rate actually represents a 14.7% drop since the spike in 2006-07.. North Carolina statewide has improved each year, such that its 2008-09 rate shows a 14.8% decrease from 2004-05 and is now "only" 26.7% distant from the 2020 health objective.

GRAPH 38

http://www.ncdhhs.gov/dph/oralhealth/stats/MeasuringOralHealth.htm 2004-05, 2006-07, 2008-09



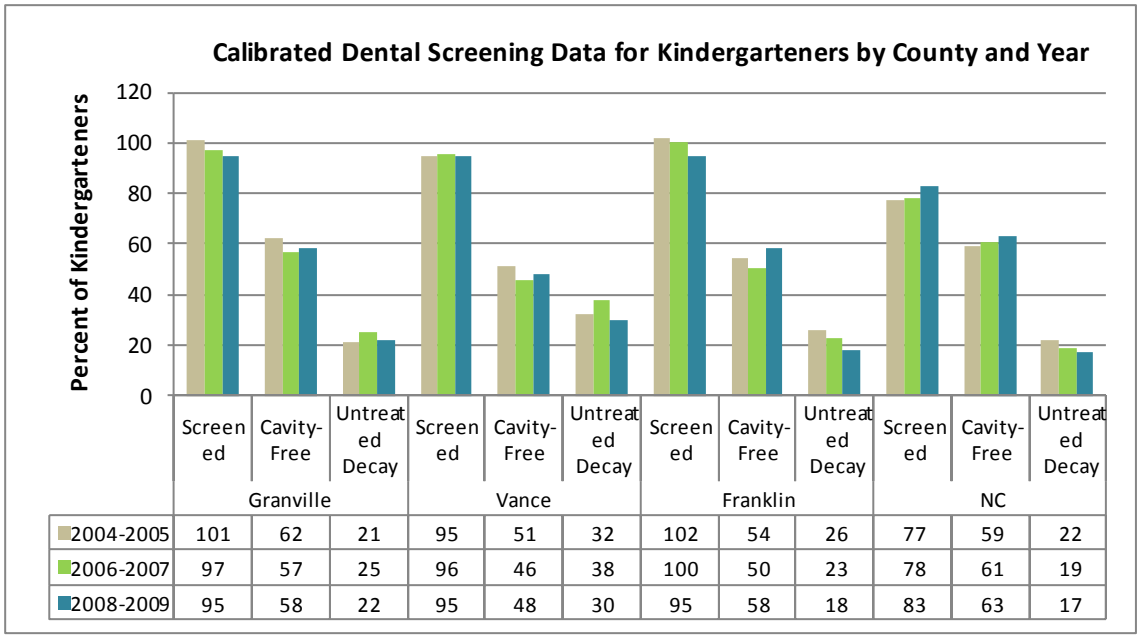
Looking at the kindergartners that have been screened and the percent that are cavity free versus with untreated decay (graph 39) clarifies somewhat more the extent of the impact—how many children are dealing with decayed, missing, or filled teeth. Locally, screening efforts have been consistently better than the state's (by 14.5%.in 2008-09) and consistently so over the years. However, with respect to untreated decay since year 2004-05, Granville County's children have actually worsened slightly; with just more than 1 in 5 having some type of decay.

"Tooth decay has a dramatic effect on eating habits and nutrition, greatly impacting the overall quality of life. ...80% of tooth decay is found in 20% of the population, and is the most common chronic infectious disease of childhood—5 times more common than asthma and hay fever. This results in an estimated 52 millions hours of school lost each year [and] means that parents are out of work [when] their children are not in school. Our job is to start as early as possible with screenings and education. ...The first dental exam [should] occur by one year of age or the eruption of the first tooth into the oral cavity." Alex Drake—DDS

In contrast Vance County experienced a 6.5% decrease from the 2004-05 year in the percent of children with decay, yet the prevalence is higher—slightly less than 1 in 3 children are affected. Franklin's decrease during the same time was even more significant (30.8%) and the percent of children now impacted less than 1 in 5. Statewide NC has seen a decrease of 22.7% since 2004-05 such that just over 1 in 6 children are impacted; Vance, Granville, and Franklin Counties exceed the state percent by 76.5%, 29.4%, and 5.9% respectively.

GRAPH 39

http://www.ncdhhs.gov/dph/oralhealth/stats/MeasuringOralHealth.htm 2004-05, 2006-07, 2008-09



	Granville			Vance			Franklin			NC		
	Screened	Cavity-Free	Untreated Decay	Screened	Cavity-Free	Untreated Decay	Screened	Cavity-Free	Untreated Decay	Screened	Cavity-Free	Untreated Decay
2004-2005	101	62	21	95	51	32	102	54	26	77	59	22
2006-2007	97	57	25	96	46	38	100	50	23	78	61	19
2008-2009	95	58	22	95	48	30	95	58	18	83	63	17

Healthy North Carolina 2020 Objective

Decrease the percent of adults who have had permanent teeth removed due to tooth decay or gum disease to 38.4 %.

2010 BRFSS Piedmont Region* 43.9 %

2010 BRFSS NC Statewide 46.7 %

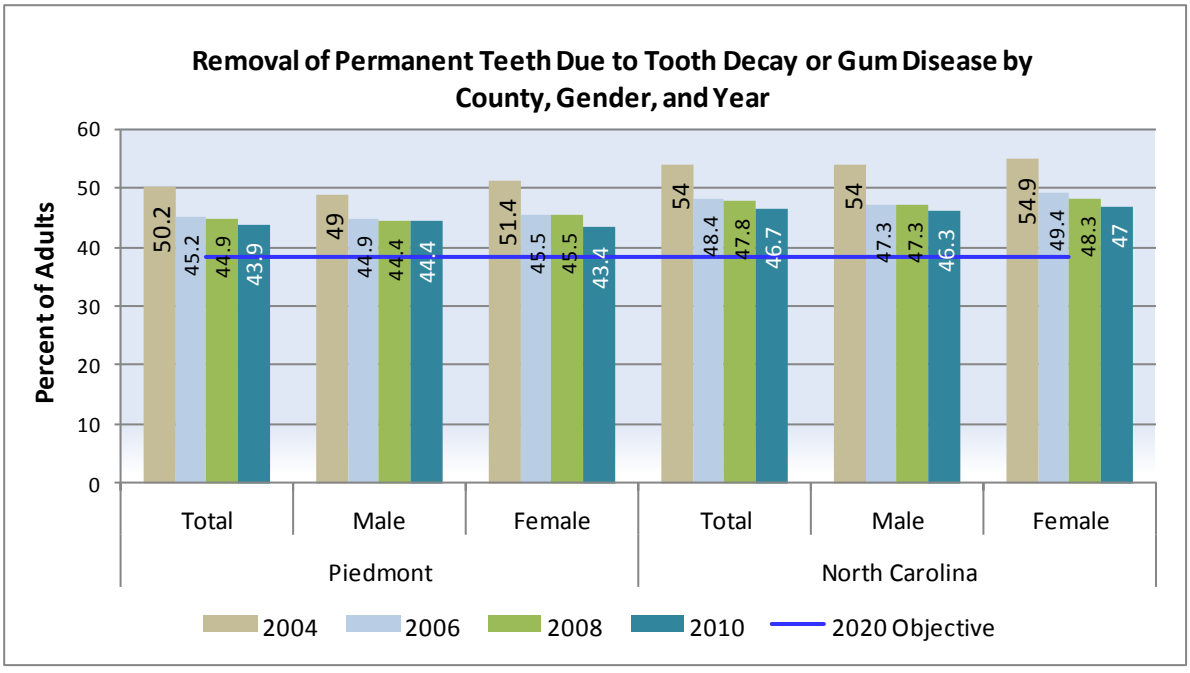
http://www.schs.state.nc.us/SCHS/brfss/2010/pied/topics.html

According to the CDC, 1/4 of US adults aged 65 or older have lost all of their teeth . Further, advanced gum disease affects 4%–12% of U.S. adults and 1/2 of the severe cases in the US are the result of cigarette smoking. Indeed, the prevalence of gum disease is three times higher among smokers than among people who have never smoked. Gum disease also may be connected to damage elsewhere in the body; recent studies link oral infections with diabetes, heart disease, stroke, and premature, low-weight births. (http://www.cdc.gov/chronicdisease/resources/publications/AAG/doh.htm)..

As mentioned on page 77, the first step towards good oral health is to start with screenings and preventive maintenance early in life. Adults with untreated decay can suffer the same ill effects as children: pain, difficulty eating, impacts on concentration and productivity, and self-esteem issues. According to the Kaiser Commission on Medicaid and the Uninsured, 59 percent of low-income Americans have no dental insurance making them less likely to prevent tooth loss or to cover the costs of repair if it occurs. The graphs that follow show the impact of permanent tooth loss in the Piedmont region and statewide, by gender and race.

GRAPH 40

http://www.ncdhhs.gov/dph/oralhealth/stats/MeasuringOralHealth.htm 2004-05, 2006-07, 2008-09



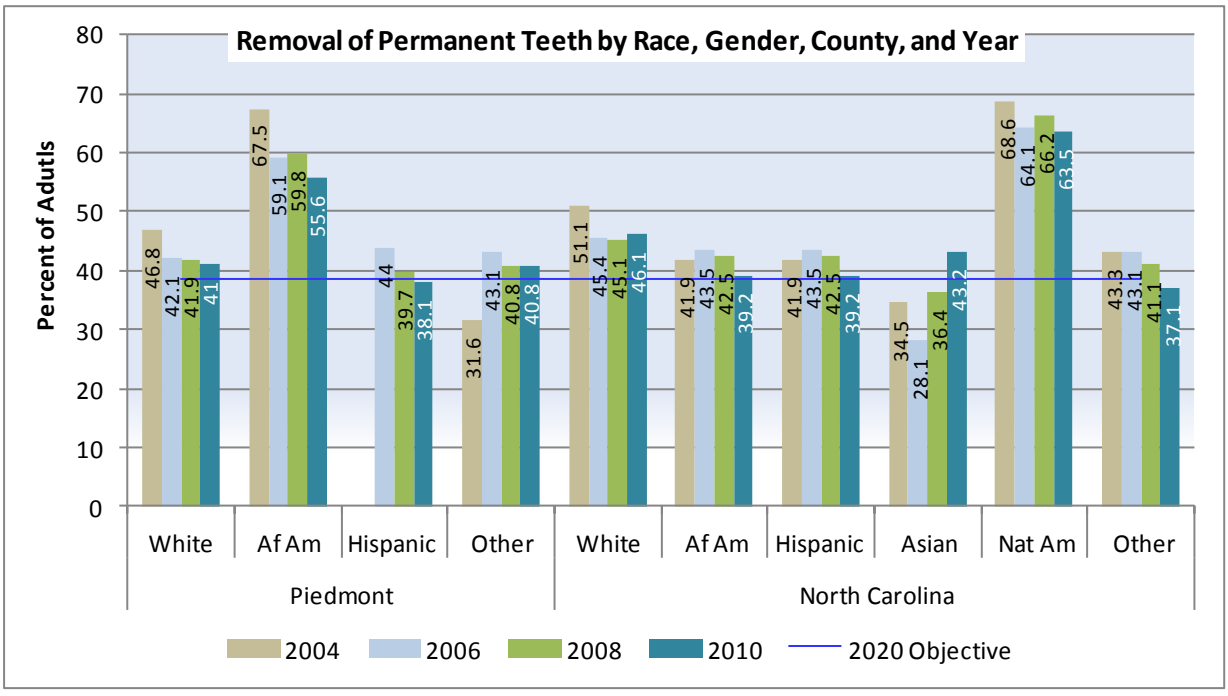
*A complete list of counties in the Region is on page 115

Graph 40 on page 78 shows that in 2010 males and females are within 2% of one another for teeth removed, although Piedmont females experienced a greater decrease from 2004 to 2010 than males (a 15.6% versus 9.4% decrease). In the same time period, Piedmont adults overall saw a decrease in removed teeth of 12.6%, and the statewide decrease was 13.5%

In the graph below, those who bear the greater burden is more clearly revealed. For the Piedmont region, the numbers of Asian and Native Americans are not sufficient to warrant separate categories. However for NC as a whole, these populations are considered, and Native American adults clearly suffer at a greater rate with removal of teeth secondary to decay or gum disease. In 2010, although the percent for Native Americans had decreased somewhat (by 7.4%) since 2004; at 63.5%, it is still exceeds the percent for NC overall by 36%. African Americans in the Piedmont fared somewhat better, incurring a 17.6% decrease since 2004. However while the percent of removed teeth is 12.4% lower than that for Native Americans, it is nonetheless 26.6 percent higher than the percent for the Piedmont region overall.

GRAPH 41

http://www.ncdhhs.gov/dph/oralhealth/stats/MeasuringOralHealth.htm 2004-05, 2006-07, 2008-09



Environmental Health

Healthy North Carolina 2020 Objective

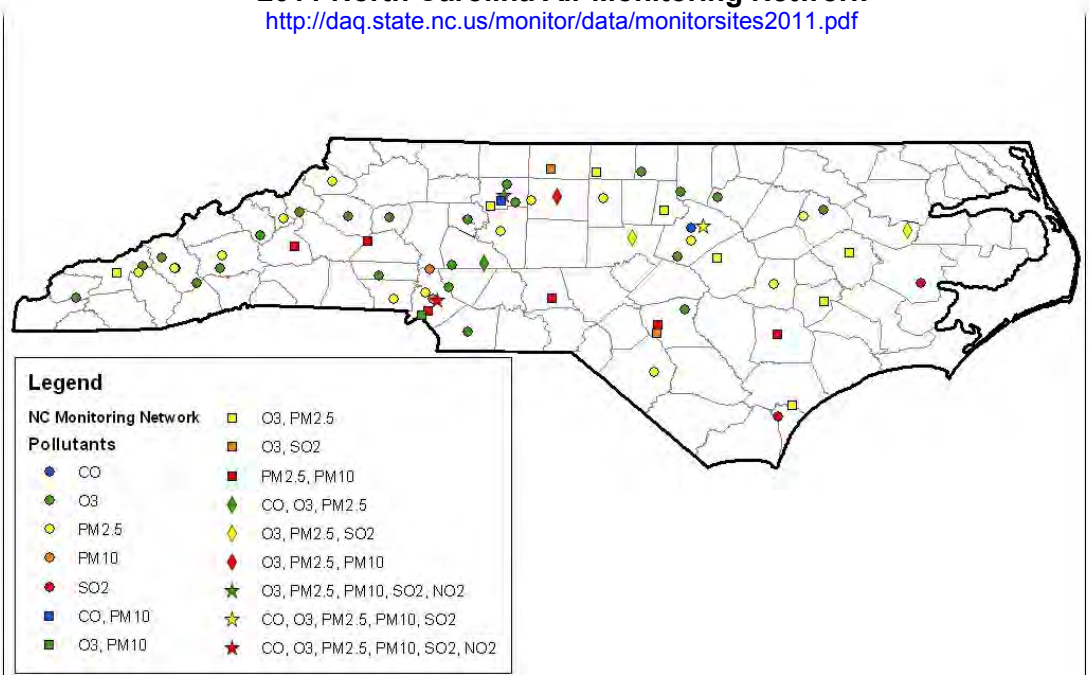
Increase the percent of air monitor sites meeting the current ozone standard of 0.075 ppm to	**100.0 %**
2008-10 average values for NC statewide	**87.1 %**
2008-10 average values for Granville site	**0.074 ppm**
2008-10 average values for Franklin site	**0.071 ppm**

http://daq.state.nc.us/monitor/data/o3design/o3nc08-10.pdf

The Clean Air Act requires EPA to set Air Quality Standards for six common air pollutants, one of which is ground-level ozone. The gas ozone (O_3) is the major component of smog which at ground-level is created by a chemical reaction between oxides of nitrogen (NOx) and volatile organic compounds (VOC) in the presence of sunlight. Because sunlight and hot weather cause ozone to form at harmful levels, it is known as a summertime air pollutant. While urban areas are the most prone to high levels, wind can carry ozone and its precursors to more rural areas. Ozone is one of the most widespread health threats and EPA regulates it by using science-based guidelines for setting permissible levels—these limits based on human health are called primary standards. (http://www.epa.gov/air/urbanair/ ; http://www.epa.gov/air/ozonepollution/). The map below illustrates the monitoring sites for various pollutants in NC. The green dot indicates an ozone monitoring site; locally there is one in both Granville and Franklin Counties which likely measures the drift from Durham and Wake Counties.

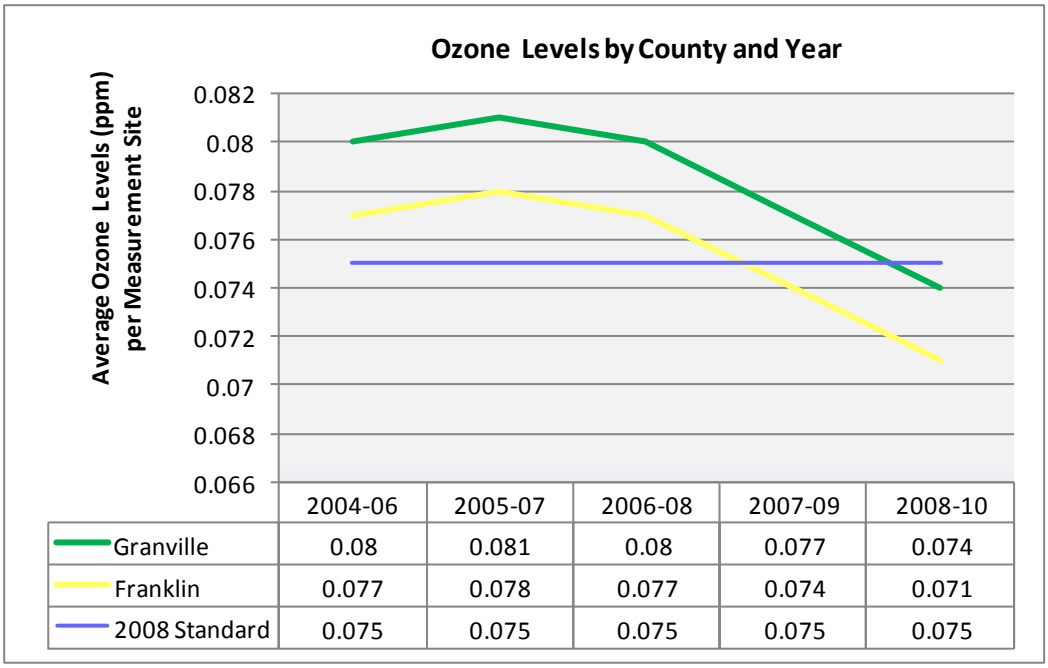
GRAPH 42

2011 North Carolina Air Monitoring Network
http://daq.state.nc.us/monitor/data/monitorsites2011.pdf



GRAPH 43

http://daq.state.nc.us/monitor/data/ 2004-06, 2005-07, 2006-08, 2007-09, 2008-10



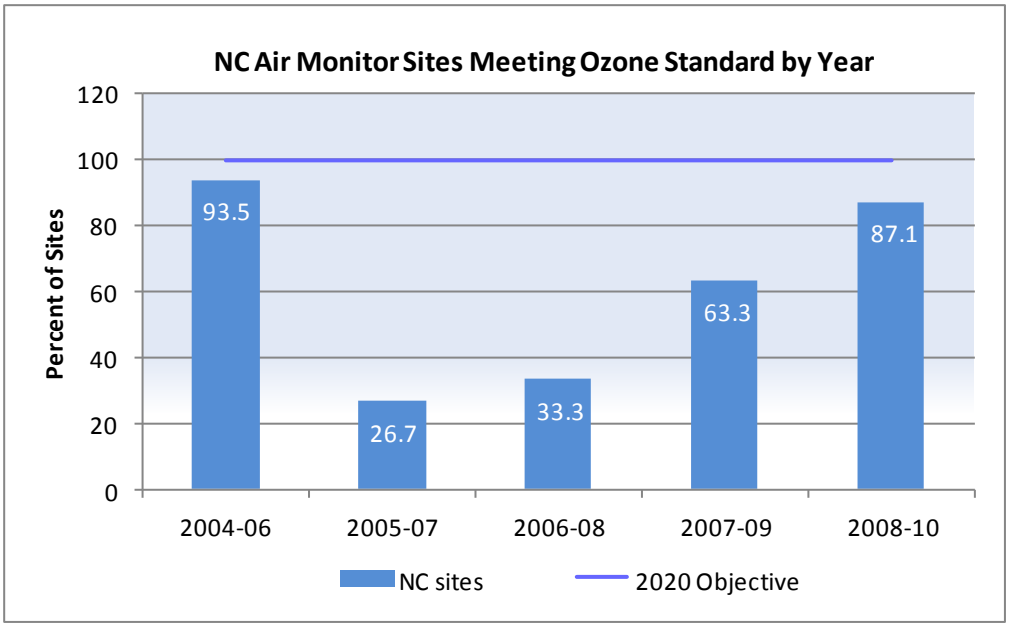
	2004-06	2005-07	2006-08	2007-09	2008-10
Granville	0.08	0.081	0.08	0.077	0.074
Franklin	0.077	0.078	0.077	0.074	0.071
2008 Standard	0.075	0.075	0.075	0.075	0.075

The first standards for ozone were set by EPA in 1971, then strengthened in 1997 (0.8 ppm based on 8 hr samples), and again in 2008 (0.075 ppm). In 2001, the supreme court upheld the constitutionality of basing the standards solely on public health grounds. http://www.epa.gov/air/ozonepollution/history.html

The impact of setting such standards can be clearly seen as the 2 counties trajectories which, while at different levels, track remarkably similar paths. Granville's level has decreased by 7.5% and Franklin's by 7.8% since 2004-06. When looking at the percent of sites meeting the standard: In 2005-07, 93.3% of sites met the 1997 standard on 2004-06, but this dropped to 26.7% of sites meeting the 2008 standard during the 2005-07 period. Yet every 3 year period since, they have improved, a perfect example of the merits of regulation with an eye on the public's health.

GRAPH 44

http://daq.state.nc.us/monitor/data/ 2004-06, 2005-07, 2006-08, 2007-09, 2008-10



Healthy North Carolina 2020 Objective

Increase the percent of population being served by community H2O systems (CWS) with no maximum contaminant level violations (among persons on CWS) to 95.0 %

2011 Granville limited estimate* 100.0 %
2011 Vance limited estimate* 100.0 %
2010 NC percent 96.5 %

**The percents above are based on the 5 systems listed in table 10—which likely serve the majority of CWS residents, but do not include the 17 well-based CWS in GC & VC for which MCL and population data was not available. While there were some individual violations, the running average for the year remained within limits for each site.*

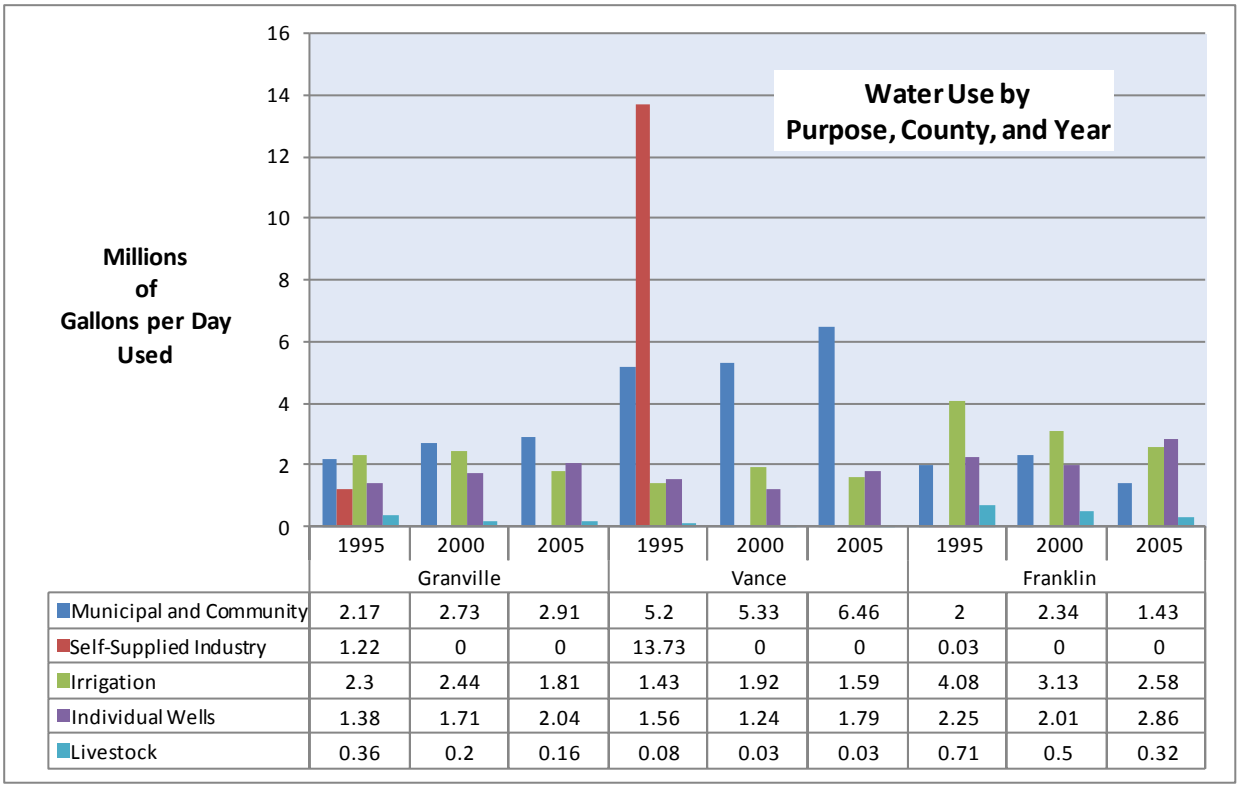
http://healthstats.publichealth.nc.gov/indicator/view_numbers/CWSnoMCL.HNC2020.html

Personal Communications with Granville and Vance County Community Water Systems Feb / March 2012

A Public Water System (PWS) is defined as a system that provides water via piping or other constructed conveyances for human consumption to at least 15 service connections or serves an average of at least 25 people for at least 60 days each year. There are three types of PWSs. PWSs can be community (CWS—such as towns or mobile home parks), non-transient non-community (such as schools, churches, or factories), or transient non-community systems (such as rest stops or parks). This objective addresses the CWS. Under the Safe Drinking Water Act, the EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs) http://www.ncwater.org/pws/AnnualReports/2010AnnualComplianceReport.pdf.

GRAPH 45

http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show *Environment, Recreation, and Resources—Water Use*



	1995	2000	2005	1995	2000	2005	1995	2000	2005
	Granville			Vance			Franklin		
Municipal and Community	2.17	2.73	2.91	5.2	5.33	6.46	2	2.34	1.43
Self-Supplied Industry	1.22	0	0	13.73	0	0	0.03	0	0
Irrigation	2.3	2.44	1.81	1.43	1.92	1.59	4.08	3.13	2.58
Individual Wells	1.38	1.71	2.04	1.56	1.24	1.79	2.25	2.01	2.86
Livestock	0.36	0.2	0.16	0.08	0.03	0.03	0.71	0.5	0.32

Graph 45 on page 82 shows a breakdown of water use in the 3 comparison counties. The category *municipal and community* includes all the systems mentioned above, which is broader than the focus of the objective, but does offer insight into the proportional weight that wells still play in meeting residential water needs.

Data available from state resources was limited to a listing of public water systems (see Appendix J), their types, and testing schedules. In addition to the municipal supply systems listed

Table 10—Maximum Contaminant Level Violations by Water System and Year

Personal Communications with
Clarissa Lipscomb—Kerr Lake Regional Water System; Larry Thomas—City Of Oxford;
Lindsay Mize—South Granville Water and Sewer Authority;
Janet Parrott—Town of Stovall; Tom Mercer—City Of Creedmoor
http://quickfacts.census.gov/qfd/states/37000.html *VC, GC, Oxford, Butner, Henderson*

	Vance County		Granville County							
	Kerr Lake Regional Water System		**Oxford**		**Stovall**		**South Granville Water and Sewer Authority**		**Creedmoor**	
	Both TTHMs/HAAs Reported Below		**TTHMs only No HAA violations**		**TTHMs only No HAA violations**		**TTHMs / HAAs**		**TTHMs only No HAA violations**	
	Individ. Viol's	**Run'g Annual Avg**	**Individual Violations**	**Running Average**	**Individual Violations**	**Running Average**	**Individual Violations**	**Running Average**	**Individual Violations**	**Running Average**
2005	0/0	OK/OK	1	Within Limits	Individual Wells Only	NA	5/4	OK/OK	0	Within Limits
2007	0/0	OK/OK	3	Within Limits	Individual Wells Only	NA	6/9	OK/ Over	2	Over Limits
2009	0/0	OK/OK	8	Over Limits	1	Over Limits	7/4	OK/ Over	3	Over Limits
2011	0/0	OK/OK	4	Within Limits	0	Within Limits	1/0	OK/OK	2	Within Limits
Residential Connect's	7430		2889		212		~ 3000		1889	
Est Pop. Served Based on Average Persons Per Household	*2006-2010 census H'son = 2.55 pph* **18,946** VC = 2.67 persons per household		*2006-2010 census Oxford = 2.49 pph* **7194** GC = 2.72 persons per household		*2010 census Stovall + GC pph out of town* **412** GC = 2.72 persons per household		*SGWASA estimate using census data + Butner Institutions* **~ 10,467** GC = 2.72 persons per household Butner = 2.64 pph		*Creedmoor estimate using census data* **4747** GC = 2.72 persons per household	
2010 County Population	45422 ~41.7% on KLRWS above		59916 22,793 = ~ 38% on community water supplies listed above							

in table 10, 6 *well-based* community water systems also supply residences in Granville County, and 11 in Vance. MCL Violations were obtained from the municipal supply systems via personal communications. MCL violations that were measured were limited to total tri-halo-methanes (TTHMs) and halo-acetic acids (HAAs), both by-products of using chlorine for disinfection during the water treatment process. It is more difficult to manage TTHM levels in the summer time as temperatures rise to 90 and above and remain so due to the length of the days.

Maintenance of a drinking water system is always a delicate balance between adding the right amount of chemicals to impede bacterial growth/harmful contaminants, and avoiding an overly high level of treatment by-products as the alternative. This nature of balance is exaggerated during the long summer months in the south. Careful monitoring and enhanced line flushing can help improve outcomes during the warm weather.

"The risk of death from pathogens is at least 100 to 1000 times greater than the risk of cancer from disinfection by-products (DBPs)" [**and**] **the "risk of illness from pathogens is at least 10 000 to 1 million times greater than the risk of cancer from DBPs".** The World Health Organization

http://www.who.int/water_sanitation_health/dwq/S04.pdf

Note—KLRWS supplies the water to the City of Oxford which in turn supplies the Town of Stovall. While KLRWS reported no MCL violations during any of the years reviewed, Oxford and Stovall did, and some of these may be related to the choice of sites from which the samples were drawn. TTHM levels can increase the longer water stays in the pipes—which means that the further away from the source the sample is taken, the higher the TTHM level is likely to be. Through 2009, KLRWS was sampling its water closer to its treatment plant than to the points of transfer to Oxford and other customers. As such, TTHM levels could increase as the water travelled from the sampling point to the "transfer" points, affecting the baseline TTHM levels of its customers including Oxford (and thereby Stovall). Since the sampling sites have changed to the metering points between KLRWS and its customers, Oxford has measured lower levels of TTHMs in its system.

Healthy North Carolina 2020 Objective

Reduce the mortality rate from work-related injuries (per 100,000 full-time workers) to 3.5

Mortality rate from work-related injuries (100,000 workers >15 hrs/week)

2006-2010 Granville rate	1.71
2006-2010 Vance rate	3.39
2006-2010 Franklin rate	1.57
2006-2010 NC Statewide rate	1.32

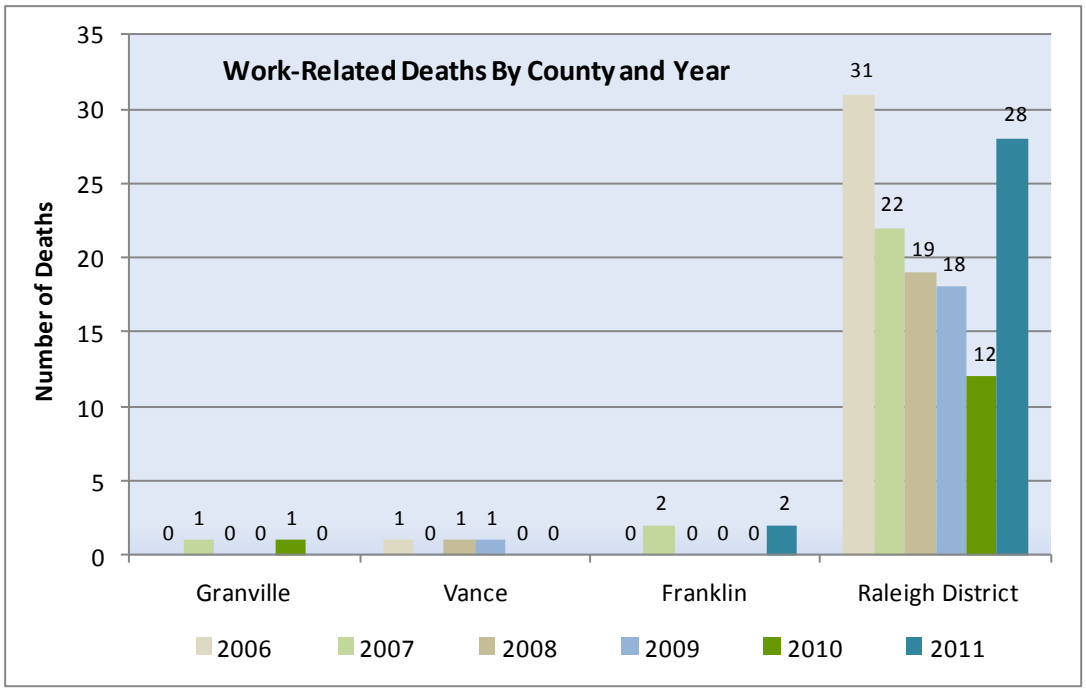
http://www.nclabor.com/dol_statistics/stats.htm

http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show *Employment and Income 2006-2010*

"Although the actual number of North Carolinians who die from work-related injuries is not large (~50± per year), these deaths are unnecessary and preventable. Agriculture, forestry, fishing, and hunting; construction; and transportation and utilities are among the industries with the highest death rates in North Carolina." (NC Institute of Medicine-Healthy North Carolina 2020). Despite best efforts, the number of *full-time only* workers by county could not be located, hence calculating local rates to compare directly with the 2020 goal was not possible. Because the local numbers are so small, the rates above were calculated over a 5 year period to stabilize the values. However, it is always wise to interpret numbers less than 20 with caution. While the rates above appear to be better than the state standard, because they reflect all those working more than 15 hours/week, if there are a high number of part-time workers in any of the counties that were removed from the denominator, the rate could worsen significantly.

GRAPH 46

http://www.nclabor.com/dol_statistics/stats.htm *2011 for years 2006,-2008; 2012 for years 2009-2011*

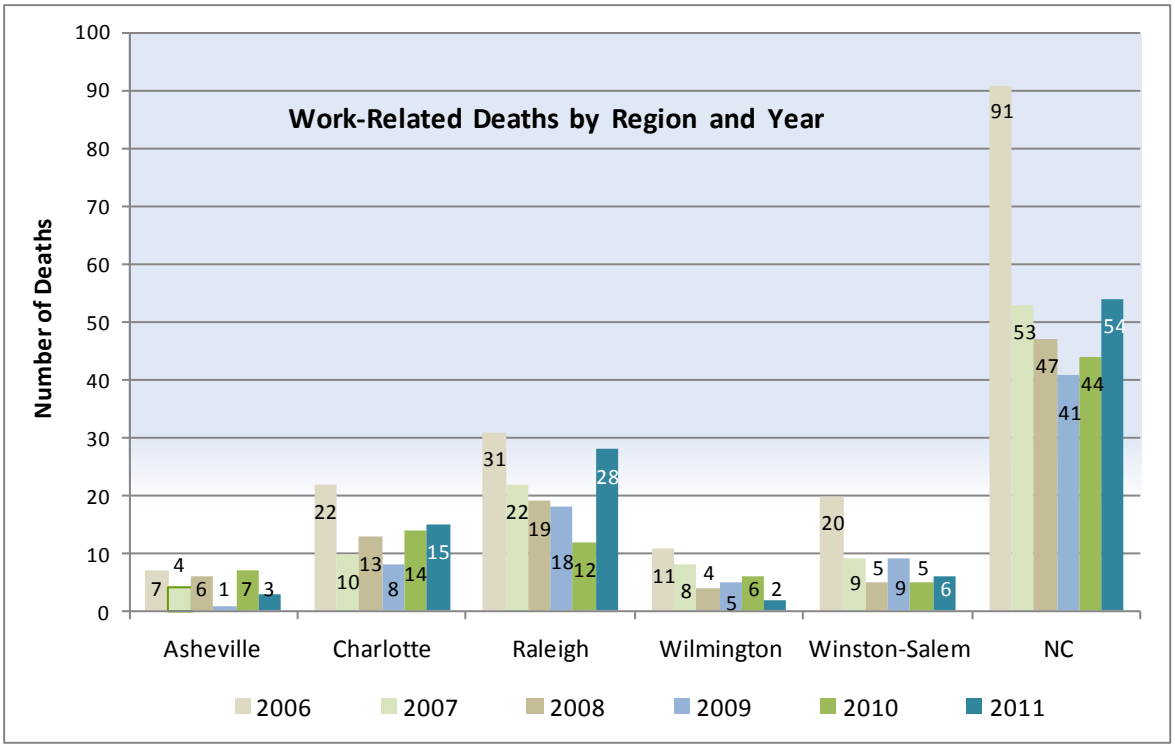


NCDOL Raleigh District Counties (44)		
Alamance	Granville	Pamlico
Beaufort	Greene	Pasquotank
Bertie	Halifax	Perquimans
Camden	Harnett	Person
Caswell	Hertford	Pitt
Chatham	Hoke	Richmond
Chowan	Hyde	Scotland
Craven	Johnston	Tyrell
Cumberland	Lee	Vance
Currituck	Lenior	Wake
Dare	Martin	Warren
Durham	Moore	Washington
Edgecombe	Nash	Wayne
Franklin	Northhampton	Wilson
Gates	Orange	

While the number of deaths in the Raleigh District appears disproportionate to the other districts, the Raleigh District contains 44% of our NC counties and 39.2% of the 2010 population. In 2011 the District had 51% of the state deaths, but last year it accounted for only 27%, and in previous years the percent hovered closer to 40% Two work-related deaths in Granville and 3 in Vance County occurred in the 5-year period (2006-2010) compared with a total of 130 for the Raleigh District. Granville's deaths were 1.5% of the total for the 5 year period while its population was 1.6% of the total. For Vance County the percent of deaths and population were not quite so aligned. Vance County had 2.3% of the work-related deaths for the Raleigh District but accounted for only 1.2% of the population. At the same time—the number of deaths were for the 5 years while the population is for 2010 only which could affect the percentage.

GRAPH 47

http://www.nclabor.com/dol_statistics/stats.htm *2011 for years 2006,-2008; 2012 for years 2009-2011*



Infectious Disease and Food Borne Illness

According to the CDC, "vaccine-preventable disease levels are at or near record lows. Even though most infants and toddlers have received all recommended vaccines by age 2, many under-immunized children remain, leaving the potential for outbreaks of disease. Many adolescents and adults are under-immunized as well, missing opportunities to protect themselves against diseases such as Hepatitis B, influenza, and pneumococcal disease." (http://www.cdc.gov/vaccines/vpd-vac/default.htm) Vaccination programs are signature public health—protecting the masses for a small price compared to the cost of treating *preventable* diseases and their consequences. Food borne illnesses, although not vaccine-preventable, are preventable by using safe food preparation and storage practices. http://www.cdc.gov/foodsafety/facts.html#mostcommon

Healthy North Carolina 2020 Objective

Increase the percent of children aged 19-35 months who receive the recommended vaccines to 91.3%

2010 Granville percent	**69 %**
2010 Vance percent	**69 %**
2010 NC County Average	**63 %**

North Carolina Immunization Registry (NCIR) accessed locally Feb 2012
http://www.immunize.nc.gov/data/immunizationrates.htm#annual

A variety of once common and serious diseases (polio, measles, mumps, rubella, diphtheria etc) are now controlled in the US through the use of vaccines, many geared towards children who, with immature immune systems are the most susceptible and often the least strong to ward off infection (http://www.cdc.gov/vaccines/vac-gen/howvpd.htm). North Carolina has established a central database, the NC Immunization Registry (NCIR), for public health departments and private medical providers to track immunizations for their patients. If all

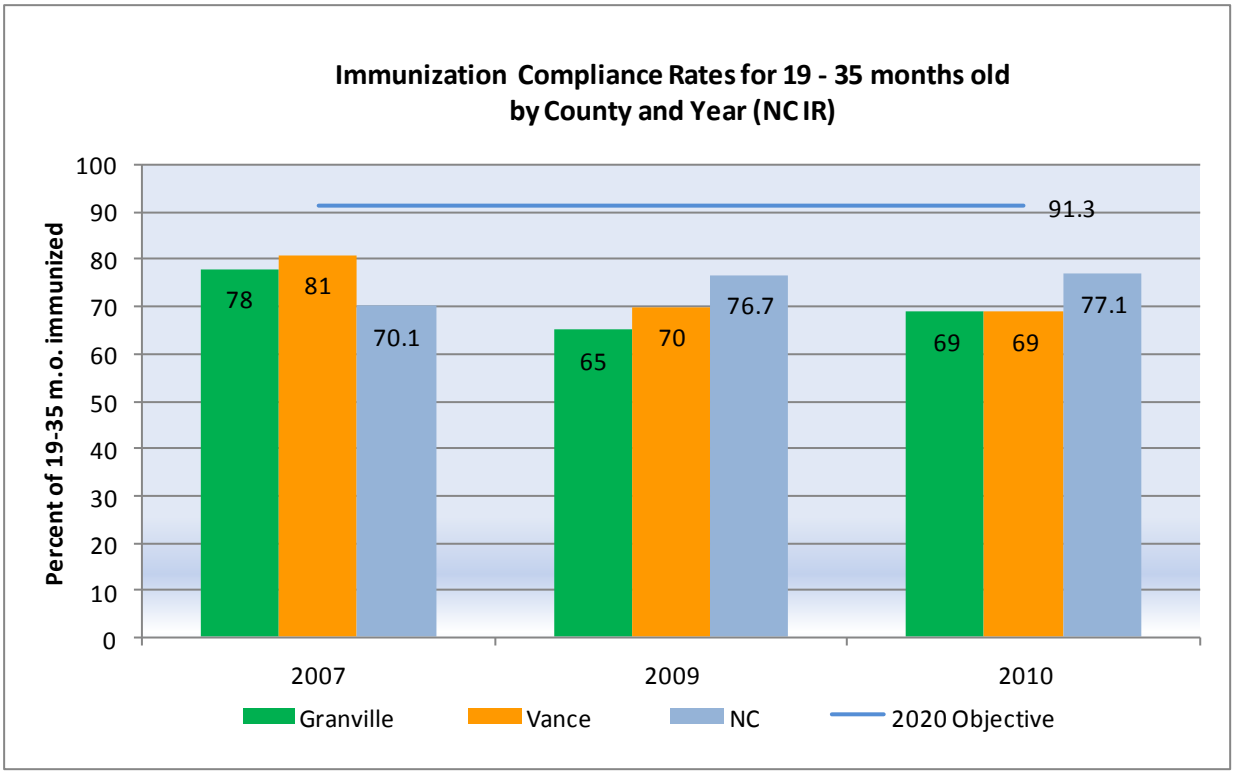
We try as hard as we can to follow up with patients to be sure they are on schedule with their shots. But some private providers follow a different schedule than what CDC recommends—that can affect whether a child is considered up-to-date or not. They also don't have the resources for someone to do immunization tracking like we do; we might be calling a patient to come in just for their shots. And if someone gets entered in once, but then goes out of county to another provider who isn't entering data into the [immunization] registry, we have no way of knowing what is going on with them—they aren't our client and they don't get care locally, yet we still try to meet the goals for everyone in the county...That's public health. Tiffanie Boone—PH Nurse

providers enter the shots they give a patient into the registry, then a complete shot record will be available for review if the patient changes providers, or needs proof of immunizations for another reason. This helps assure that patients are given only the immunizations they need and no extras, and to be sure there are no gaps in coverage. The NCIR also enables the state to monitor progress at the local level with statewide immunization goals. Yet it is not a *complete* measure of immunization coverage because it does not track anyone who has not first been entered into the database.

Granville and Vance Counties have both trended down from 2007 to 2010—Granville County by 11.5% and Vance County by 14.8%, while the state has improved by 10%. It is not clear why. Public Health outreach and follow-up methods remain consistent. One possible explanation is that babies receive a first shot at birth in the hospital. That shot will be entered into the NCIR—if they then continue care with a provider who does not use the registry, there is no way Public Health tracking nurses can know about them to be sure they are receiving the care needed, and that it is documented appropriately.

GRAPH 48

North Carolina Immunization Registry (NCIR) accessed locally Feb 2012



Healthy North Carolina 2020 Objective

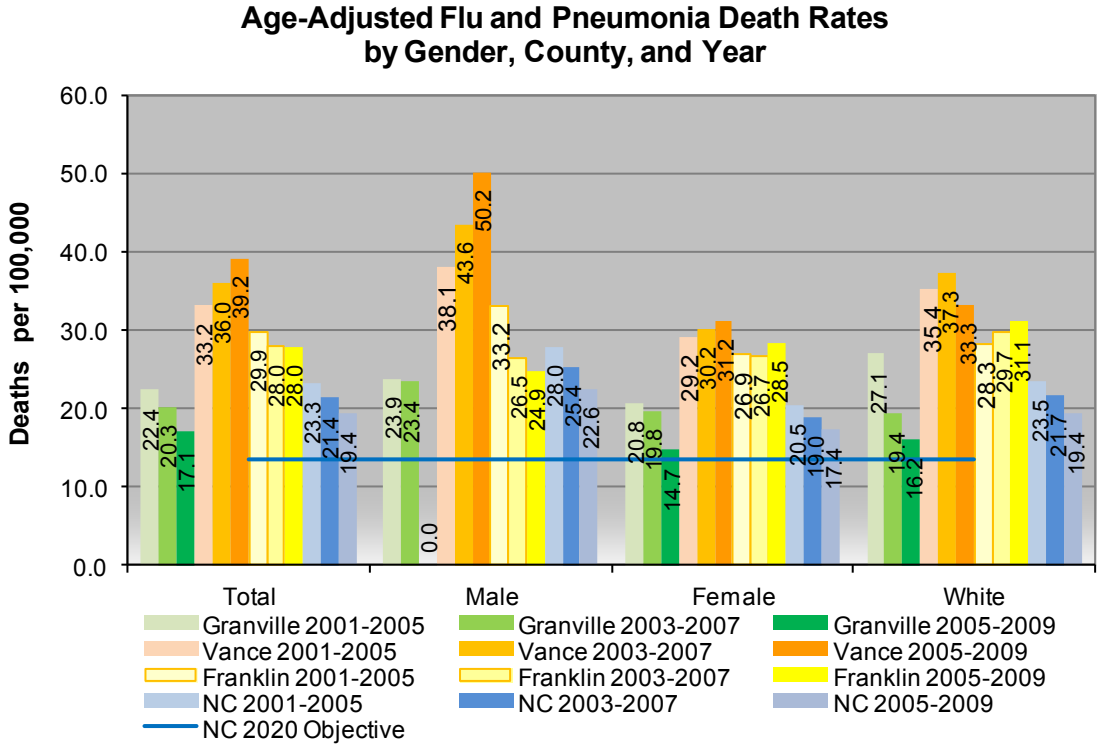
Reduce the pneumonia and influenza mortality rate (per 100,000 population) to	**13.5**
2006-2010 Granville age-adjusted rate per 100,000 population	**16.2**
2006-2010 Vance age-adjusted rate per 100,000 population	**36.7**
2006-2010 Franklin age-adjusted rate per 100,000 population	**24.7**
2006-2010 NC age-adjusted rate per 100,000 population	**18.6**

http://www.schs.state.nc.us/SCHS/data/databook/ 2006-2010 Age-adjusted death rates by county

For the 2005-09 period, flu and pneumonia combined were the 7th leading cause of death in NC, exceeding some cancers, kidney and liver disorders, and motor vehicle accidents. In Vance County it was the 4th cause of death behind only heart disease, all cancers combined, and stroke (and in Franklin 5th—tied with diabetes). The CDC recommends that everyone over 6 months old should get a seasonal vaccine. However, those over 65 years, children less than 2 years, and those with certain chronic diseases are particularly at risk. Anyone that lives with someone in a higher risk category should be vaccinated as well, so that they don't risk bringing the virus into the home to someone more susceptible, even while they may not be affected. http://www.cdc.gov/flu/keyfacts.htm. See appendix G for total minority trends in flu/pneumonia.

GRAPH 49

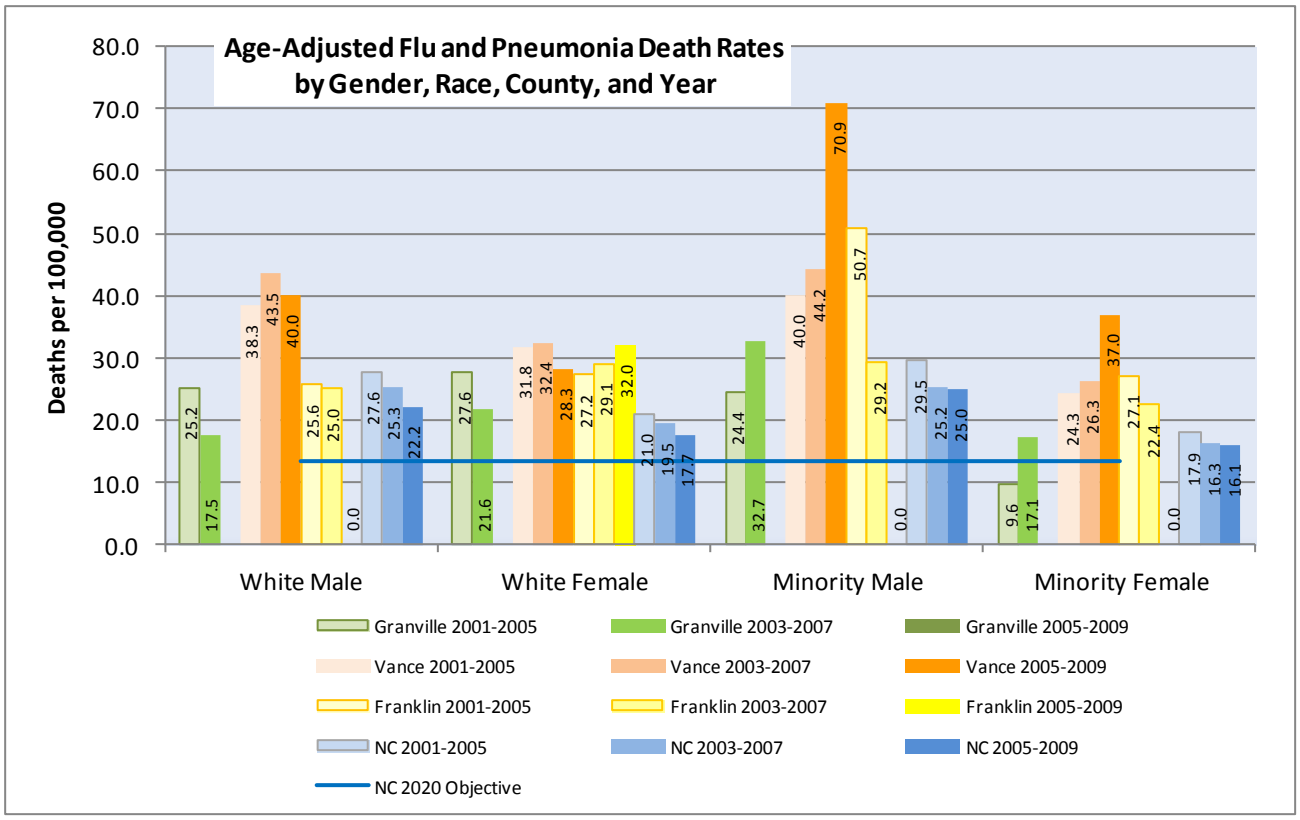
http://www.schs.state.nc.us/SCHS/data/databook/2011/CD21B%20racespecificsexspecific%20rates.rtf
http://www.schs.state.nc.us/SCHS/data/databook/2007/CD21B%20racespecificsexspecific%20rates.xls



Granville County saw the greatest decrease in flu/pneumonia deaths (23.7%) from the 2001-2005 five year period to 2006-2009. Franklin County realized a small decrease of 6.4% and the state one of 16.7%. In Vance County, males bear the greatest burden with a 2005-09 rate that is 60.8% higher than the female rate. In Franklin County the rates are much closer—in 2005-09, the female rate was 14.5% higher than that for males. In Granville County, with no male deaths during that same period, the burden lay with females—although historically the male rate has been slightly higher than the female, which is also the case for NC (29.9% higher in the 2006-09 period.). Death rates for gender/race combined are below. Starting with 2005-2009 data; NC no longer calculates a rate if the total deaths are below 20. Zeros/gaps appear for Granville and Franklin Counties when this occurred making multi-year and some county comparisons not possible. However, it is clear that Vance men and minority women have higher rates of death from flu/pneumonia and that rates have increased for minorities for the 2005-09 period from 2003-07: for minority men by 60.4% and minority women by 40.7%. Further, the Vance minority male rate is 77% higher than the white male rate and 91.6% higher than that for minority women

GRAPH 50

http://www.schs.state.nc.us/SCHS/data/databook/2011/CD21B%20racespecificsexspecific%20rates.rtf
http://www.schs.state.nc.us/SCHS/data/databook/2007/CD21B%20racespecificsexspecific%20rates.xls



Healthy North Carolina 2020 Objective

Decrease the average number of critical violations per restaurant/food stand to 5.5.

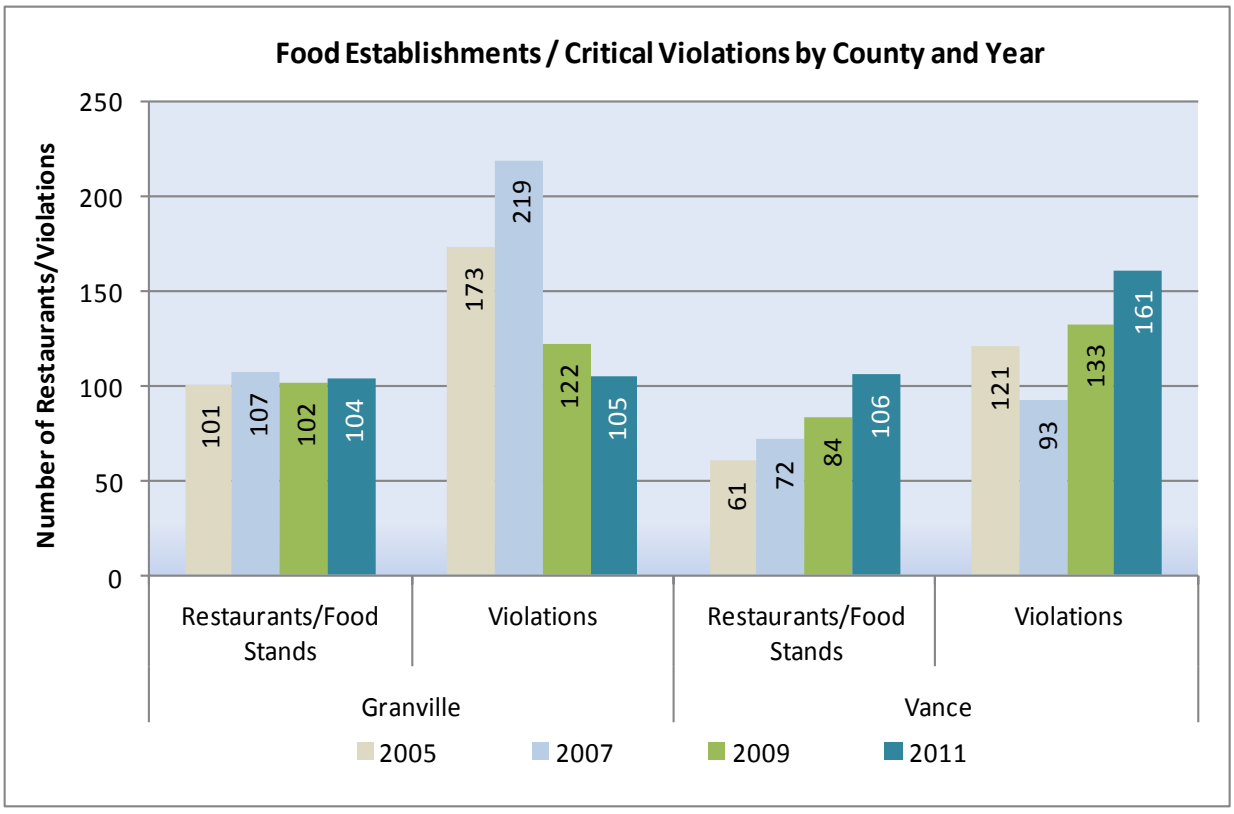
2011 Granville County ratio 1.01
2011 Vance County ratio 1.52
2009 NC Statewide ratio 6.1

Granville-Vance District Health Department Environmental Health Department email 2/27/12
http://healthstats.publichealth.nc.gov/indicator/view_numbers/CriticalViolationFoodEst.HNC2020.html

Along with vaccination programs, assuring food safety is another signature public health issue. With food being a vehicle for bringing infectious organisms to individuals, and innumerable pathways for introducing such organisms into the system (via farms, processing plants, storage facilities, markets, preparation sites/restaurants etc), it is no wonder that an oversight system is needed to protect consumers from poor handling practices along the way. CDC estimates that each year roughly 1 in 6 Americans (or 48 million people) gets sick, 128,000 are hospitalized, and 3,000 die of food borne diseases (http://www.cdc.gov/foodborneburden/). Restaurant inspections on the local level is one way to assure that safe practices are being used by vendors in order to protect the public good.

GRAPH 51

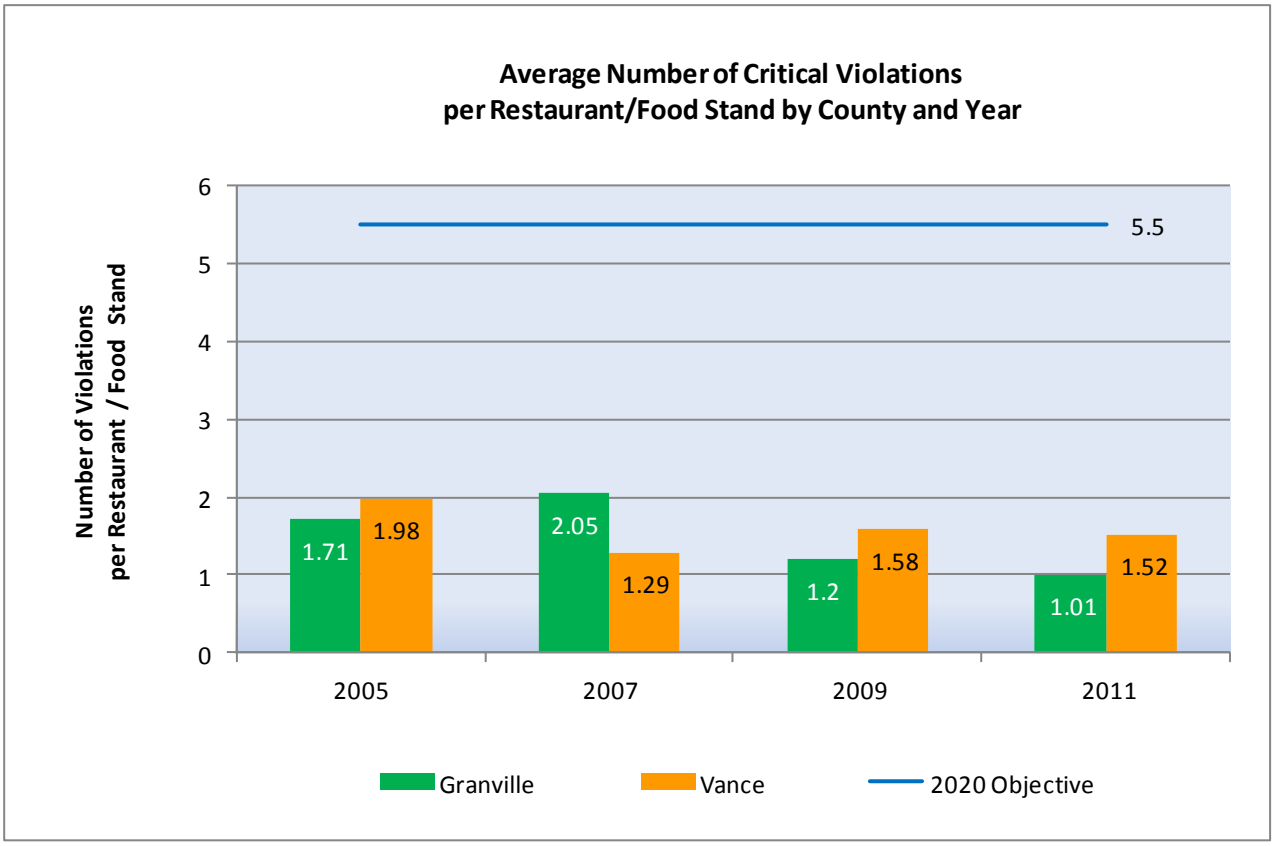
Granville-Vance District Health Department Environmental Health Department email 2/27/12



Local data was not available from state resources; as such, no data is presented for Franklin County, nor is trend data presented for the state. Data on Granville and Vance Counties was derived from the Granville-Vance District Environmental Health Program which is responsible for conducting inspections of restaurants and food stands quarterly. Numbers of both food establishments and critical violations are shown on the previous page, while the ratio of violations per establishment is shown below. Both counties ratios are well below the stated 2020 goal. Vance County's ratio has decreased 23% from 2005 to 2011 and Granville County's has decreased 70% such that they are 81.6% and 72.4% lower than the 2020 objective respectively. The Environmental Health Staff has partnered with Vance Granville Community College since 2003 to offer the Serv Safe food safety course (by the Nat'l Restaurant Assoc) twice a year to regional food handlers in an effort to yield precisely this low level of critical violations.

GRAPH 52

Granville-Vance District Health Department Environmental Health Department email 2/27/12



Social Determinants of Health

It is not possible to separate the likelihood of being at risk for certain health issues from the circumstances in which a person lives. As income goes up, so does access to concrete influences such as services, information, and opportunities. More subtle influences on health and resilience associated with income but no less real in impact can be the level of long-term hope and expectation one has versus the unremitting stressors of trying to make ends meet.

Healthy North Carolina 2020 Objective

Decrease the percent of individuals living in poverty to 12.5 %.

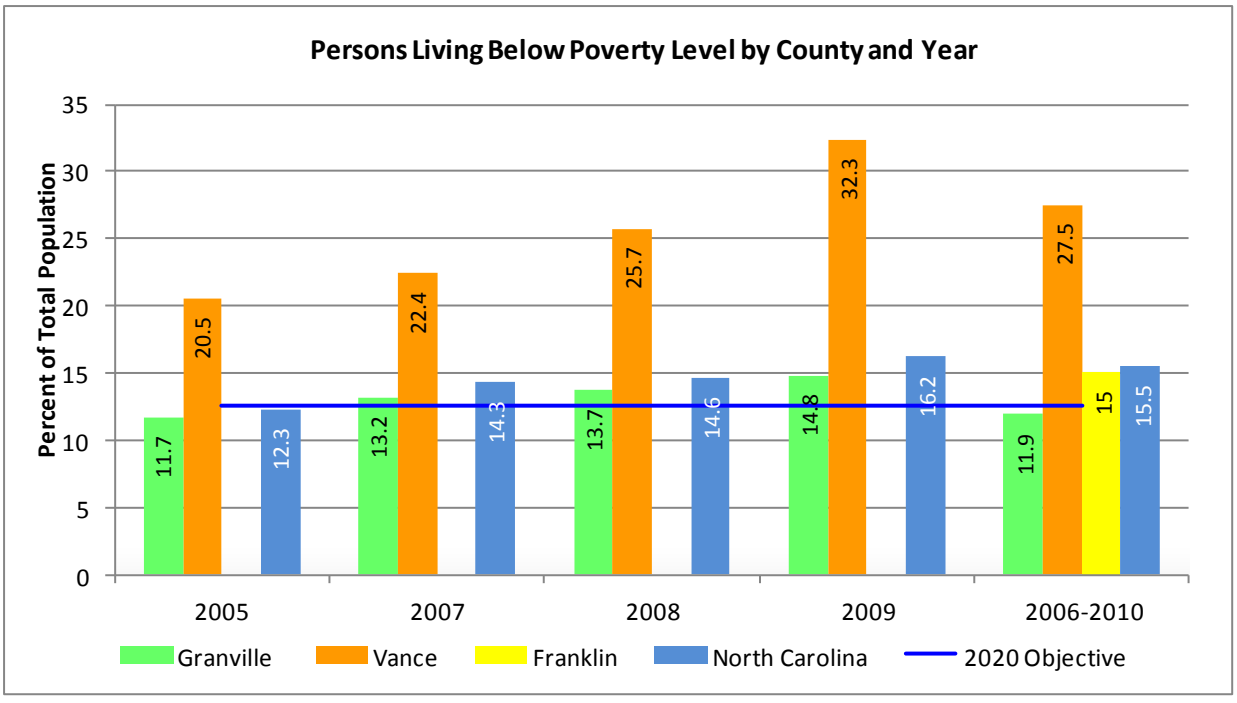
2006-2010 Granville percent	11.9 %
2006-2010 Vance percent	27.5 %
2006-2010 Franklin percent	15.0 %
2006-2010 NC Statewide percent	15.5 %

http://quickfacts.census.gov/qfd/index.html

With this in mind, how many in a given area live in poverty can be an indicator of their health status. The US Department of Health and Human Services indicates that the poor are more likely to have risk factors such as high weight and smoking, as well as use less preventive services and health care overall. They also are more likely to be disabled or chronically ill, and have a shorter life expectancy than those with higher incomes (http://www.answers.com/topic/poverty-and-health). Data for Franklin County for past years was not readily available while researching

GRAPH 53

http://quickfacts.census.gov/qfd/states/37/37077.html
http://quickfacts.census.gov/qfd/states/37/37181.html
http://quickfacts.census.gov/qfd/states/37/37069.html
http://quickfacts.census.gov/qfd/states/37000.html

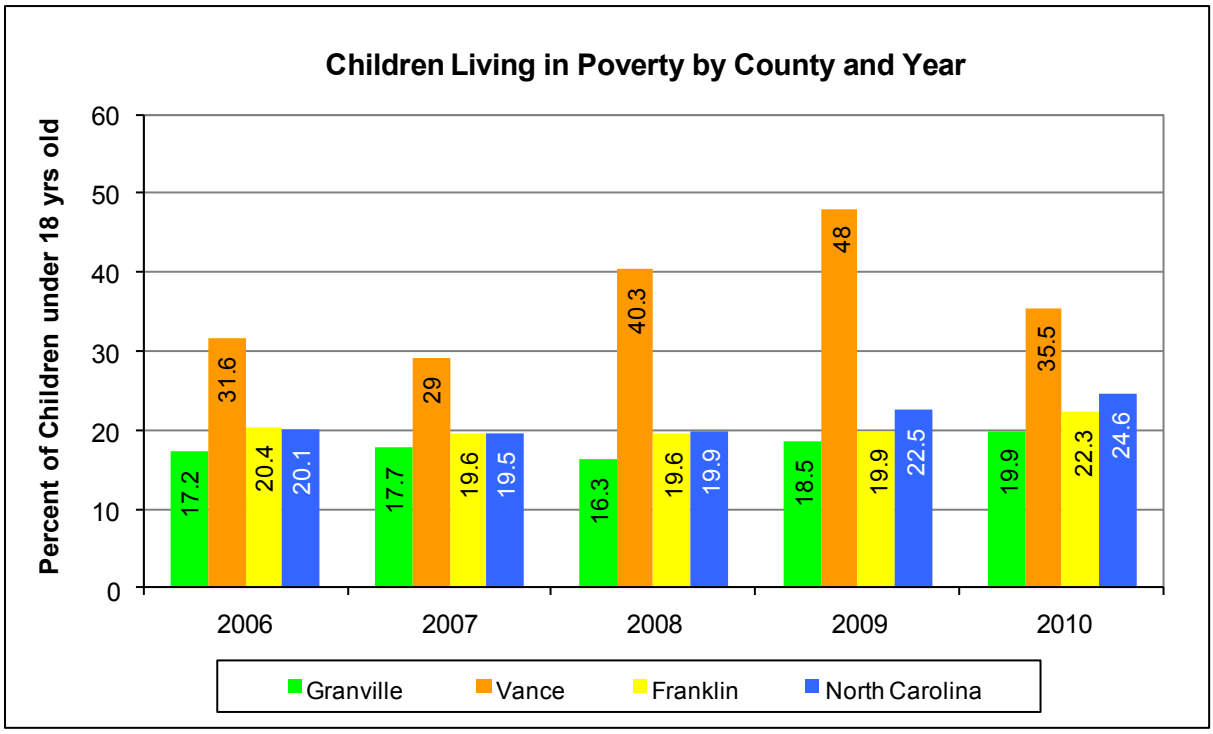


parameter, hence the gap for the single years in graph 53 and the decision to show the 2006-10 5 year period for each of the 3 counties and the state. Given the current economy, the rise in the percent living in poverty from 2005 to 2009 for NC and Granville County (by 26.5% and 31.7% respectively) is not surprising. Far more surprising (and disheartening) is to see a 57.6 percent rise in the same for Vance County whose level was already 66.7% higher than the state average in 2005, such that in 2009 it was double the state's level. For the 5 year period, the percent of Vance County residents living in poverty is 77.4% higher than the state, while the level in Granville County remains 23.2 percent lower than for NC overall.

The graph below indicates clearly that children bear an even greater burden of poverty. For Granville and Vance Counties, and NC in 2009 the percent in poverty was 25%, 48.6%, and 38.9% respectively for children less than 18 years than it was for the population as a whole. Most disturbing was a level of 48% for Vance County children in 2009; fortunately it decreased 26% by 2010. Yet it is still 44.3% higher than the state's level.

GRAPH 54

http://datacenter.kidscount.org/DataBook/2011/DefinitionsSources.aspx#Poverty
http://datacenter.kidscount.org/data/bystate/stateprofile.aspx?state=NC&cat=1445&group=Category&loc=4948&dt=1%2c3%2c2%2c4
http://datacenter.kidscount.org/data/bystate/stateprofile.aspx?state=NC&cat=1445&group=Category&loc=5000&dt=1%2c3%2c2%2c4
http://datacenter.kidscount.org/data/bystate/stateprofile.aspx?state=NC&cat=1445&group=Category&loc=4944&dt=1%2c3%2c2%2c4
http://datacenter.kidscount.org/data/bystate/stateprofile.aspx?state=NC&cat=1445&group=Category&loc=35&dt=1%2c3%2c2%2c4



Healthy North Carolina 2020 Objective

Increase the 4 year high school graduation rate to 94.6 %.

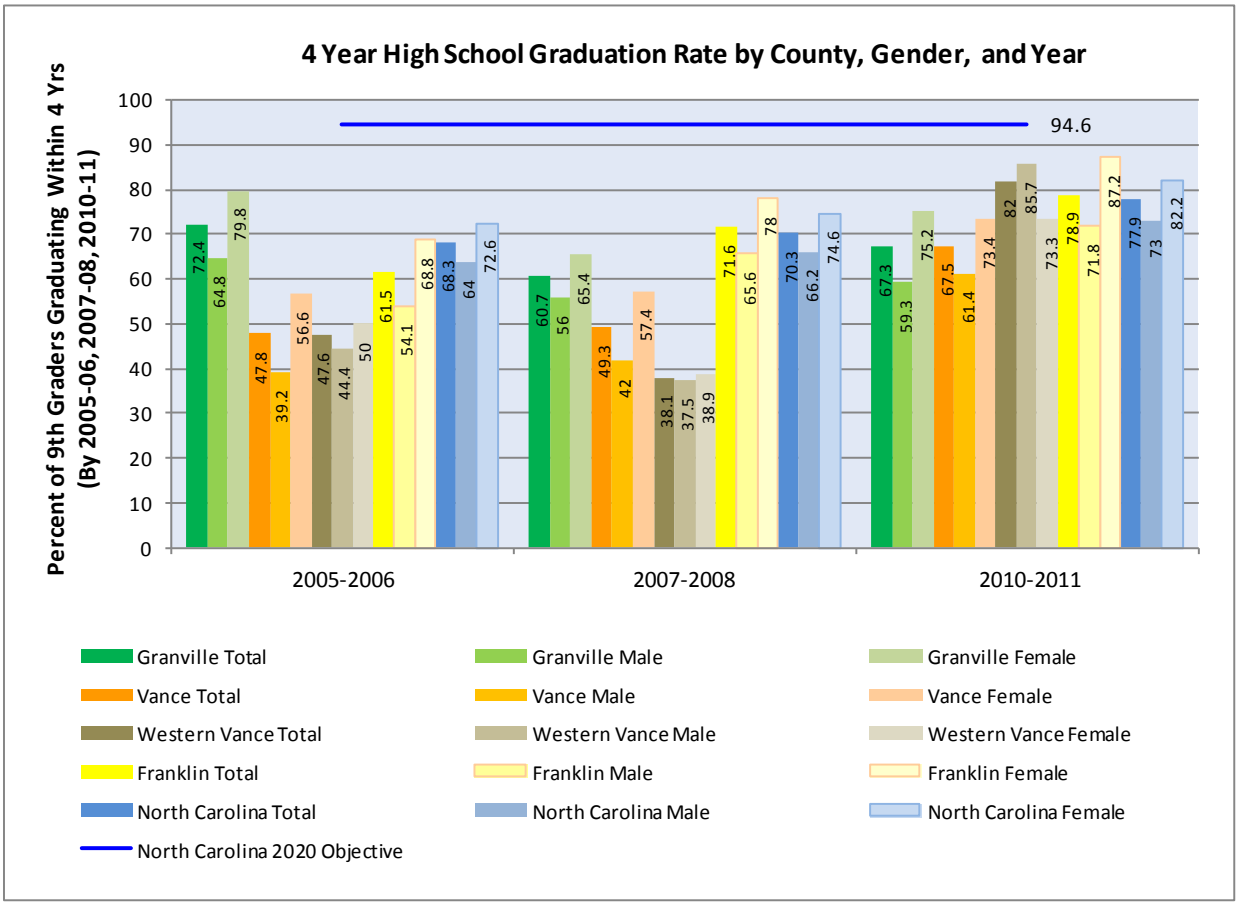
2010-2011 Granville rate	**67.3 %**
2010-2011 Vance rate	**67.5 %**
2010-2011 Franklin rate	**78.9 %**
2010-2011 NC Statewide rate	**77.9 %**

http://www.dpi.state.nc.us/accountability/reporting/cohortgradrate Graduating 2010-11

Over a lifetime, according to the Organization for Economic Cooperation and Development (OECD), the average high school graduate earns $470,000 more than a high school dropout. A high school dropout earns ~35 % less than a high school graduate and faces greater risk of unemployment—with nearly 1/3 of male and more than 1/2 of females that don't complete high school being unemployed (http://www.ehow.com/about_4815076_importance-high-school-education.html#ixzz1o7LyMelf). The graph below shows what percent of high schoolers in a given class graduate (by year and gender) within 4 years of starting the 9th grade. Western Vance High School was also reviewed because of striking improvements with a high need population.

GRAPH 55

http://www.dpi.state.nc.us/accountability/reporting/cohortgradrate Graduating 2005-06, 2007-08, 2010-11

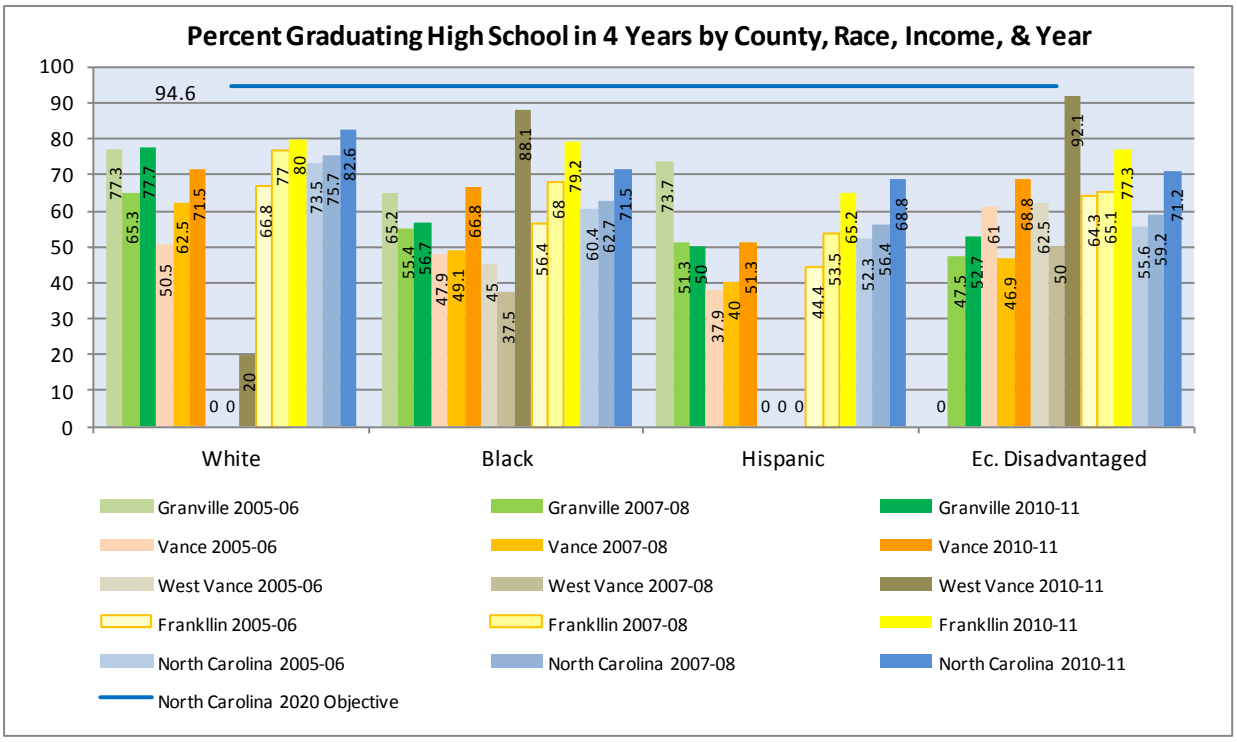


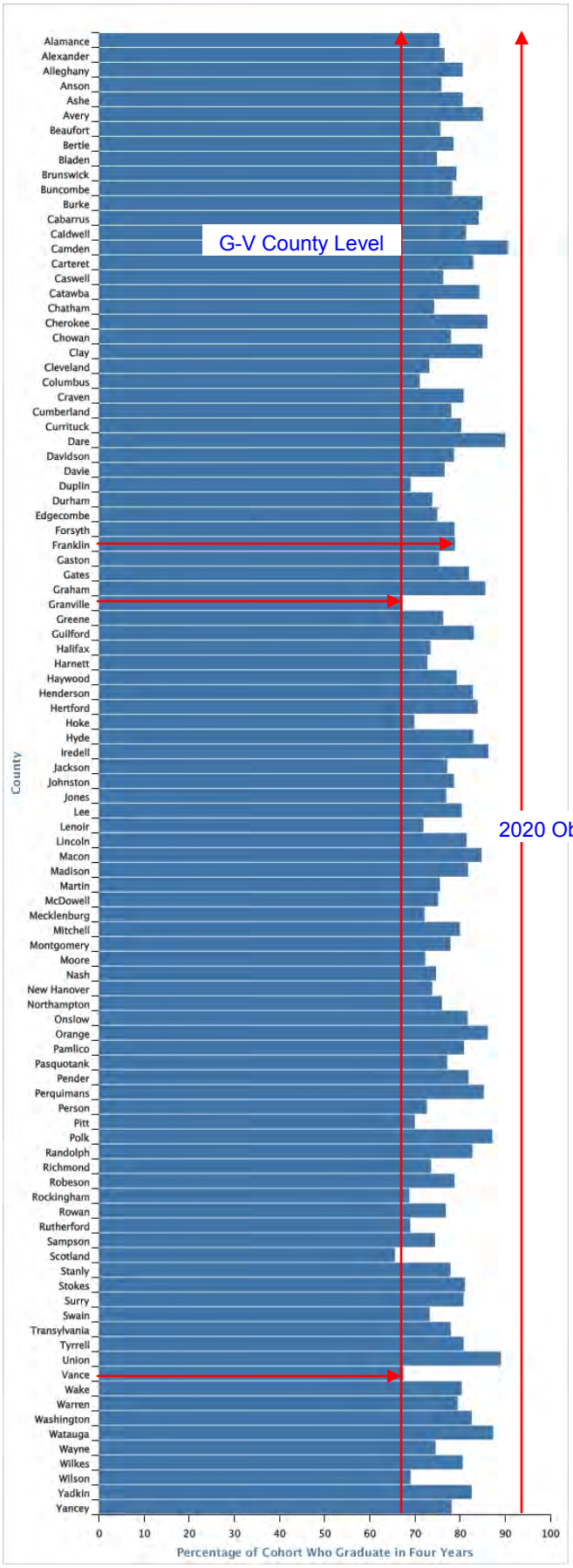
It is worth noting that the 4 year graduation rate does not include private or charter schools, nor does it consider those students that may graduate after 4 years. Across the board, females are graduating in higher numbers than males (in 2010-11 by 26.8% GC, 19.5% VC, 21.4% FC, 12.6% NC). From the 2005-06 graduating class to the 2010-11, Granville County saw a 7% decrease in its rate while Vance and Franklin Counties respectively saw 41.2% and 28.3% increases. Western Vance High School's rate improved by 72.3% and the state's by 14.1%. In 2003, Western Vance started to recruit HS sophomores who were already off-track for graduation (either due to failing courses or excessive absences), contracting with students and caregivers to engage in the mission to graduate on time. Its surge in the graduation rate is likely related to this change. Further, in 2004-05, the NC Board of Education awarded supplemental funds to 16 disadvantaged school districts, including Vance and Franklin counties, to address funding difference disparities which may have had the desired impact.

When looking at how the races and the economically disadvantaged fare, most jurisdictions have seen solid improvements for all groups from 2005-06 to 2010-11. However, while the rate for Granville County whites has remained stable, it has fallen 14.3% and 32.2% for blacks and Hispanics respectively. While the GC rate for low income students has increased by 10.9% since 2005-06, it remains 26% lower than the state rate. In Granville and Vance

GRAPH 56

http://www.dpi.state.nc.us/accountability/reporting/cohortgradrate Graduating 2005-06, 2007-08, 2010-11

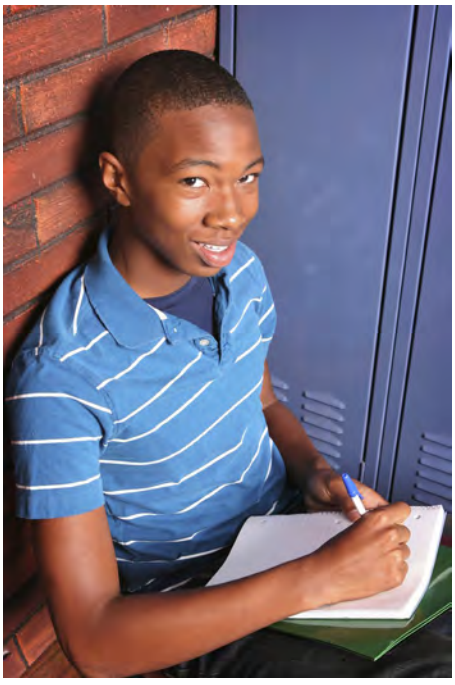




Counties, whites are graduating at higher rates. In the 2010-11 year, white graduation rates were higher than those for blacks by 37% (GC), 7% (VC), 1% (FC), and 15.5% (NC). Hispanic students have the lowest rates, with all three counties' 4 year graduation rate being lower than NC's (GC—27.3%, VC—25.4%, FC—3.8%). The economically disadvantaged have made strides; in addition to Granville's increase from 2005-06 to 2010-11, Vance has increased by 12.8%, Franklin by 20.2%, and NC by 28.1%. However, Granville and Vance levels remain lower than the state (26% and 3.4% respectively), while Franklin is 86% and Western Vance is 29.4% higher. For more information on kids in Vance and Granville Counties, go to Appendix H.

GRAPH 57
2010-2011
4 Year High School Graduation Rate

http://healthstats.publichealth.nc.gov/indicator/view/HSGradRate.County.html



Healthy North Carolina 2020 Objective

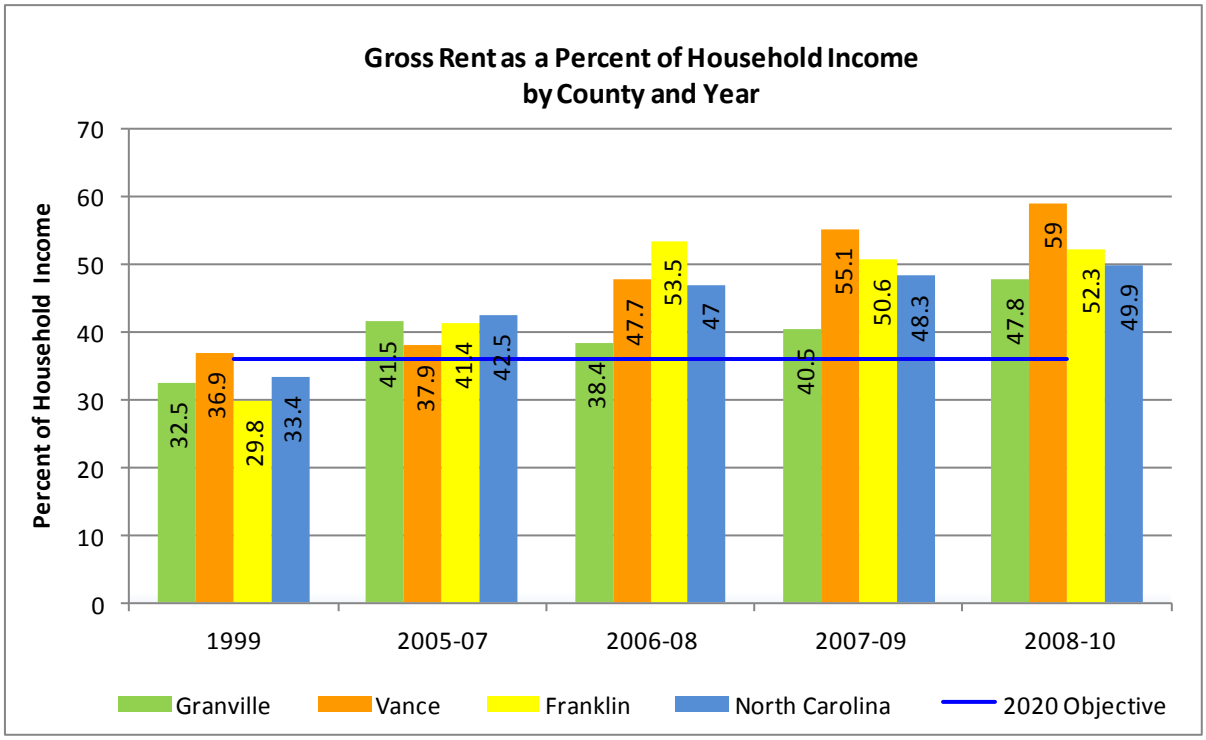
Decrease the percent of people spending more than 30% of their income on rental housing to	**36.1 %**
2008 – 2010 Granville County	**47.8 %**
2008 – 2010 Vance County.	**59.0 %**
2008 – 2010 Franklin County	**52.3 %**
2008 – 2010 NC Statewide	**49.9 %**

http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_3YR_DP04&prodType=table

The more a household spends on housing, the less that remains for other essentials such as utilities, transportation, food, clothing, and medical care. Further, if the money spent is for rent, it becomes an investment in someone else's assets rather than one's own—no collateral is gained beyond a 30 day stay. If housing costs are sufficiently high, other needs may go un-met, or substandard housing is chosen as an accommodation, both which impact well-being. In the graph below, 3 year estimates form the American Community Survey are available from 2005 on. 1 year data from the 2000 census is included for additional comparison. In viewing the trend of increasing rental costs as a percent of income over time, it is possible that in the 2005-07 period this could be related to housing and rental prices changing more than income.

GRAPH 58

http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_00_SF3_DP4&prodType=table
http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_07_3YR_DP3YR4&prodType=table



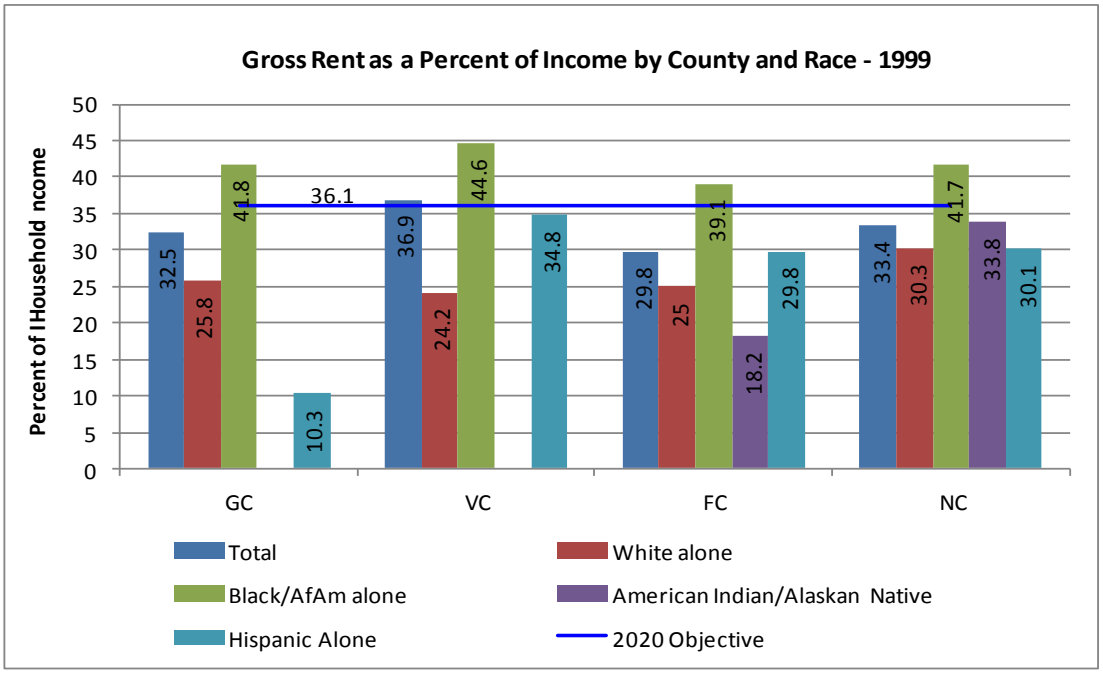
http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_00_SF3_DP4&prodType=table

However, as the housing bubble burst, growth slowed, and job losses increased, it is possible that later increases in income being spent on rent are related more to declining incomes than increasing rent. Given that Vance County's 2005-07 percent was the lowest of the group and its unemployment increases the greatest (103%) since 2007, this supposition is not unreasonable. It is also striking to see that the 2020 goal is to return to 1999 levels. Granville County residents fared the best during the years from the 2005-07 to 2008-10 period with "only" a 15.2% increase in the amount of income spent on rent. In contrast Vance County percent increased by 55.7% and Franklins by 26.3%. North Carolina income spent on rent increased by 17.4% such that Granville County was 4.2% lower than the state for the 2008-10 period while Vance County was 18.2% higher.

Graph 59 shows the percent of income spent on rent by race. Although data by race is only available for 1999, it gives at least a glimpse of disparities that are likely still at play. While the income spent on rent by Hispanics in Granville County, and by American Indians/Alaskan Natives (the latter is unlikely figuring into this group in NC) in Franklin County is surprisingly low, the disparity between whites and blacks is consistent with other trends. In 1999 the percent income spent by blacks on rent exceeded whites across the board: by 84.3% (VC), 62.0% (GC), 56.4% (FC), and by 37.6% more statewide. Further, while Vance blacks are "only" spending 7.2% more of their income on rent than those statewide, Vance whites are spending 20% less than NC whites—revealing the disparity in a different way.

GRAPH 59

http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_00_SF4_DP4&prodType=table
http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_08_3YR_DP3YR4&prodType=table
http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_09_3YR_DP3YR4&prodType=table
http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_3YR_DP04&prodType=table



Chronic Disease

Heart Disease, cancer, stroke, and chronic lung disease are the top 4 causes of death in North Carolina and our 3 comparison counties, with diabetes not far behind. When looking at causes of premature death for 40-64 year olds, the top 3 are cancer, heart, disease, and diabetes—all chronic conditions which can be impacted by one's activity levels, eating habits, and tobacco use. Although risk factors such as age, gender, and family history cannot be modified, efforts to improve lifestyle behaviors can not only decrease the risk of premature death from these chronic diseases as well as the risk of falls (re: activity) but can also improve quality of life.

Healthy Carolinians 2010 Objective

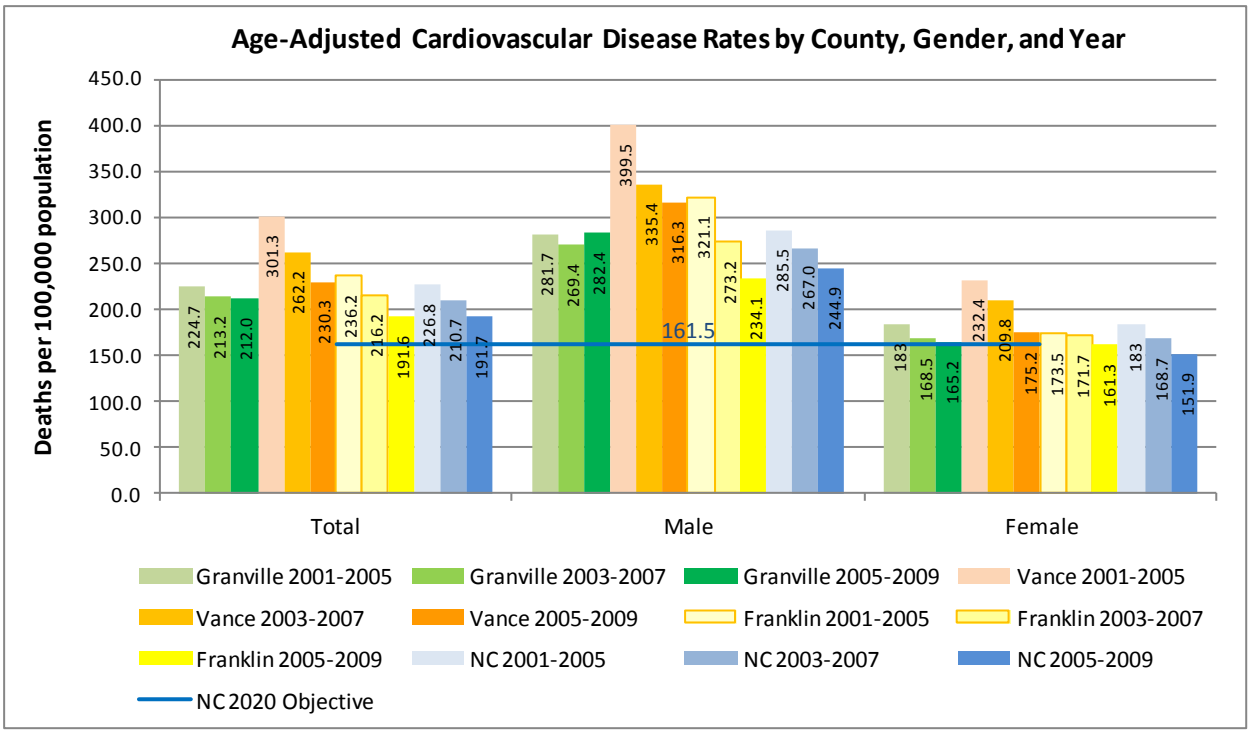
Reduce the cardiovascular disease mortality rate (per 100,000 population) to	**161.5**
2005-2009 Granville age-adjusted rate per 100,000	**212.0**
2005-2009 Vance age-adjusted rate per 100,000	**230.3**
2005-2009 Franklin age-adjusted rate per 100,000	**191.6**
2005-2009 NC age-adjusted rate per 100,000	**191.7**

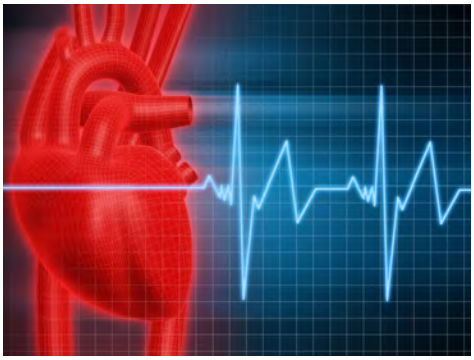
http://www.schs.state.nc.us/SCHS/data/databook/2011/

The death rate from cardiovascular (heart) disease has decreased across the board from the 2001-05 to the 2005-09 period: for Granville County by 5.6%, for Vance by 23.6% for Franklin by 18.9% and, for the state as a whole, by 9%. While females do succumb to heart disease, their death rates are near the 2020 objective; so men still clearly bear the burden (below).

GRAPH 60

http://www.schs.state.nc.us/SCHS/data/databook/ *2007, 2009, 2011*





Death rates for men exceed those for women by 70.9% in Granville, 80.5% in Vance, 45.1% in Franklin, and 61.2% for NC. The graph below further illustrates death rates according to race and gender by year. For all 3 counties and the state, the most recent death rates for white women are below the stated 2020 goal. For that 2005-09 period, minority females are within 16% of the goal, with the exception of Vance County for whom the 2005-09 death rate exceeds the goal by 45.2%. While recent data on poverty are not available by race, it is quite possible that the stressors of nearly 1 in 3 Vance County residents living in poverty are being borne out in these death rates. In the same 5 year period, white males exceed the 2020 goal significantly—Granville and Vance Counties by 62.7% and 69.5% respectively, Franklin County by 38.3% and NC by 46.2%. But the overwhelming disparity is born by black men whose death rates exceed the target by 105% for Granville County, 140% for Vance, 62.1% for Franklin, and 82.0% for NC overall.

"With regard to the health of our community, the emphasis should be on prevention of disease. We need to be proactive in reducing risks of illness and having regular checkups rather waiting for disease to strike. It makes more sense to spend more of our health dollars on preventive medicine, especially in these critical economic times." Dr. William Beverly Tucker

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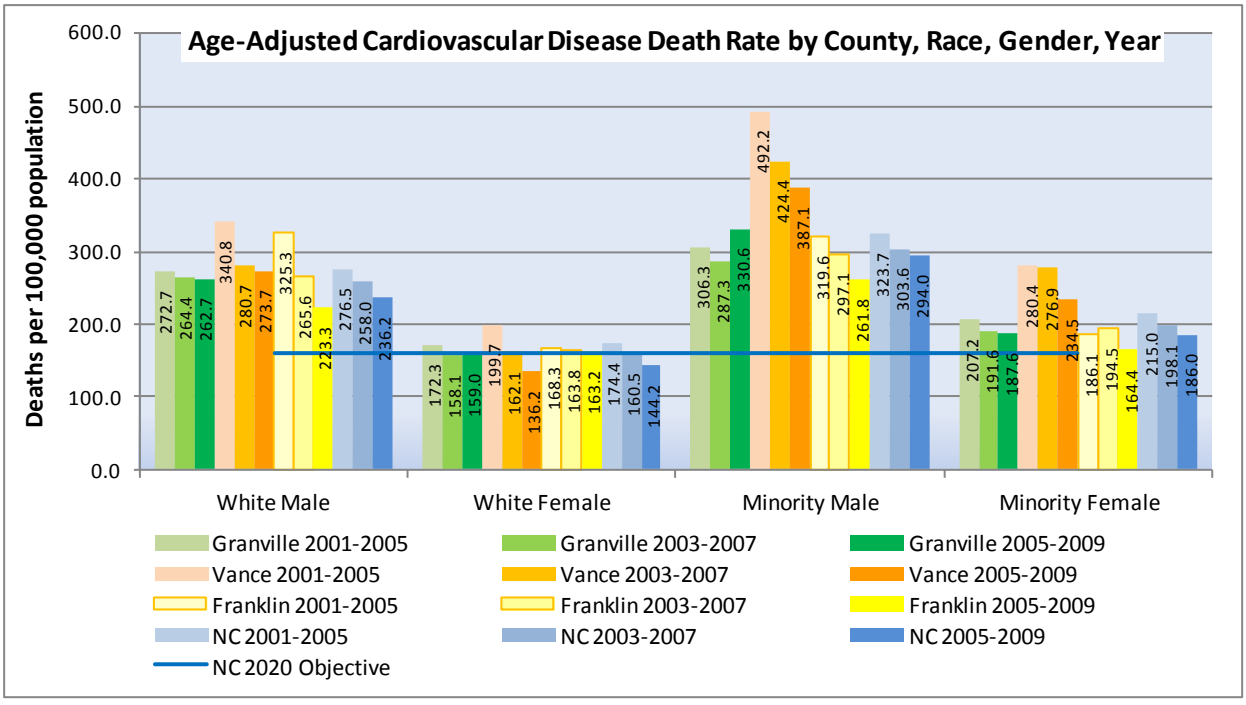
GRAPH 61

http://www.schs.state.nc.us/SCHS/data/databook/ *2007, 2009, 2011*



Healthy North Carolina 2020 Objective

Decrease the percent of adults with diabetes to	**8.6%**
2010 BRFSS Piedmont Rate*	8.6 %
2010 BRFSS NC Statewide	9.8 %

http://www.schs.state.nc.us/SCHS/brfss/2010/nc/all/diabete2.html

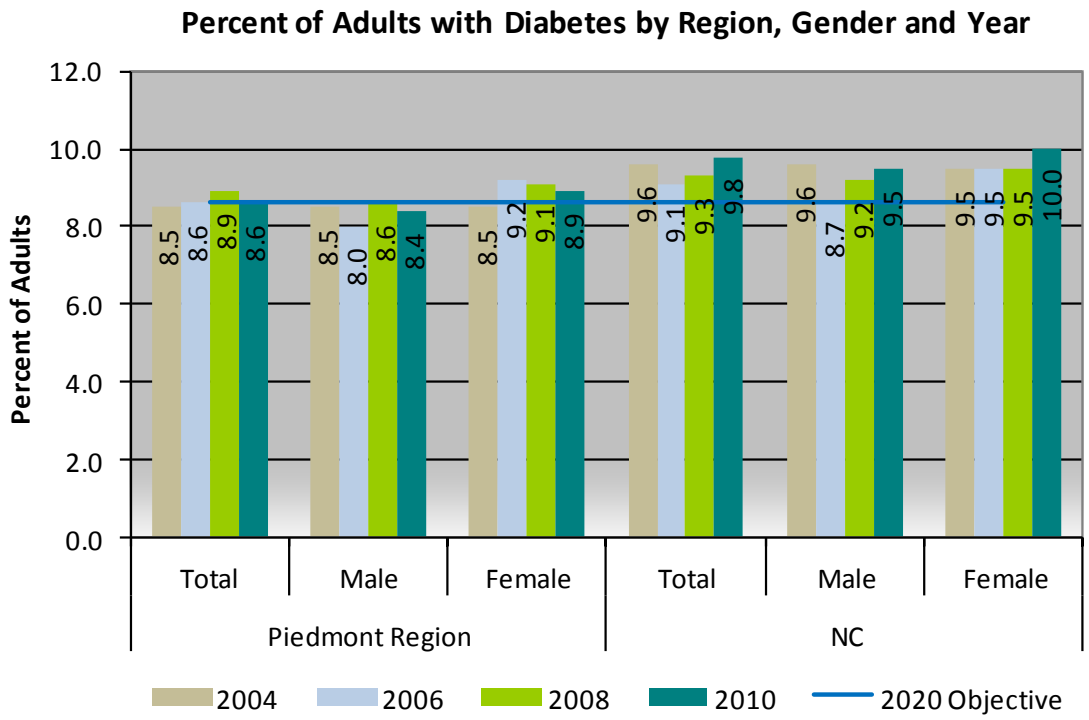
2011 Granville Survey response	7 %
2011 Vance Survey response	12 %
2005-2009 Granville age-adjusted death rate per 100,000	42.0
2005-2009 Vance age-adjusted death rate per 100,000	28.0
2005-2009 Franklin age-adjusted death rate per 100,000	26.0
2005-2009 NC Statewide age-adjusted death rate/100,000	23.6

http://www.schs.state.nc.us/SCHS/data/databook/2011/

The American Diabetes Association estimates that in 2006 diabetes cost NC $5.3 million. Of this, excess medical costs associated with the disease were ~$3.6 million and lost productivity was valued at ~$1.7 million. Medical expenditures for those diagnosed are ~2 times higher than for those without diabetes, while approximately $1 in $10 health care dollars is attributed to diabetes. http://www.diabetes.org/advocate/resources/cost-of-diabetes.html. Type 2 diabetes, for which lack of activity and high weight are primary risk factors, accounts for at least 9/10 of cases, and is being seen in younger populations as obesity rates rise. With the number of normal weight high schoolers (objective 4) actually *decreasing* locally, the potential for long-term impacts of diabetes increases if the age of diagnosis lowers.

GRAPH 62

http://www.schs.state.nc.us/SCHS/brfss/results.html *Diabetes 2004, 2006, 1008, 2010*

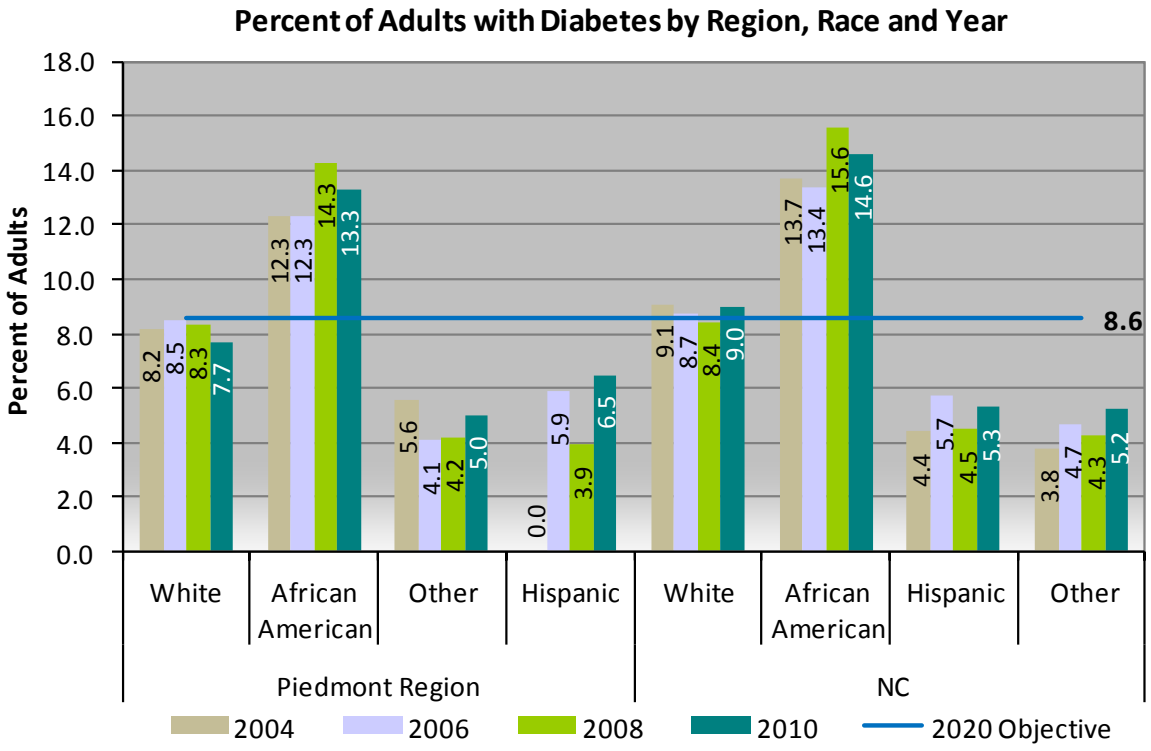


*A complete list of counties in the Region is on page 115

According to the BRFSS results in graph 63 diabetes diagnoses have been fairly stable for the Piedmont region and the state, with only small movement for females (a 4.7% increase from 2004 to 2010 in the Piedmont, and 5.3% for women across the state). More revealing are the rates by race, which show that in 2010 there were 72.7% more African Americans in the Piedmont with diabetes than whites. Further, while the percent of Piedmont whites with diabetes decreased 6% from 2004 to 2010, the percent of African Americans increased by 8%. A similar increase appears to occur among Hispanics, however, the 2004 value is not available because numbers less than 20 are not included. Granville and Vance 2011 survey results are not particularly aligned with mortality rates which show Granville's prevalence of disease to be 41.7% less than Vance's. However, the death rates (see appendix I) for 40-64 yr olds (2005-09) show that Vance's rate was actually 4.7% lower than Granville's (not statistically significant). Indeed, the death rate from diabetes in Granville County increased 53.3% from 2001-05 to 2005-09, while the increases were much smaller for Vance (9.3%) and Franklin counties (12.4%). The NC rate decreased by 3.6% for this period.

GRAPH 63

http://www.schs.state.nc.us/SCHS/brfss/results.html *Diabetes 2004, 2006, 1008, 2010*



Healthy North Carolina 2020 Objective

Reduce the colorectal cancer mortality rate (per 100,000 population) to 10.1

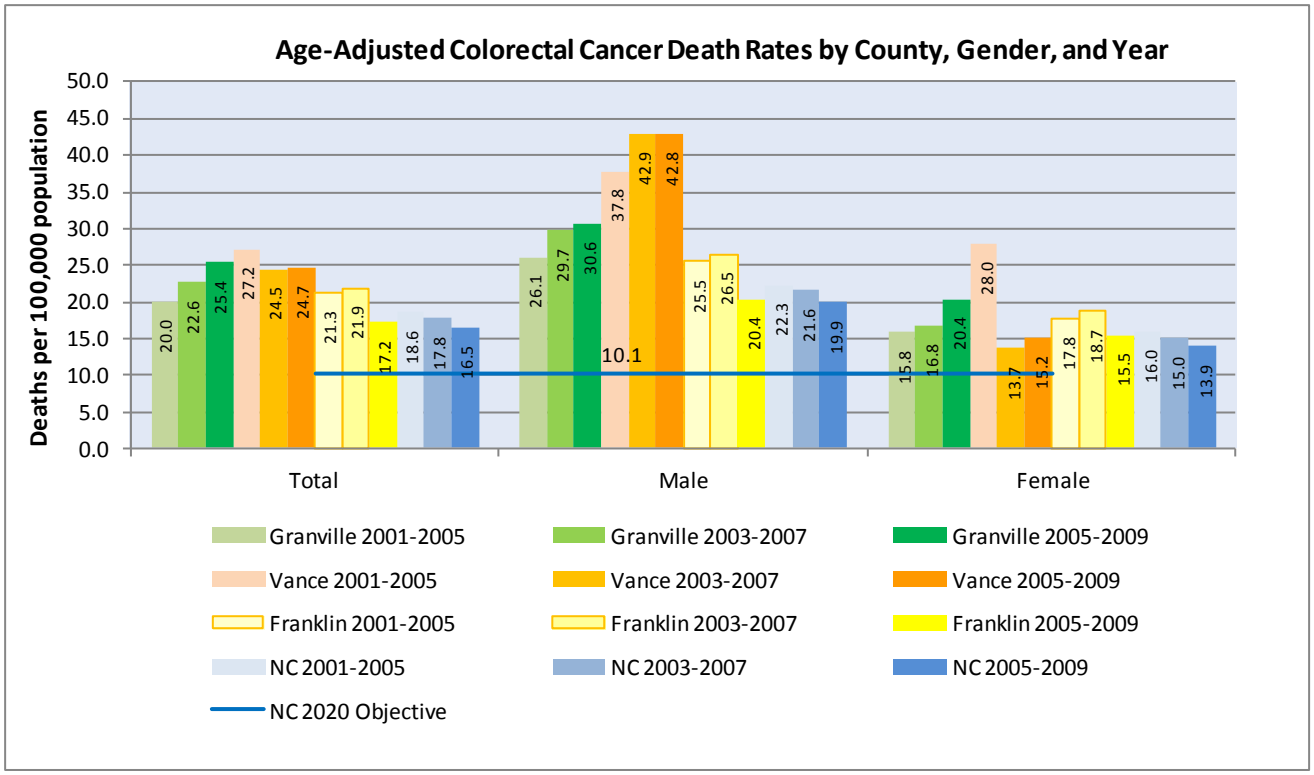
2005-2009 Granville age-adjusted rate per 100,000	25.4
2005-2009 Vance age-adjusted rate per 100,000	24.7
2005-2009 Franklin age-adjusted rate per 100,000	17.2
2005-2009 NC Statewide age-adjusted rate per 100,000	16.5

http://www.schs.state.nc.us/SCHS/data/databook/2011/

After lung cancer, according to the CDC, colorectal cancer is the second leading cancer killer in the US with about 1/3 as many deaths nationwide (http://www.cdc.gov/cancer/colorectal/). Locally colorectal cancer death rates remain below those for diabetes in the 2005-09 period, but a view of trends in Granville and Vance Counties bears watching. The overall rate for Granville increased by 27% from 2001-05 to 2005-09, and although the same rate for Vance decreased by 9%, the rate for Vance males increased by 13.2% and that for Granville men increased by 17.2%. During the same time period, the death rate for Franklin men decreased by 20% and for the state by 11.3%

GRAPH 64

http://www.schs.state.nc.us/SCHS/data/databook/2011/
http://www.schs.state.nc.us/SCHS/data/databook/2009
http://www.schs.state.nc.us/SCHS/data/databook/2007

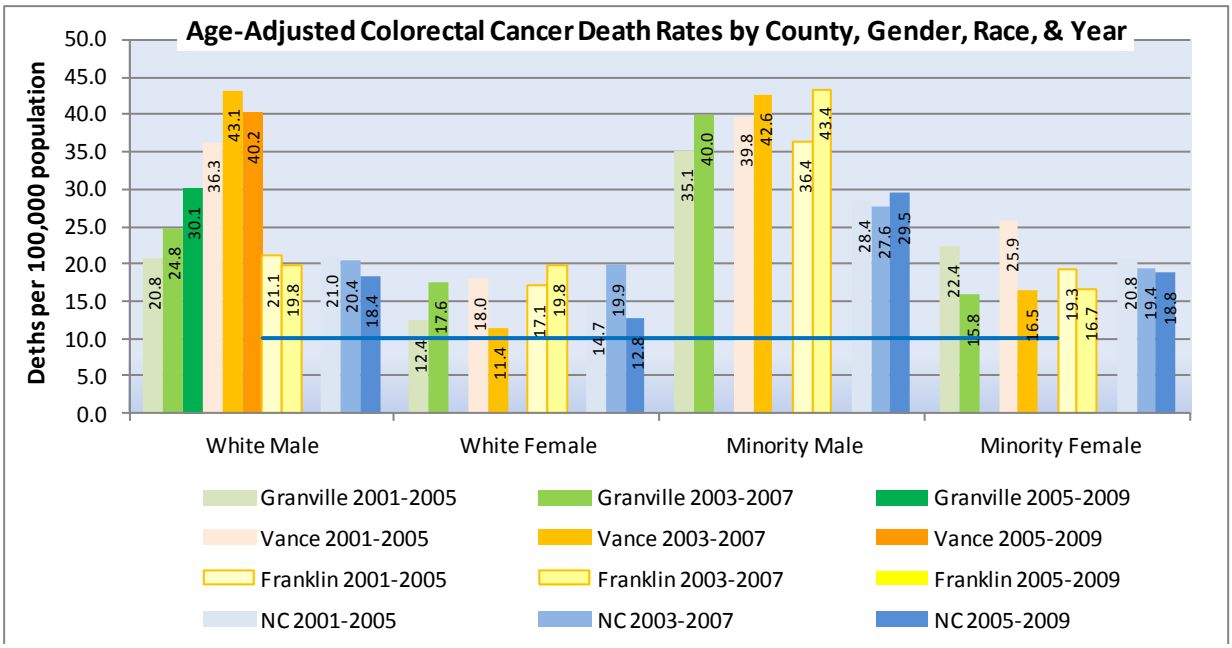


We often hear the phrase "there is no silver bullet" as it pertains to solving complex problems. Improving our county's health status is one of those complex issues that will take all of us working ... together to have an impact . Our health care providers, our community health organizations, our churches, our neighborhoods, and each citizen can do a lot to influence health. However, it will take courage and discipline within each person to make good health related decisions for the overall county's health status to move significantly. We cannot delegate our health to a doctor or hospital or health department. We must make our health our own personal business" . Bob Singletary—CEO of MPMC

The graph below reveals colorectal cancer death rates by race and gender. The gaps for the 2005-09 period are not because no deaths occurred, but rather because the number of deaths was <20 and therefore the rate was not calculated by the state. Because of this, it is not possible to compare rates across the years for the counties for groups other than white males. Notable is that while the state rate decreased from 2001-05 to 2005-09 by 12.4%, the rate for Granville's white males increased by 44.7% and for Vance men by 10.7%. The death rate for Vance County white and minority males is comparable, however for the 2003-07 period (2005-09 missing) , the GC minority male rate exceeded that for whites by 61.3%; Franklin County's white/minority spread for men is greater: 119%. It is possible to compare 2005-09 rates for NC races. Minority men exceed white men in the death rate from colorectal cancer by 60.3%.

GRAPH 65

http://www.schs.state.nc.us/SCHS/data/databook/2011/
http://www.schs.state.nc.us/SCHS/data/databook/2009
http://www.schs.state.nc.us/SCHS/data/databook/2007



Cross-Cutting

The last measures of health status that *Healthy North Carolina 2020: A Better State of Health* addresses are additional layers to topics already discussed. Life expectancy can be considered the "bottom-line" outcome of all other efforts, while self-reported good health is the subjective measure of the same. With access to health care in large part related to whether one can afford it or not, the percent of non-elderly uninsured looks at those in society who are not old enough to receive Medicare and are therefore "falling through the cracks" without Medicaid or other health insurance. They may be unemployed with no viable way to afford health care, or employed but not covered through work and still unable to pay for individual coverage. Lastly, the measure of adults who are a healthy weight addresses a primary risk factor for many of the chronic diseases which affect quality of life and the likelihood of premature death.

Healthy North Carolina 2020 Objective

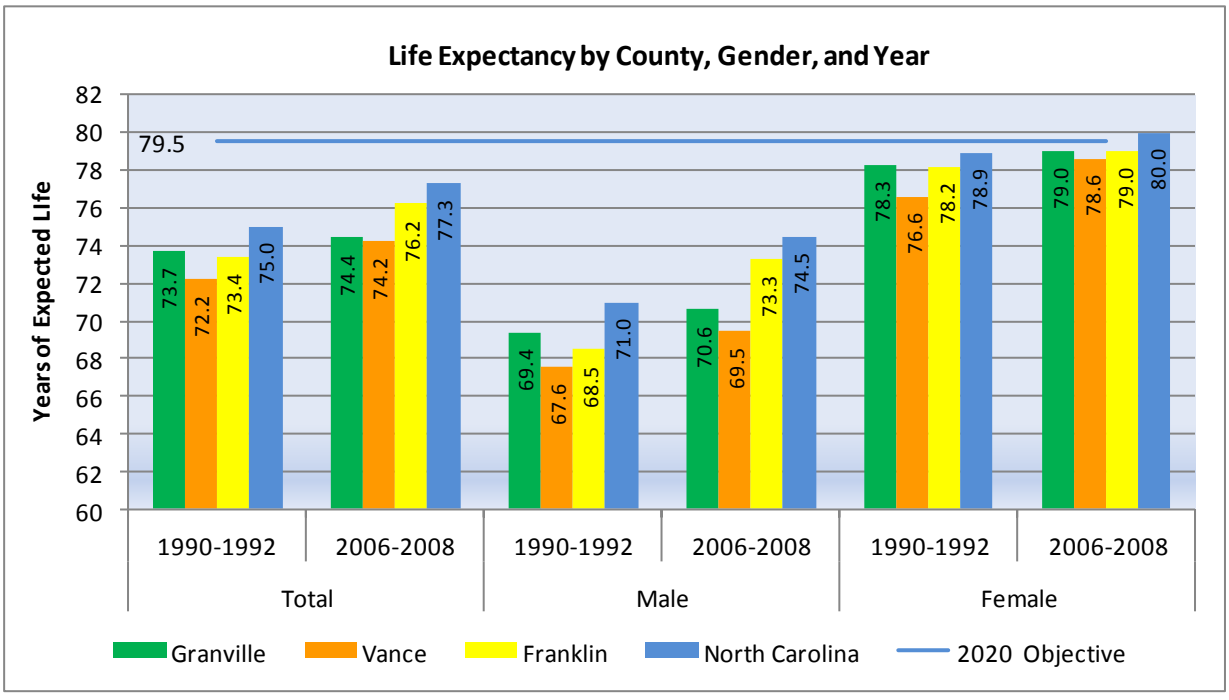
Increase the average life expectancy (LE) in years to	**79.5.**
2006-2008 Granville LE years	**74.4**
2006-2008 Vance LE years	**74.2**
2006-2008 Franklin LE years	**76.2**
2006-2008 NC statewide LE years	**77.3**

http://www.schs.state.nc.us/SCHS/data/lifexpectancy/ *GC, VC, FC, and NC 1990-92, 2006-08*

Discussion of the data detailed in the graph below follows on the next page.

GRAPH 66

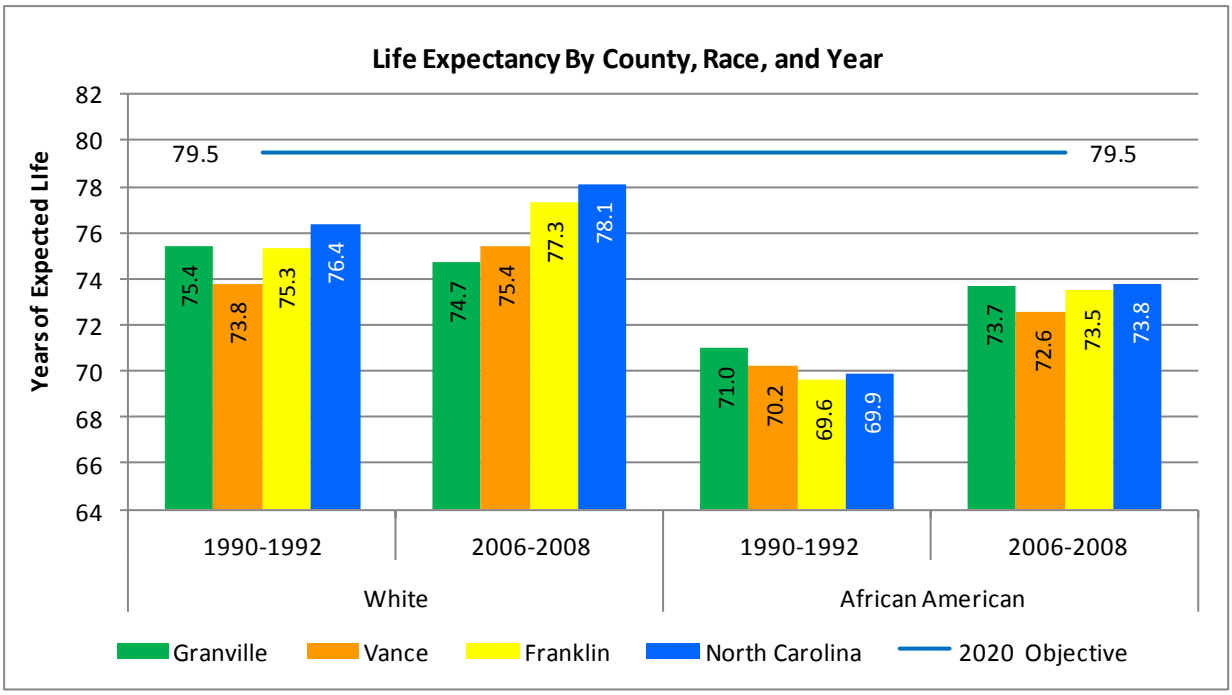
http://www.schs.state.nc.us/SCHS/data/lifexpectancy/ *GC, VC, FC, and NC 1990-92, 2006-08*



It is heartening to see that life expectancy (LE) has increased from 1990-92 period to 2006-08 by 8 months (0.9%) for Granville County to 2.8 years or 3.8% for Franklin County. Vance County's increased by 2 years or 2.8%. There is a noticeable difference between male and female LE—the greatest occurring in Vance County with women expected to live 9.1 years (13.1%) longer than men; Granville is similar with 8.4 more years (11.9%) expected for women than men. Indeed, the LE for NC women overall has just exceeded the 2020 goal and the county women are close behind. Looking at the graph below, the races are actually closer than the genders. In the 2006-08 period, Granville County African Americans expected only 1 year (1.3%) less life than whites, while in Vance County the difference was 2.8 years or 3.7% less for African Americans. The difference increases slightly for Franklin County and NC with African American LE 4.9% and 5.5% less respectively. As a group, excluding the state, the life expectancy of the county African Americans is better than that for our male residents.

GRAPH 67

http://www.schs.state.nc.us/SCHS/data/lifexpectancy/ *GC, VC, FC, and NC 1990-92, 2006-08*



Healthy North Carolina 2020 Objective

Increase the percent of adults reporting good, very good, or excellent health to	**90.1 %.**
2010 BRFSS Piedmont rate	**83.9 %**
2010 BRFSS NC Statewide rate	**82.0 %**
2011 Granville Survey	**75.2 %**
2011 Vance Survey	**67.2 %**

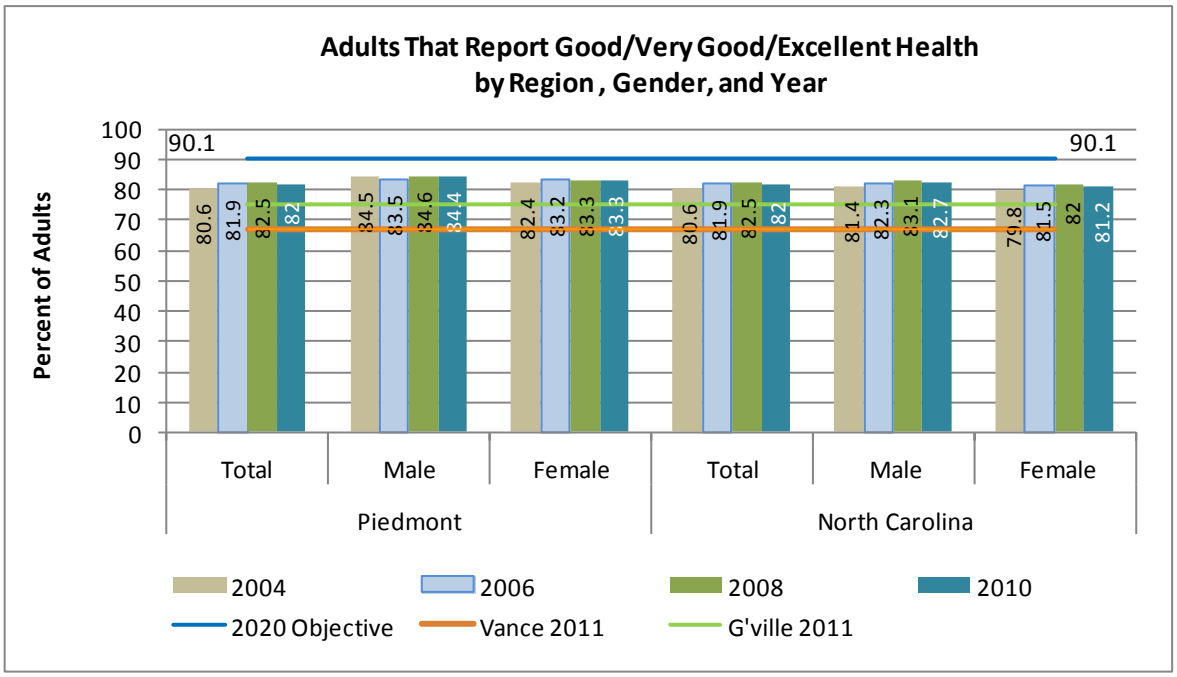
http://www.schs.state.nc.us/SCHS/brfss/2010/pied/topics.html#hs *Health Status*

How residents view their own health can be another indicator of overall health conditions. Interestingly, the results shown in the graph below shows that perception of health has remained essentially stable from 2004 to 2010 for the region and the state. At the same time, the data from the community survey completed in Granville and Vance Counties in June 2011 are in line with the general trends that have been reviewed for so many health parameters. 8.3% less Granville County adults reported good, very good, or excellent health than adults statewide. Vance County adults, who are generally suffering a greater burden of ill health and disease for the 2020 objectives, are lower still—with 18.1% less reporting good to excellent health.

GRAPH 68

http://www.schs.state.nc.us/SCHS/brfss/results.html

Piedmont Region and NC; 2004, 2006, 2008, 2010; Health Status



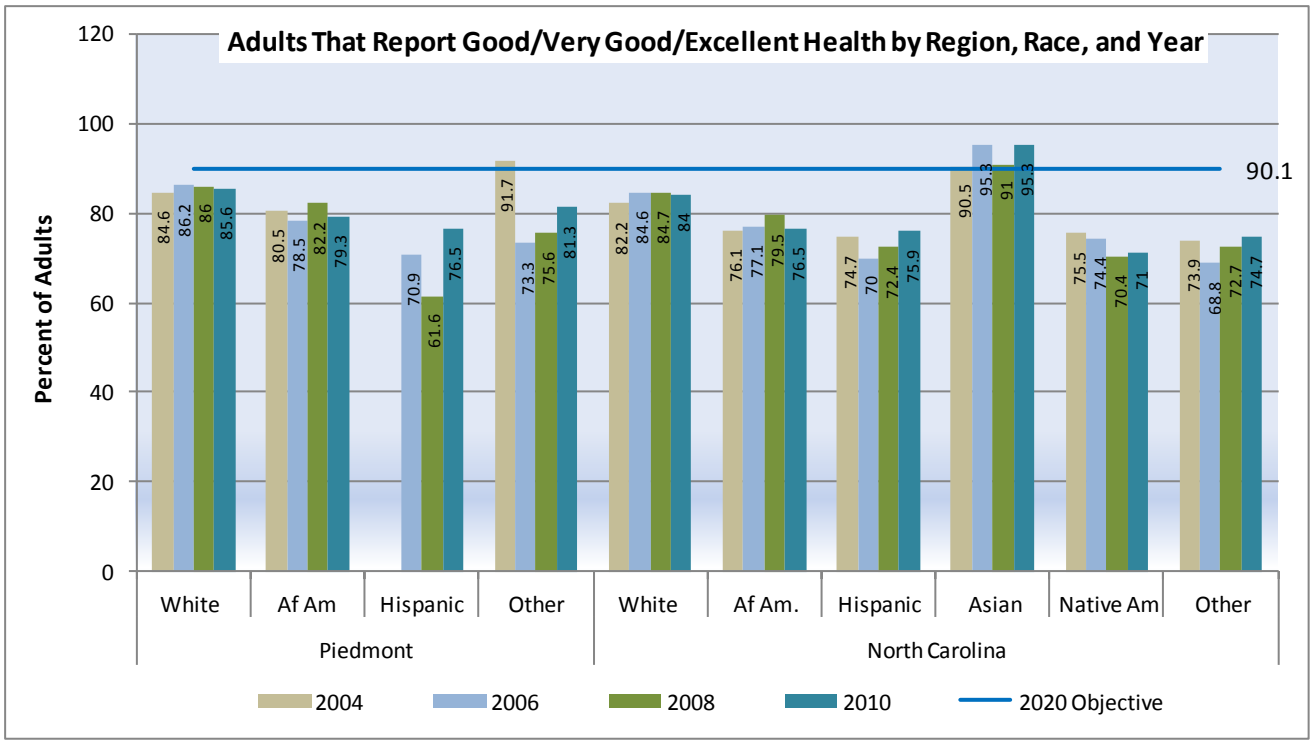
There is one sure thing I have learned as a leader at my church with the *Faithful Families: Eating Smart and Moving More* initiative; There is a part of all of us that yearns for health and wholeness and that seed awaits the blessings of affirmation, hope, and direction."

Betty Moseley—Oxford, NC

Viewing the breakdown of personal health perception by race for the region and the state from 2004 to 2010 below, one can see that the responses for whites and African Americans have been fairly consistent over the years with only 1 to 3.5% variability in the percent reporting good to excellent health. Asians and Native Americans are not included in the Piedmont region because their numbers were too small for the responses to be considered representative. Statewide, only Asians report good health at the 2020 objective level, and Native Americans in the 2010 year are the furthest distant (21.2% below the goal). In the Piedmont region, Hispanics self-report good health at the lowest level. Given the daily stressors that many in this population endure, this should not be surprising. Many work in physically demanding jobs, often in harsh conditions, with below standard pay, and no health insurance. Housing conditions may be crowded and language a barrier. Many struggle to find local acceptance and to support children in school despite language difficulties. Loneliness and homesickness may further confound feelings of well-being. Public Health departments, as has always been the case for the marginalized have become one stable resource for care for this group.

GRAPH 69

http://www.schs.state.nc.us/SCHS/brfss/results.html *Health Status ~ Piedmont and NC; 2004, 2006, 2008, 2010*



Healthy North Carolina 2020 Objective

Reduce the percent of non-elderly un-insured individuals (aged less than 65 years) to	**8.0%**
2008-2009 Granville County	18.4 %
2008-2009 Vance County	22.8 %
2008-2009 Franklin County	19.7 %
2008-2009 NC Statewide	19.7 %

http://nciom.org/wp-content/uploads/2010/08/County-Level_Estimates_08-09.pdf

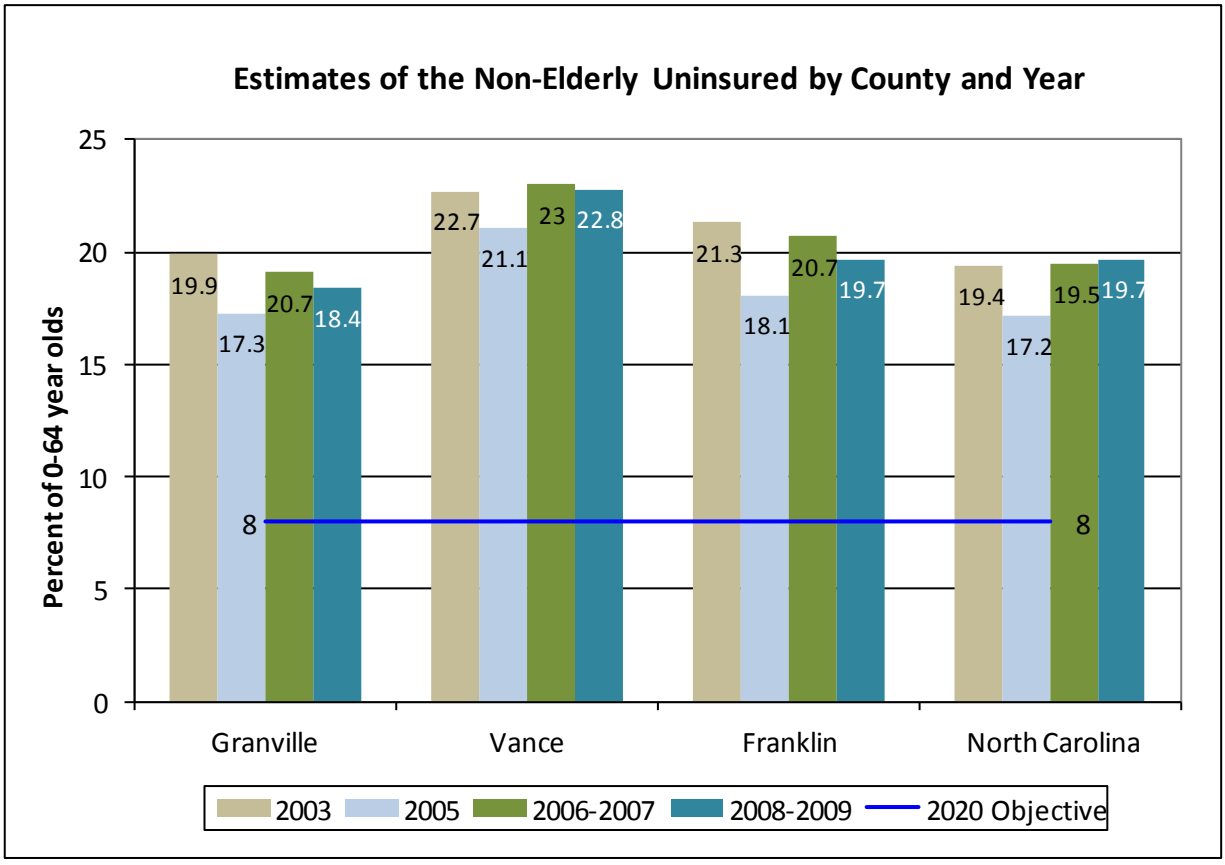
2011 Granville Survey	21.9 %
2011 Vance Survey	18.2 %
2010 BRFSS Piedmont*	21.4 %
2010 BRFSS NC Statewide	22.7 %

http://www.schs.state.nc.us/SCHS/brfss/2010/pied/access65.html

The number of residents under 65 that are uninsured is still well above the target of 8 percent for our 3 counties as well as the state (GC by 130%, VC by 185%, FC and NC by 146%). While the percent has decreased nominally for Granville and Franklin Counties from 2003 to 2008-09 (5.6% and 7.5% respectively), it has remained essentially level for Vance County and NC.

GRAPH 70

http://nciom.org/wp-content/uploads/2010/08/County-Level_Estimates_08-09.pdf
http://www.nciom.org/wp-content/uploads/2010/08/co-level_uninsured_estimates-2008-2.pdf
http://www.shepscenter.unc.edu/new/NorthCarolinaUninsured2005.pdf
http://www.shepscenter.unc.edu/publications/NorthCarolinaUninsured2003FindingsBrief.pdf



*A complete list of counties in the Region is on page 115

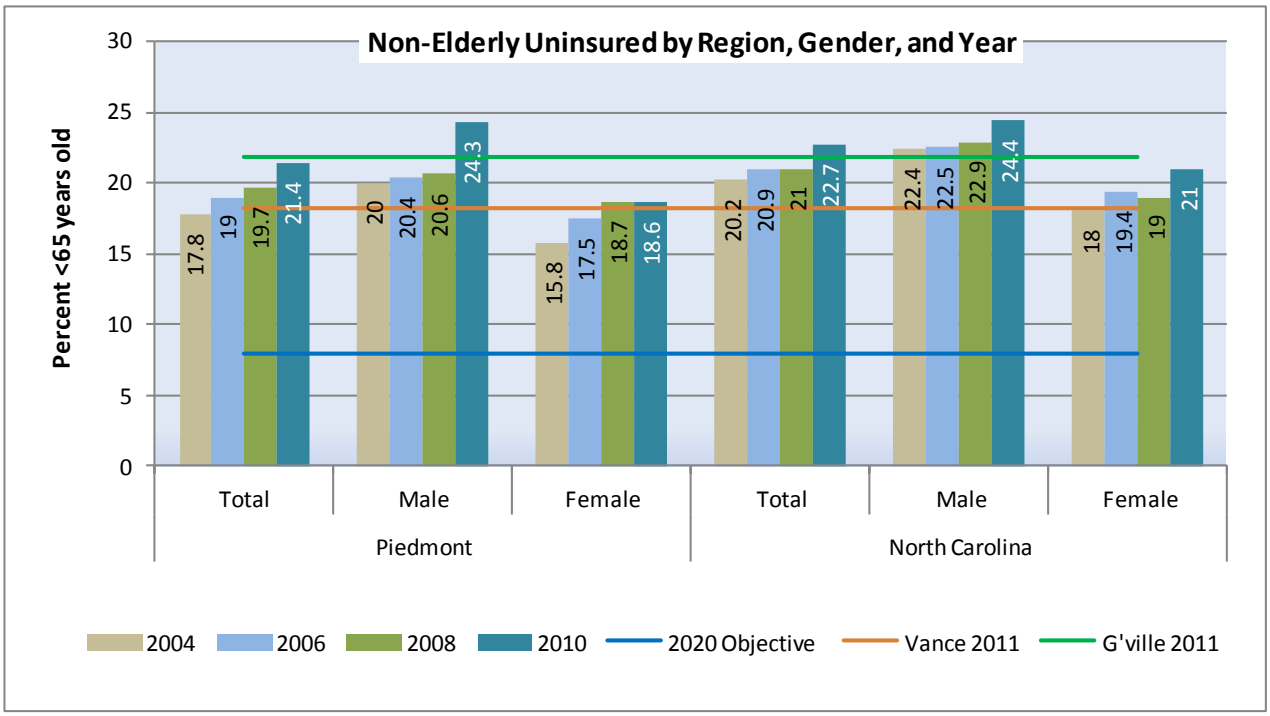
When comparing the counties to the statewide average, Granville County fares the best, being at 17.2% lower than NC. Not surprisingly though, with the poverty and unemployment levels higher in Vance County, the percent of uninsured is as well; Vance is 15.75% than the state while Franklin County percent is the same as NC's.

While data for the counties is not available by gender and race, it is possible to review regional data with this breakdown. As is often the case, males fare generally worse than females, with an 18% increase from 2008 to 2010 on the Piedmont region, compared with a 6.6% increase for NC overall. This is likely related to the economic downturn of the past few years. While Piedmont women showed no movement in insurance coverage during the same time, the percent of uninsured females across the state increased by 10.5%. Overall female rates for 2010 are better than male coverage rates: 23.5% less uninsured women in the Piedmont as compared with 9.2% less in 2008, 13.9% less for NC compared to 17.0% less in 2008. Given that males often bear the greater burden of health conditions than females, certainly in the Granville-Vance District outreach efforts to men is merits consideration.

GRAPH 71

http://www.schs.state.nc.us/SCHS/brfss/results.html

Piedmont Region and NC; 2004, 2006, 2008, 2010; Health Care Access

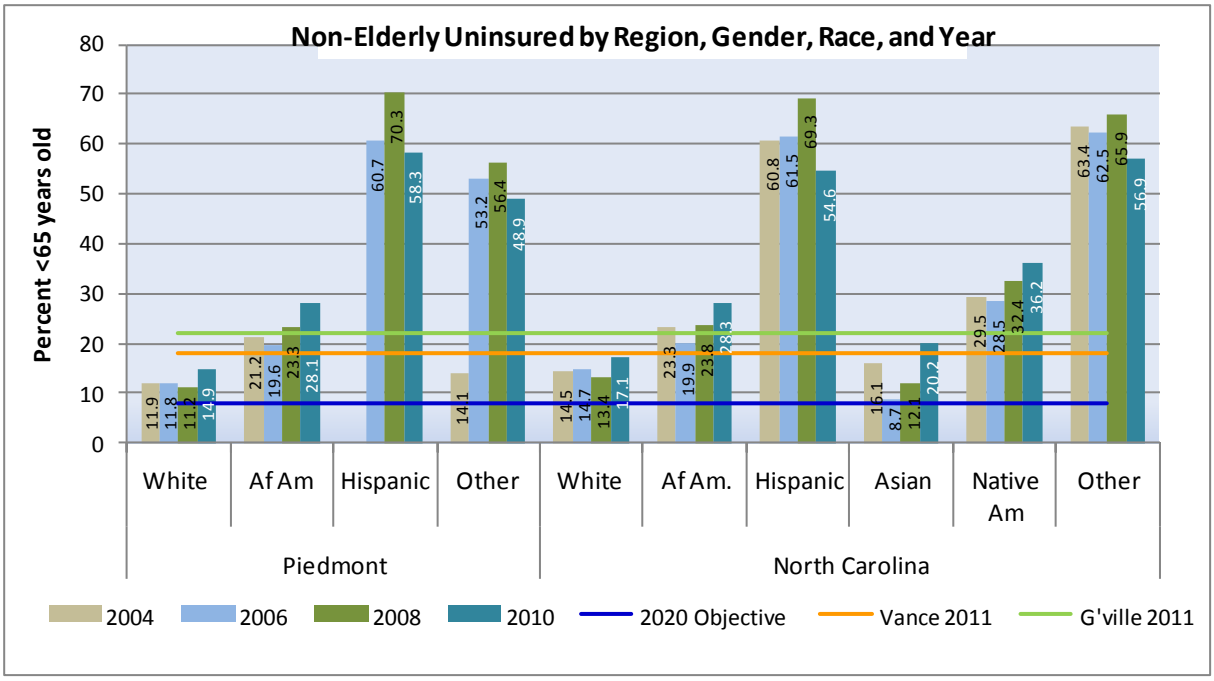


It s quite striking to see from the breakdown below that the white population is so much closer to the 2020 target than the other groups. Yet the 2010 data appears to reflect the current employment and economic situation—even the white rate of uninsured increased by 33% from 2008 to 2010, such that it is 86% greater than the target. The black rate increased by 20.6% to be 251% higher than the target. It is also clear that the Hispanic and other populations have the biggest gap in coverage. Although the percent of Hispanics without health insurance decreased by 17% since 2008—with 58% uninsured, they are 629% above the goal. And with a 13% decrease, all other minorities as a group remain 511% above the goal. There are many that might argue that if some in these populations are here without documentation, it should not matter whether they have health insurance, but everyone pays when health care coverage is inadequate. If patients can't cover their costs, hospitals raise rates for all to cover those who cannot pay. Many avoid care when problems may be manageable to save money. Yet often the sequellae of late care can be devastating. Those with insurance may get discounted rates via the "portion you do not owe" from their benefit statement; while those who pay cash do not. They often pay more for their care than the insured and have the least resources to be able to meet such expenses.

GRAPH 72

http://www.schs.state.nc.us/SCHS/brfss/results.html

Piedmont Region and NC; 2004, 2006, 2008, 2010; Health Care Access



Healthy North Carolina 2020 Objective

Increase the percent of adults who are neither overweight nor obese to 38.1%

2010 BRFSS Piedmont rate*	**36.8 %**
2010 BRFSS NC Statewide	**34.7 %**
2003 BRFSS Franklin-Granville-Vance	**28.1 %**

http://www.schs.state.nc.us/SCHS/brfss/2010/pied/rf2.html

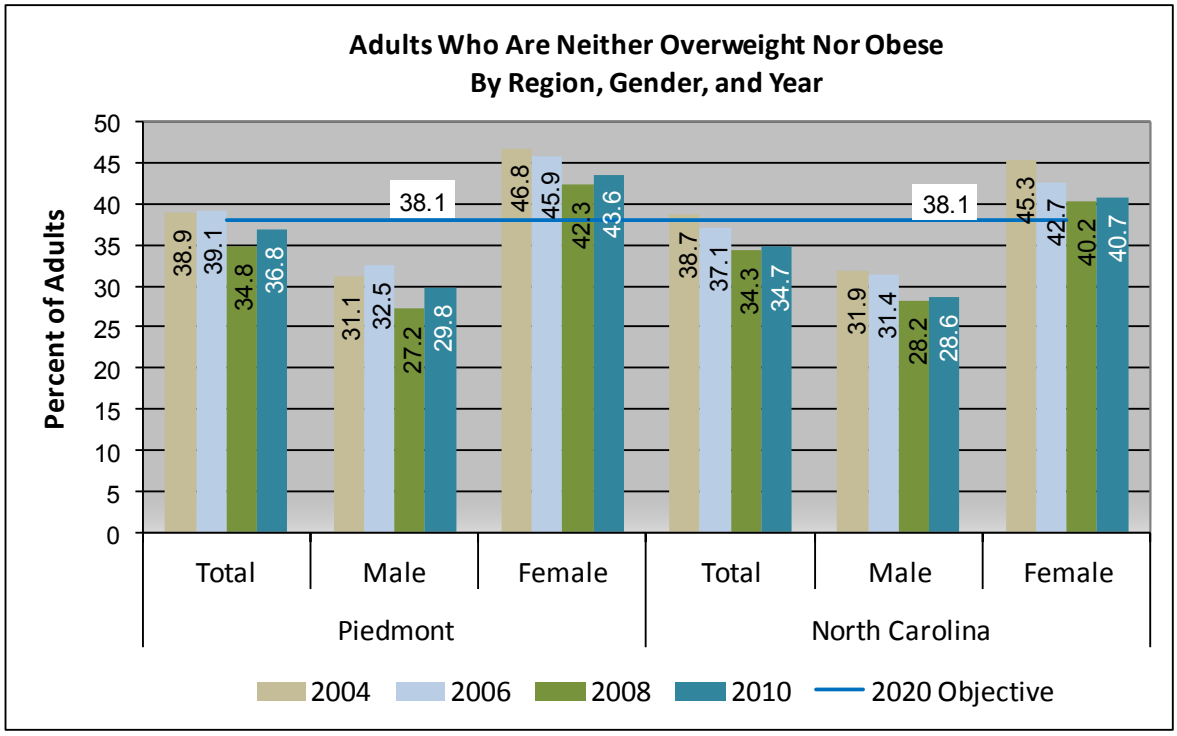
Why one weight related goal here and another under the Physical Activity and Nutrition health objectives? The latter focus on high school appropriate weight *and* adequate physical activity for adults. Why? Because a normal weight youth has a better chance of being a normal weight adult, and an active adult has a better chance of being normal weight, as well obtaining a whole host of benefits that are related to regular physical activity. At the same time, so many ill-effects are associated with overweight and obesity, that adding an adult healthy weight goal to this last category, to broaden the scope of the earlier objectives, was deemed important.

Unfortunately the value of that decision seems borne out in the graph below: males and females (and therefore the total) are each trending in the wrong direction. Although the change is slight: 4.2% less Piedmont males and 7.8% less females were in the healthy weight range in 2010 than in 2004 (the decrease was 10% for NC men and women both), it is consistent.

GRAPH 73

http://www.schs.state.nc.us/SCHS/brfss/results.html

Piedmont Region and NC; 2004, 2006, 2008, 2010; Variables & Risk Factors



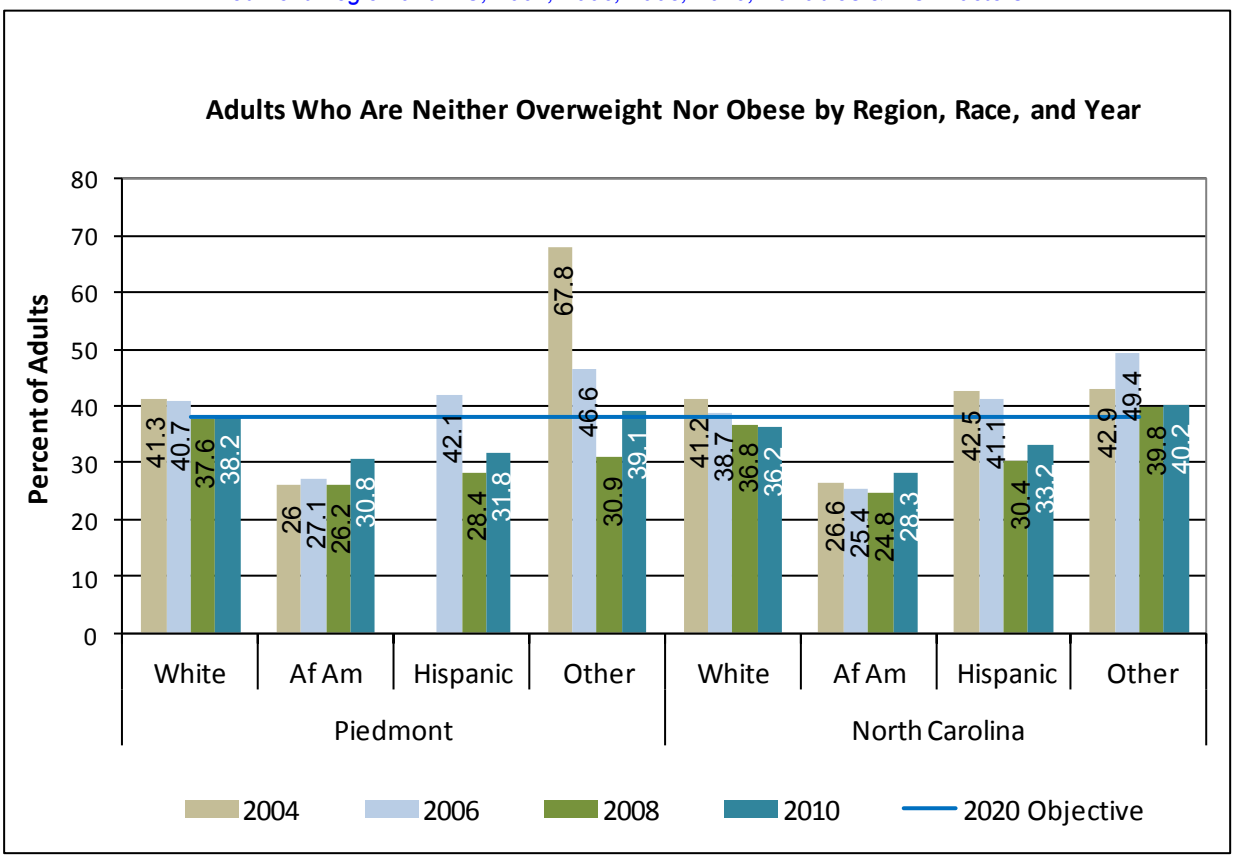
*A complete list of counties in the Region is on page 115

At the same time, both Piedmont and NC *women* met the 2020 goal for weight, and their percentages significantly exceeded those for men (by 46.3% Piedmont; by 42.3% NC), a clear indicator of where effort might be directed. When looking at the breakdown by race for the Piedmont below, several trends can be observed: whites and "other minorities" were at the target level for 2010, although the percent of whites with appropriate weight decreased by 7.5% since 2004, and the percent of "other" decreased by 42.3%. The shifts for the latter population are fairly dramatic from year to year which may be related to the number of respondents—"others" number in the hundreds, while white respondents number in the thousands (a shift of 100 in such a group might change the total by 2-3%; and a shift of 30 in a group of 300 causes a swing of 10%). Also notable is that while the percent of appropriate weight blacks in 2010 increased 18.5% since 2004, it is still 19.2% below the target. The percent of "healthier" weight Hispanics has decreased by 24.5% since 2004. Is it possible this is a sign of acculturation? The longer immigrants are in the country, the more they might adopt American habits, including fast food dining and consumption of soda—habits we would all do well to avoid.

GRAPH 74

http://www.schs.state.nc.us/SCHS/brfss/results.html

Piedmont Region and NC; 2004, 2006, 2008, 2010; Variables & Risk Factors



Piedmont and Central NC Regions Reference Counties

BRFSS Piedmont Region Counties (24)			
Forsyth	Lee	Person	Stokes
Franklin	Lincoln	Randolph	Union
Gaston	Mecklenburg	Richmond	Vance
Granville	Montgomery	Rockingham	Wake
Guilford	Moore	Rowan	Warren
Iredell	Orange	Stanly	Yadkin

Youth Tobacco and Risk Behavior Surveys Piedmont/Central Region Counties (37)			
Alamance	Franklin	Mecklenburg	Rowan
Anson	Gaston	Montgomery	Scotland
Cabarrus	Granville	Moore	Stanly
Caswell	Guilford	Orange	Stokes
Chatham	Harnett	Person	Surry
Cumberland	Hoke	Randolph	Union
Davidson	Iredell	Richmond	Vance
Davie	Lee	Robeson	Wake
Durham	Lincoln	Rockingham	Yadkin
Forsyth			

PC Region IV - Northeast Counties (13) For PRAMS Data		
Alamance	Granville	Vance
Caswell	Johnston	Wake
Chatham	Lee	Warren
Durham	Orange	
Franklin	Person	

North Central NC Counties (19) For Drug Use Data		
Alamance	Granville	Rockingham
Caswell	Guilford	Stokes
Chatham	Halifax	Surry
Davie	Iredell	Vance
Durham	Orange	Warren
Forsyth	Person	Yadkin
Franklin		

Community Survey

Explanation and Methods

While looking at statistics obtained from other resources, or secondary data, is critical to understanding the needs of a community, it is also important to know what the community itself feels are its needs. This can only be learned by asking its community members. This type of information must be compiled locally and, as such, is considered primary data. The Assessment Team determined that the best way to learn about each county's thoughts would be to administer a survey to as representative a sample of county residents as possible. Further, as has been the case with past community assessments, the team felt that responses should be gathered from each county separately because they are different in many ways and therefore the issues from the residents' perspective may vary as well. Although the questions were the same, each county was surveyed separately, but the results for each county are presented together so that one may see where the similarities and the differences lie.

The team reviewed the survey used in the 2007 Community Health Assessment for both counties as well as the most recent one developed in 2011 by the State Office of Healthy Carolinians (HC) and available on HC Website as part of the Community Assessment Guidebook. http://www.healthycarolinians.org/assessment/resources/survey.aspx The group decided to adopt the latter with a few adjustments. Some advantages of the state version considered by the team were that it was cross-referenced with the recently released NC 2020 Health Objectives and the NC Behavioral Risk Factor Surveillance System; and it was already translated into Spanish and being used by other counties across the state. Also included were some questions that the group felt would be very relevant to follow up work in the coming years.

In 2007, 1.9% of the population >18 years old (1375 people) in the two counties completed CHA surveys. However, despite the respectable reach, more than 80% of respondents in both counties were female—a far cry from the ± 50% goal. With this in mind and the desire to obtain responses from a group more representative of the county demographics, the team sought the involvement of the NC Center for Public Health Preparedness (NC CPHP) at the Gillings

School of Global Public Health which was offering its expertise and equipment to accomplish 2 stage cluster sampling in local jurisdictions using hand-held computer technology. *Two-stage cluster sampling is when the geographic regions or clusters are first randomly sampled and then the people within each geographic cluster are randomly sampled. A commonly used two-stage cluster sampling scheme, the "30 x 7" sample, was developed by the World Health Organization. 30 x 7 means that 30 census blocks are randomly selected from all of the census blocks in a county, then seven sites per census block are also randomly selected.* *Page 32, appendix E;* http://www.healthycarolinians.org/library/pdf/CHA-GuideBookAppendiciesUpdatedDecember15-2011.pdf With the limited resources available locally, it is unimaginable that such a process could have been accomplished without the help of the NC CPHP, which is supported by the Centers for Disease Control to improve the capacity of the public health workforce to prepare for, and respond to, terrorism and other emerging public health threats.

Because of the many differences between Granville and Vance Counties, the team elected to do survey the counties separately. As such, three days were set aside for 10 teams of 2 to disperse into the community to administer the surveys *in each county* in June 2011; nearly 1000 man hours of time needed to be recruited and coordinated. District Health Department staff were indispensable as many suspended their work duties in order to support the survey process. CHA Team members and partner agency staff joined in, and the GVDHD Emergency Preparedness Coordinator coordinated the master schedule and work with Law Enforcement to assure safety issues were addressed.

The NC CPHP staff prepared the 2 stage cluster sampling sets, loaded the hand-held computers with the survey and geographic data, led training sessions for workers, and coordinated logistics during the survey days in addition to various tasks associated with creating a final product. Granville County Government funds provided box lunches for the Granville County workers and Maria Parham Medical Center did so for Vance County workers. UNC School of Public Health Interns created bulletin boards in the county health departments to advertise the process as well as print copy and articles for each of the local papers in addition to working nearly every survey day in the field. Area Mental Health and Health Education staff went on local radio to publicize the CHA and survey process. Workers were identifiable with yellow vests marked "Public Health" and green neck wallets with ID in a clear front pocket to help allay fears that residents might have had about being approached by strangers. "Goodie" bags were compiled with information about/from partner organizations and small give-aways for each respondent, whose name (entirely separate from the survey responses) was also entered

into a drawing for gift cards and other donated prizes. Residents who refused to participate were given information (bi-lingual) about the survey process with contact information to reassure them about the workers that approached them. 200 surveys were completed in Granville County and 200 in Vance. Spanish speaking workers and survey materials were assigned to cover census blocks that were identified with a high percent of Spanish-speaking residents. Although quite labor intensive to implement 2 complete survey processes, there were enough visible differences in some of the responses to feel the decision was warranted and the added insight valuable. An additional advantage to completing the survey orally and face to face is that survey workers read all questions aloud—hence it was not required for a respondent to be able to read. Workers also were able to clarify any questions and also to be sure that every question was completed.

The survey questions asked for opinions about issues in 7 different topic areas.

- Part1: Quality of Life Statements Q 1—6
- Part 2: Community Improvement Q 7—8
- Part 3. Health Information Q 9—13
- Part 4: Personal Health Q 14—27
- Part 5. Access to Care/ Family Health Q 28—33
- Part 6. Emergency Preparedness Q 34—40
- Part 7. Demographic Questions Q 41—52

NC CPHP staff reviews equipment and data entry with GVDHD staff

Because the survey was completed anonymously, the last section on demographics served to clarify what types of people completed the survey (and how representative the respondents were of the actual county populations), rather than to convey specific information about any specific individuals. In this section of the results, each county's responses are paired with the 2010 census data for that county to view how well they are aligned (or not).

Demographics of Survey Respondents

While it is clear that a diverse group of county residents were reached, women are unfortunately still over-represented, although much less so than in the last assessment—63% (Granville) and 67% (Vance) compared with 83% (GC) and 82% (VC) in 2007.

Bullets for the demographic groups follow with notable points mentioned.

- **Age**—Survey numbers in Vance match well with the census if age groups 45-54 and 55-59 years are combined, with only the 65-74 years group over-represented. Granville County respondents also reasonably mirror the census; if 25-34 years is merged with 35-44 years, the match is improved, with only 75-84 year olds over-represented.
- **Race**—An appropriate spread in both counties
- **Hispanicity**— Under-representation in Vance County. Despite census blocks with a preponderance of Hispanic households according to census data (such that bi-lingual workers with Spanish language materials were assigned these areas), the reality did not live up to expectations. Granville County did meet its target.
- **Language other than English spoken at home**—Adequately represented
- **Marital Status**—In both counties "never married" was under-represented, while "unmarried partner" was over-represented. Perhaps those in the latter category self-selected out of the former, if the question was phrased/asked differently on our survey than by the census.
- **Education**—Under-representation of "less than 9th grade", and "9-12th grade, no diploma" in Vance. In Granville, "less than 9th grade" was slightly low and "9-12th grade, no diploma" was over-represented.
- **Income**—35.5% of Vance respondents refused to answer, and incomes from $25,000 and up were under-represented. 8.7% refused to answer in Granville; incomes $25,000—$34,999 were over-represented; incomes $35,000 and higher were under-represented.
- **Employment**—There were more home-makers and self-employed in Granville than Vance as well as nearly 33% more full-timed employed respondents. Conversely, there was double the amount of part-time workers in Vance than in Granville. Given the data on poverty, wages, and non-elderly uninsured, this unfortunately helps explain the other issues. Combining full and part-time workers compares with the percent employed according to the census.
- **Internet Access**—Approximately 70% of residents in both counties are able to access the internet, which means that ~30% still can not.
- **Zip Code—**Census data for residence by zip code was not available. Some zip codes overlap county lines, but are NOT listed in zip codes by county on Zipcode.com. Hence a zip code may have been reported in the survey but not be matched with the baseline from zipcode.com.

Summary of Survey Results

On the pages following this narrative, graphs detail the responses to each question by Granville and Vance County residents which the reader can review. While confidence intervals were available for inclusion, the Team determined to exclude them, feeling that they would confuse the average reader. Below are some key points that appear upon review of the more general questions addressing each community. The first 6 questions looked at quality of life issues. The categories "agree" and "strongly agree" with the statement are combined below for each question to give a overall view of respondents feelings about their county of residence. The most favorable response is in green/bolded, the least favorable in red/bolded. Not surprisingly, *economic opportunity* does not get high marks in either county. Yet most Vance County residents still feel it is a good place to grow old, and more than half feel the health care is good. In Granville County, the view is generally favorable across the categories with the lowest "mark" after *economic opportunity* going to *available help from others in times of need*.

Access to health care is now a far less significant factor for our community than it was a few years ago. Our medical managed care program, Community Care Partners...has been embraced by our primary care medical practices, and all Medicaid recipients may choose a practice for comprehensive care. Uninsured persons may receive some services at the health department and also may be seen at Rural Health Group, a Federally Qualified Health Center, for comprehensive care with costs determined by a sliding fee scale based on income. Four County Health Network also arranges care in some situations. Roddy Drake, MD—Health Director

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QUALITY OF LIFE		
	Granville	**Vance**
Agree/strongly agree that there is good health care in the county	63.4%	56.3%
Agree/strongly agree that the county is a good place to raise children	**89.9%**	43.5%
Agree/strongly agree that the county is a good place to grow old	85.9%	**65.3%**
Agree/strongly agree that the county has plenty of economic opportunity	**25.1%**	**11.0%**
Agree/strongly agree that the county is a safe place to live	87.6%	32.6%
Agree/strongly agree that there is plenty of help in times of need in the county	54.3%	42.9%

When looking at responses to Community Improvement questions several trends can be seen, many overlapping clearly with what has been discussed earlier in the review of the statistics. Not surprising is that poverty is considered a top quality of life issue in both counties. Whether the economy is good or poor or one is well off or not, no one can argue with the perspective that the ability to make a living wage impacts almost all of the 2020 Health Objectives.

As such, given the current economy, it is understandable that 2 of the top 3 areas needing improvement for residents of both counties are employment related—job availability and the rate of pay—both critical to meeting the demands of daily living and critically linked to graduation rates. Several other concerns have not only risen to the top in more than one question but do so for both counties, and are related threads in the tapestry of community well-being. Substance use/abuse alone can impact so many areas: petty and violent crime; graduation, STD, and teen pregnancy rates, motor vehicle accidents, mental health, domestic violence, and work productivity at a minimum. While the data reviewed in the Substance Abuse section show improving trends, they are regional rather than local, so it is possible that the concerns "voiced" in the survey reflect real activities observed by respondents that is being washed out in regional data.

COMMUNITY IMPROVEMENT	
Granville	**Vance**
Which One Issue Most Affects Quality of Life?	
Low income/poverty	Low income/poverty
Drug/Alcohol Abuse	Violent Crime
Dropping Out of School	Drug/Alcohol Abuse
Pollution	Dropping Out of School
Which One Service Needs the Most Improvement?	
Availability of Employment	Availability of Employment
Higher Paying Employment	Positive Teen Activities
Positive Teen Activities	Higher Paying Employment
Elder Care options	Drug Abuse Prevention

Homicide is the second cause of death among 20-39 year olds in Vance County so it should not be a surprise that respondents consider violent crime the second most important issue affecting quality of life in that county. Further, with both school systems having lower 4 year graduation rates, and education such a key to employability, it is not surprising that dropping out of school might also on the radar for the community. As cutbacks continue though, and discipline an ever-present issue, it is critical that the community, and most-especially parents/ caregivers, support the educational process and their children's success in school. Not unrelated is that "positive teen activities" is highlighted for both counties, the lack of which can impact substance use, STD/teen pregnancy rates, school performance, and juvenile crime rates. Although the school system offers a variety of after-school sports and other activities, in the past, one barrier to attendance has been the lack of transportation home afterwards for children that ride the bus. Creativity and partnerships may be needed to determine possible solutions to this fill this gap in our rural counties. Pollution and elder care issues were identified by Granville County residents, the latter listed as needing improvement. This may be related to Alzheimer's disease rates in that county—for 85+ yr olds, it is the 3rd highest cause of death.

Looking at the *Health Information* that residents believe is needed, both counties are essentially matched for the top 3 behaviors that *people need to know more about*; only the order differs between the counties. *Eating well/nutrition* which rises to the top in the survey for the first

HEALTH INFORMATION	
Granville	**Vance**
Which One Health Behavior Do People Need to Know More About?	
Substance Abuse Prevention	Crime Prevention
Crime Prevention	Eating Well/Nutrition
Eating Well/Nutrition	Substance Abuse Prevention
What Health Topics/Diseases Would You Like to Learn More About?	
Cancer	Cancer
Diabetes	Diabetes
Heart Disease/Heart Health	HIV/AIDS
If You Have Children, What Health Topics Do Your Children Need to Know More About?	
Drug Abuse	Sexual Intercourse
Eating Disorders	Nutrition
Reckless Driving/Speeding	Reckless Driving/Speeding

time with this question is also supported by the local chronic disease death and obesity rates. This is a topic area that has been addressed as a consequence of each assessment. Indeed, the 4th Annual Granville-Vance Eat Smart Move More Weight Loss Challenge is one such effort that arose from strategy discussions to raise awareness, promote common messaging, and support improved personal behaviors.

With respect to health topics that residents would like to know more about, it is striking that cancer and diabetes ranked 1 and 2 in both counties, yet when looking at the top diseases that respondents reported *having,* cancer does not make it to the top 6 for residents of either counties, and diabetes only "just" ranks on the Vance County list.. That being said, cancer *has superseded heart disease* as the leading cause of death in Granville County and is getting closer to it in Vance. And diabetes rates are on the rise for 40-64 yr olds in both counties, while its management can be critical to quality of life for those aging with the disease. At the same time, with essentially 1/3 or more of the population affected by high blood pressure, heart disease, and high cholesterol, it is somewhat surprising that no one is interested in more information about the problems that impact 1 in 3 homes.

It is worth noting that Granville County which is not economically as stretched as Vance County has a far greater percent of respondents (20.4%) concerned about depression than Vance. Could it be possible that when there are so many more stressors for one group as compared with another (as there are in Vance County), more are worried about surviving rather than their anxieties…?

Lastly, from the table on page 122, one can see the top items that concern parents with respect to their children. Drug use and nutrition issues again are mentioned, while sexual activity and reckless driving are newly "added", and both warranted as motor vehicle accidents are the 1st and 3rd highest cause of death for 20-39 yr olds in Granville and Vance Counties respectively.

Have You Ever Been Told By a Health Professional that You Have…?	
Granville	**Vance**
High Blood Pressure—41.2%	High Blood Pressure—31.8%
Depression/Anxiety—32.2%	Obesity—31.6
Heart Disease—27.8%	High Cholesterol—31.0%
Obesity—22.1%	Depression/Anxiety—18.9%
High Cholesterol—11.3%	Asthma—17.8%
Osteoporosis—11.3%	Diabetes—12.0%

Granville—Vance Survey Results

This survey explores all of the Healthy Carolinians 2020 focus areas. Questions that gather information about one or more of the focus areas are noted with: **HC2020: Focus Area Abbreviation(s)** to the right of the question number. And although Vance and Granville Counties may both be referenced in a question title, participants were asked to respond with their opinions about their county alone.

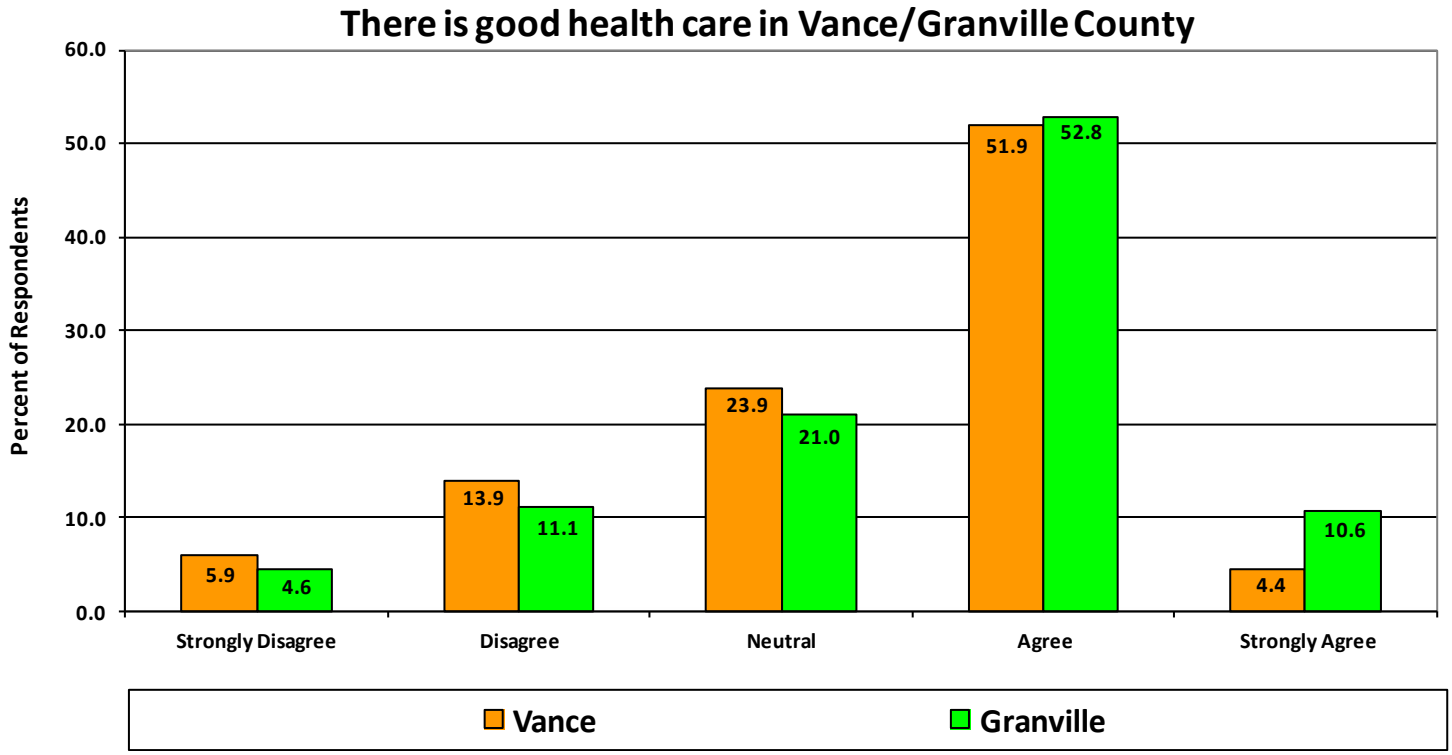
Key to Focus Area Abbreviations:

C	**Cross-cutting**
CD	**Chronic Disease**
EH	**Environmental Health**
I	**Injury**
ID/FI	**Infectious Disease/Foodborne Illnesses**
MH	**Mental Health**
MIH	**Maternal and Infant Health**
OH	**Oral Health**
PAN	**Physical Activity and Nutrition**
SA	**Substance Abuse**
SDH	**Social Determinants of Health**
STD/UP	**STDs/Unintended Pregnancy**
T	**Tobacco**

Training for Vance County Survey Field Team
June 2011

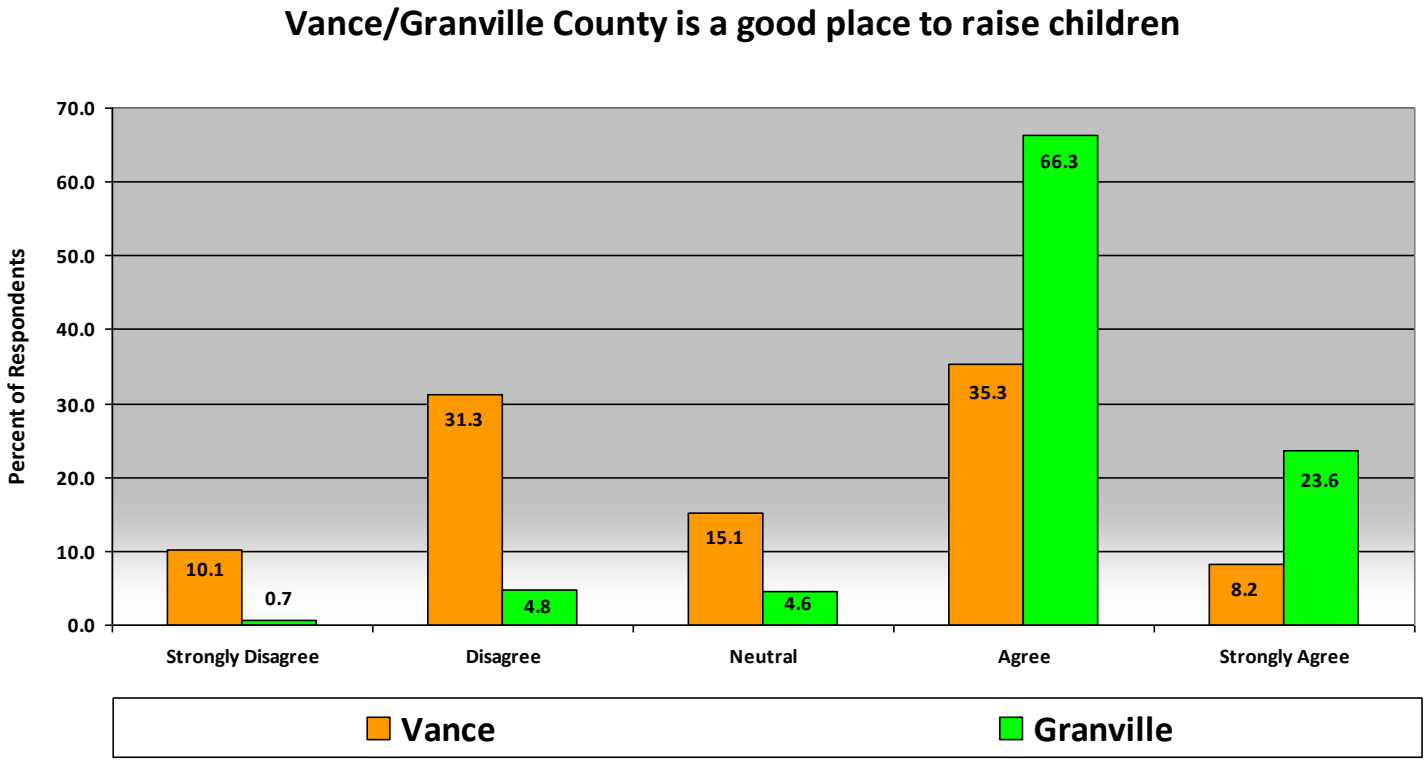
Question 1

HNC2020: SDH



Question 2

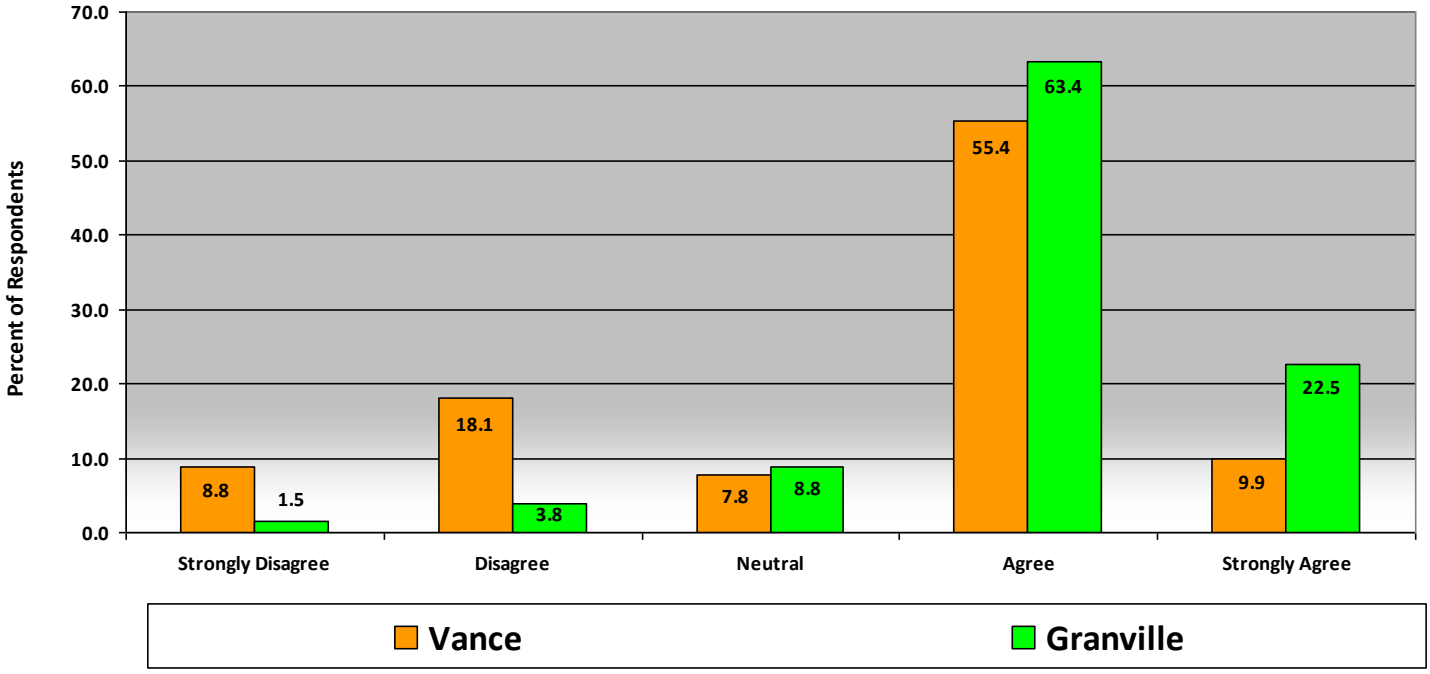
HNC2020: SDH



Question 3

HNC2020: SDH

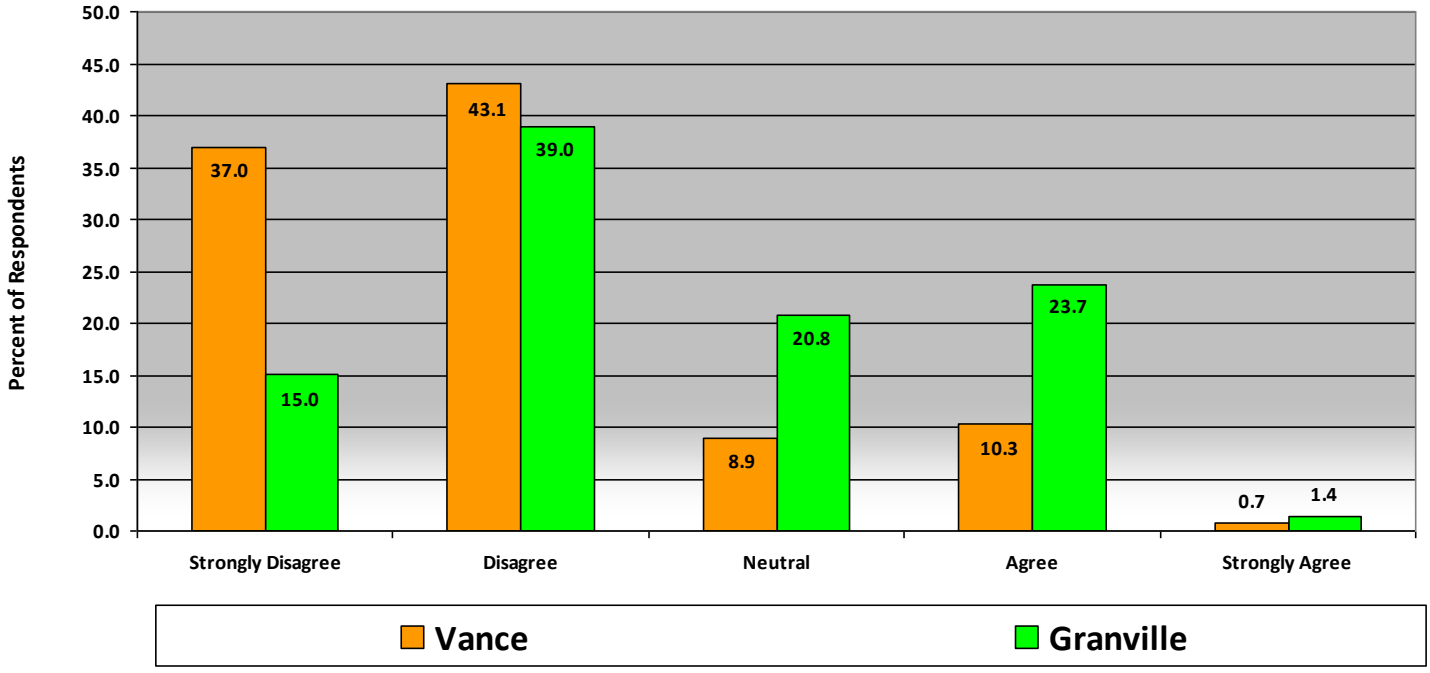
Vance/Granville County is a good place to grow old



Question 4

HBC2020: SDH

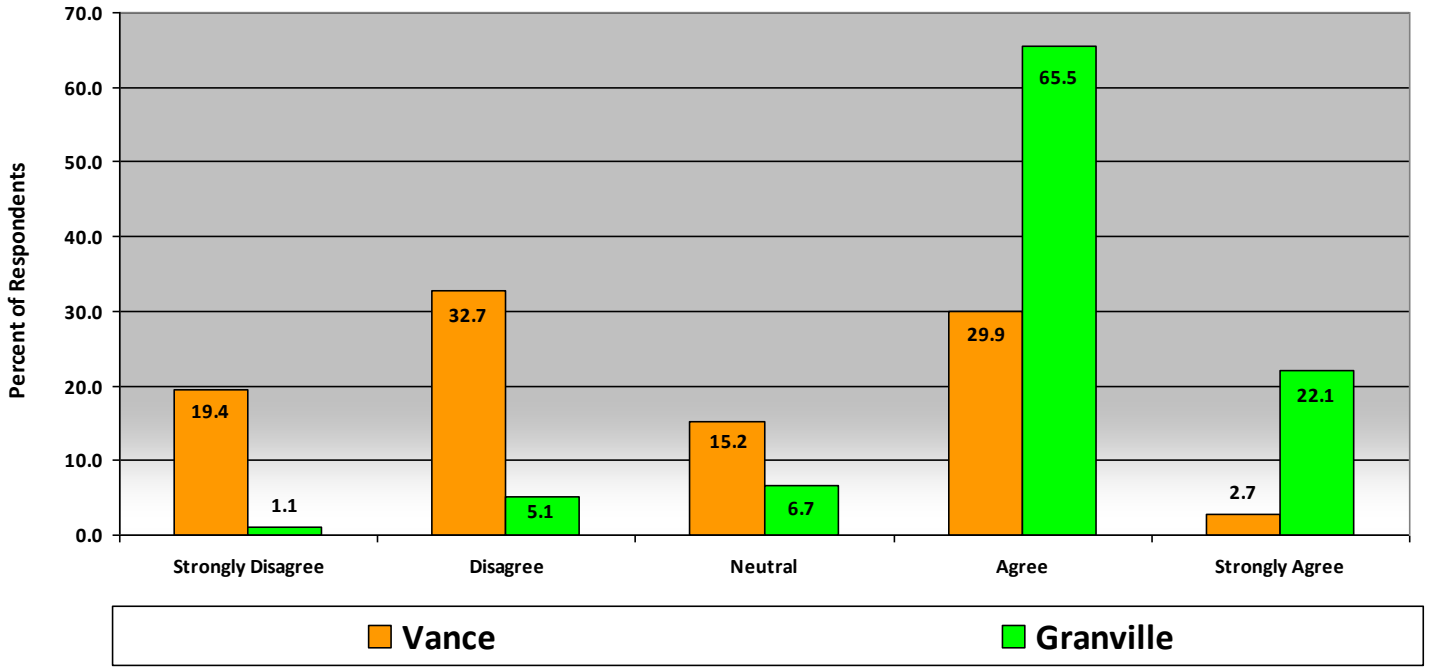
Vance/Granville County has plenty of economic opportunity



Question 5

HNC2020: SDH

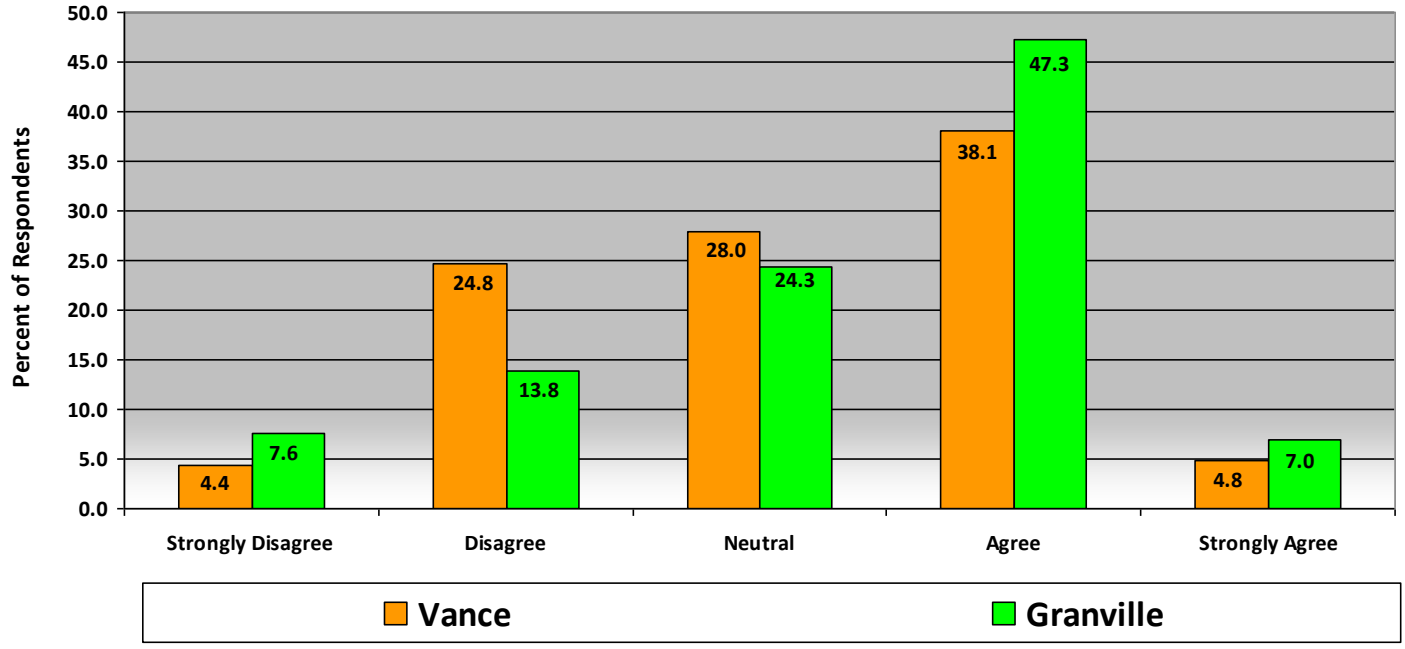
Vance/Granville County are safe places to live



Question 6

HNC2020: SDH

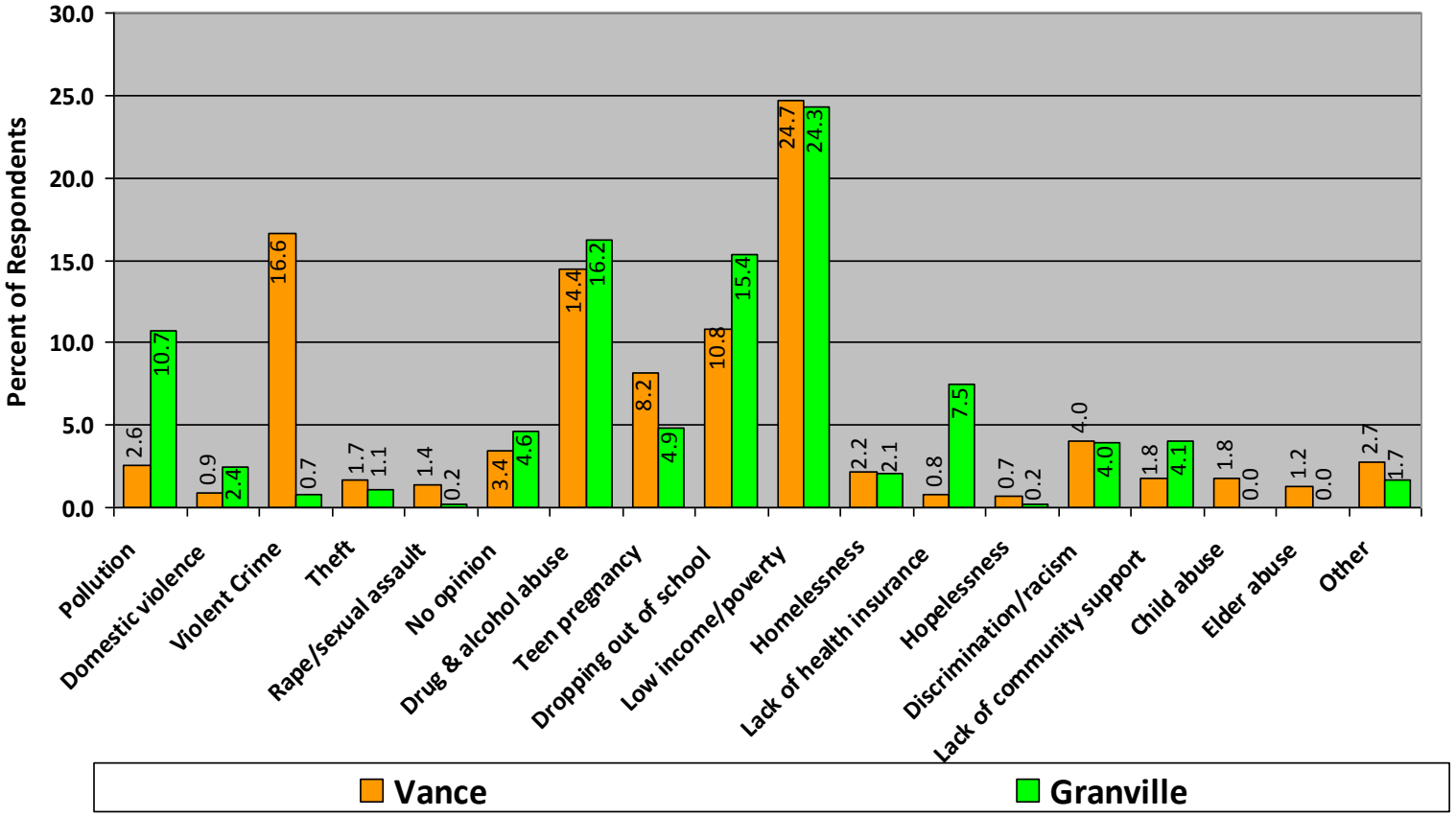
There is plenty of help during time of need in Vance/Granville County



Question 7

HNC2020: EH, SDH, I, MH

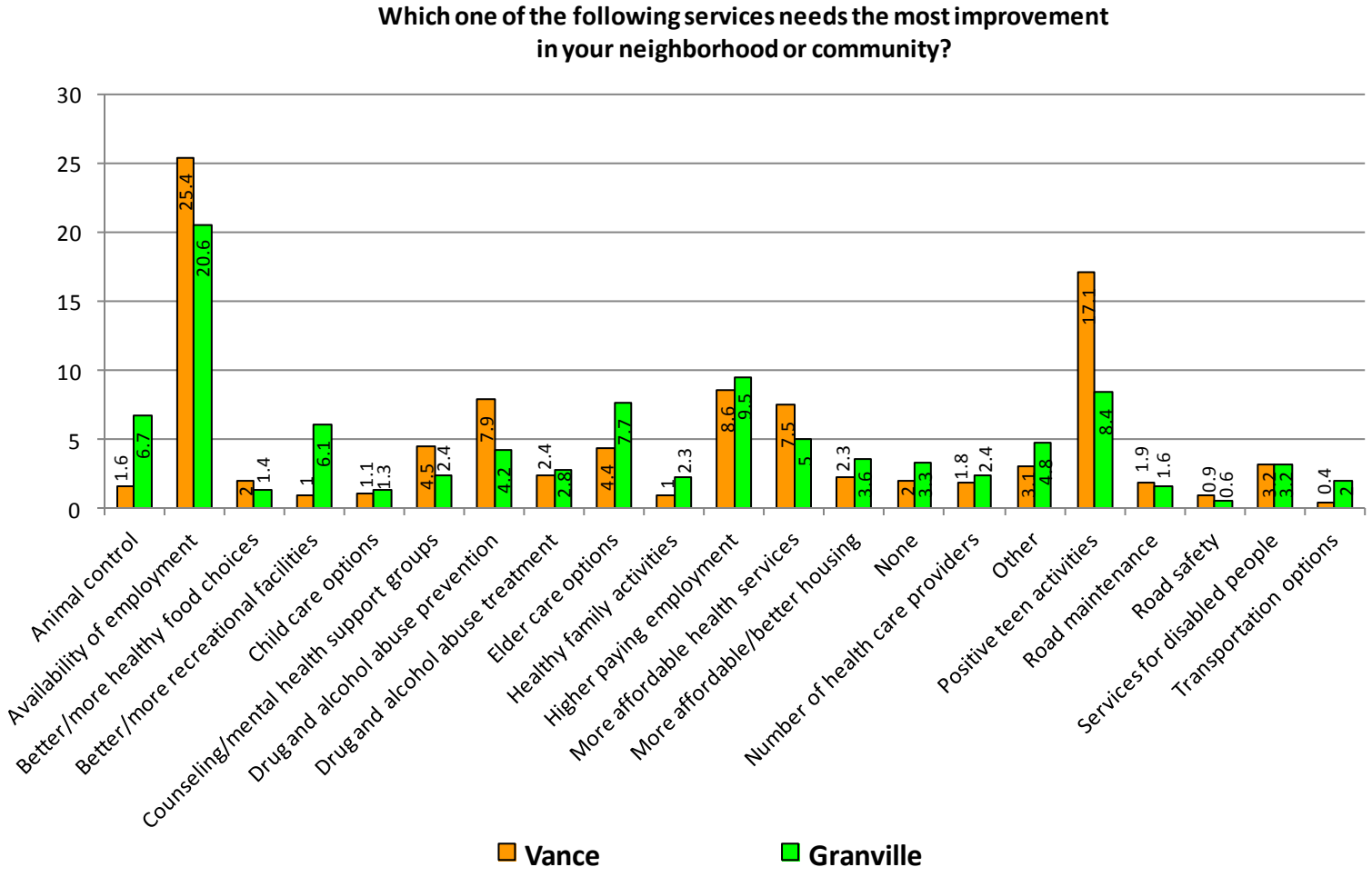
Which one issue most affects the quality of life in Vance or Granville County?



Breakdown of Other Responses

Vance County– 2.7% of total responses	
Unemployment	3.3%
Slack judicial system	4.2%
Lack of parenting	20.5%
Lack of opportunities for dining, shopping	19.2%
Jobs	9.3%
Inadequate education	4.2%
Illegal immigration	38.9%

Granville County - 1.7% of total responses	
Begging for money	16.8%
Health insurance rates	16.2%
Lack of economic options	7.6%
Lack of education and care for property	17.3%
Lack of jobs	6.5%
Mental	24.3%
No opinion	11.4%



Breakdown of Other Responses

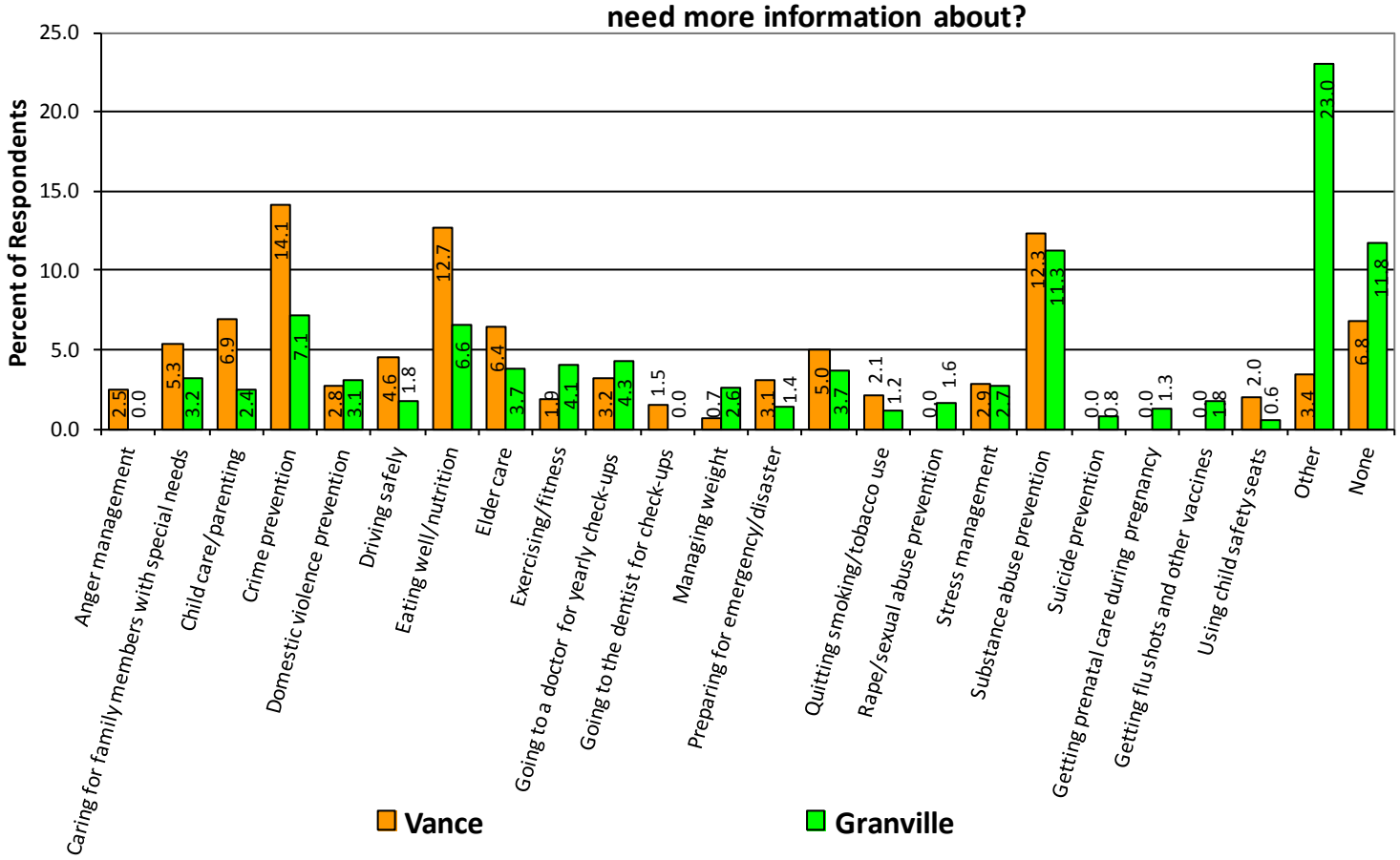
Vance County– 3.1% of total responses	
Opportunities for felons	9.9%
Law enforcement	21.9%
Keeping kids in school	12.8%
Education	7.1%
Crime	13.6%
Child protective services	34.7%
Type of Health Care Providers Needed	
Home care aides	8.6%
Every kind	55.7%
Elderly	7.6%
Doctors	28.1%

Granville County - 4.8% of total responses	
Mental health	35.4%
Disability	6.2%
Emergency management	22.2%
Employment	2.3%
Prejudice about homosexuality	7.5%
Schools	20.4%
Water taste and cost	5.9%
Type of Health Care Providers Needed	
GEN[eral practice]?	9.7%
General health physicians/practice	77.8%
Specialists for children	12.5%

Question 9

HNC2020: PAN, SA, I, MH, MIH, OH, STD/UP, ID/FI, T

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



Breakdown of Other Responses

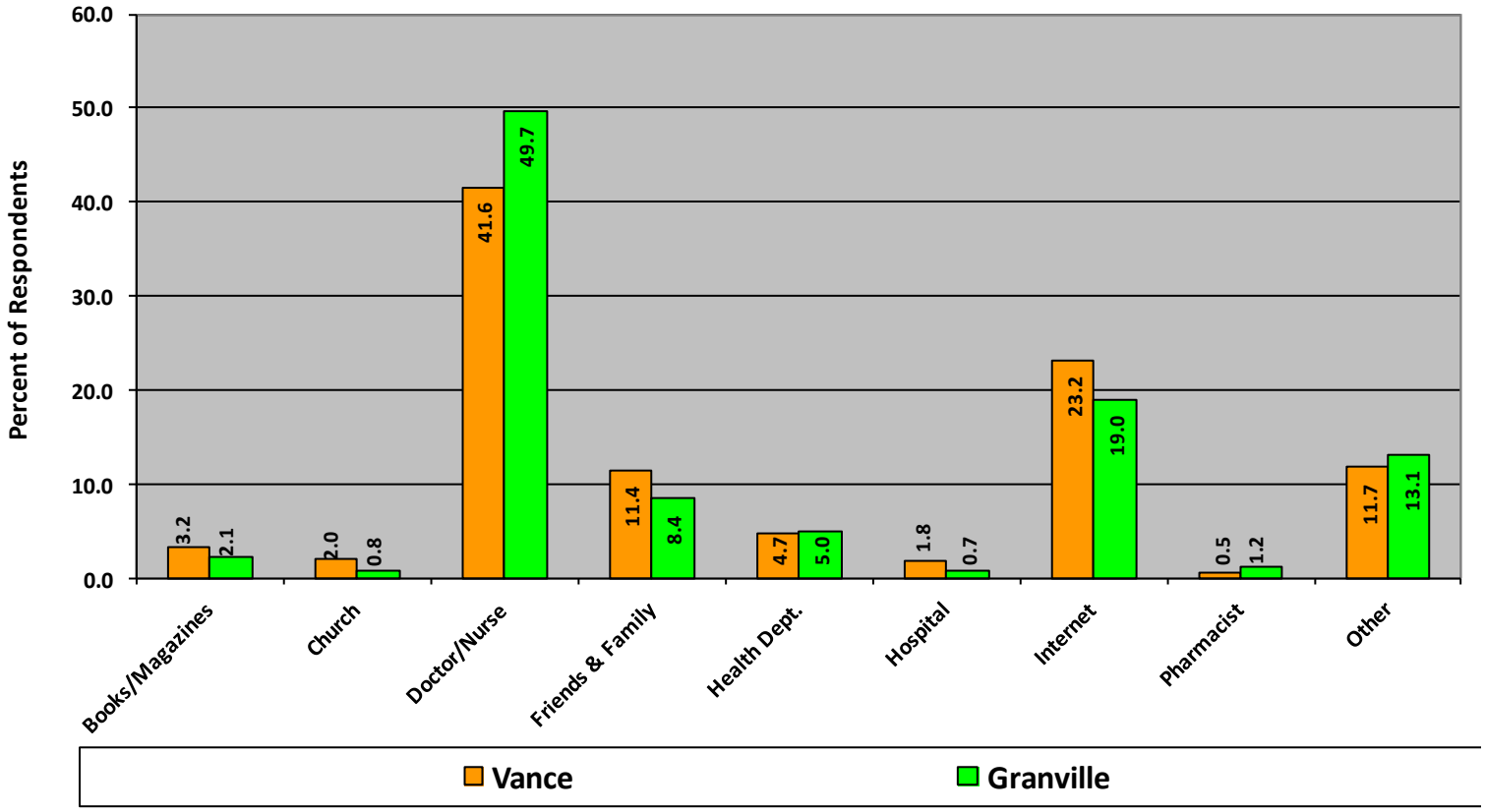
Vance County– 3.4% of total responses	
School	3.1%
Mental health services/self management	28.8%
Medication cost	11.4%
Jobs	4.4%
Info available, people don't use	15.3%
Ethical living	11.4%
Diabetes	6.0%
Child's school	4.4%
Career opportunities for the young	11.7%
Chronic Disease Prevention	4.4%

Granville County - 23.0% of total responses	
Mental health	8.1%
Obesity	4.6%
Affordable health care	3.4%
Aids and alcohol	3.1%
Alzheimer's	5.6%
Autism	3.1%
Cancer	7.0%
Childhood obesity/schools giving unhealthy snacks	5.6%

Granville County cont...	
Cholesterol screening and diabetes	1.6%
Diabetes	3.9%
Diet & exercise	1.7%
Don't know	5.6%
Fire prevention	1.6%
Growing vegetables & canning goods	1.2%
High blood pressure	4.3%
Humane & ethical treatment of animals	1.6%
Insurance	1.3%
Littering	4.1%
Locations of health care	1.0%
Medication management	5.6%
More respect to people	1.2%
Needs information	7.7%
Racism	3.6%
Responsible teen/young adult decision making	1.2%
Seizures	5.7%
What's available in the community	3.1%

Question 10

Where do you get most of your health related information?



Breakdown of Other Responses

Vance County– 11.7% of total responses	
Employer/work	14.1%
VA hospital	1.9%
Television	23.2%
Training	2.5%
The mail	4.8%
School	10.2%
None	1.8%
Newspapers/radio	26.4%
Neighbors	4.8%
Myself	2.3%
Little of everywhere	4.4%
Don't know	1.1%
Counseling	2.6%

Granville County - 13.1% of total responses	
Murdock Center	7.2%
School	25.4%
TV	11.9%
DSS	7.5%
Employer/work	28.3%
Insurance Company	11.9%
Medicare	4.9%
VA Hosp	2.3%

Question 11

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

Vance County	
ADHD	0.5%
aging parents/elder care	0.9%
Alzheimer's	2.3%
aneurysm	0.5%
appendicitis	0.5%
arthritis/rheumatoid arthritis	3.2%
asthma	1.4%
autism	1.8%
back problems	0.5%
cancer (cervical, ovarian, prostate)	13.3%
COPD	0.9%
cost of insurance	0.5%
diabetes	10.1%
emphysema	0.5%
fibromyalgia	0.9%
flu	0.5%
gout	0.5%
health issues	0.5%
health service & facilities/health services available to those 65 & older	0.9%
heart/heart disease	3.7%
HIV/AIDS	4.1%
hypertension	3.7%
liver conditions	0.5%
lupus	0.9%
mental health	0.5%
mercer	0.5%
multiple sclerosis	0.9%
nutrition	1.8%
obesity/weight management/weight loss	2.3%
parkinsons disease	0.5%
potassium	0.5%
routine test needed	0.5%
stargart disease	0.5%
stds	1.4%
stroke	0.5%
swelling	0.5%
thyroid disease	0.5%
iv drug use	0.5%
spiritual health	0.5%
teenagers pregnancy	0.5%
healthy living	0.5%
n/a /not sure/none	34.9%

Question 11

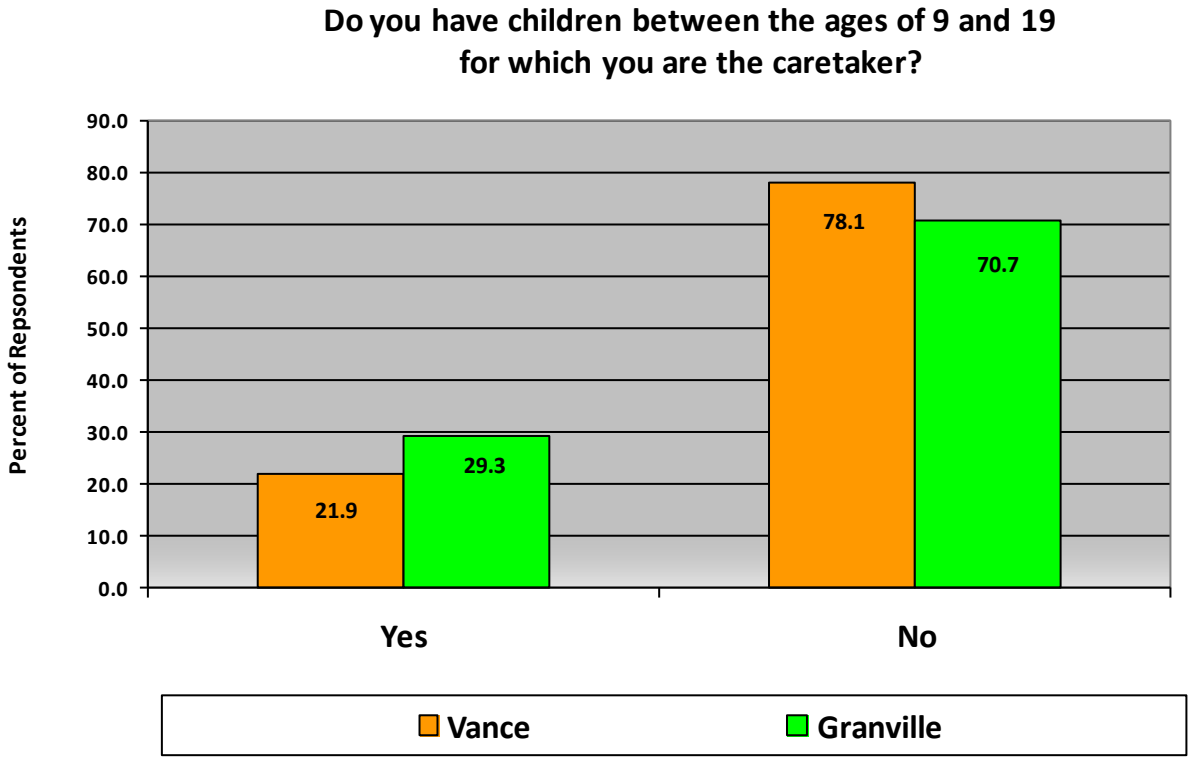
What health topic (s) / disease(s) would you like to learn more about?

Granville County

acid reflux	0.5%
adhd	1.0%
aging	1.4%
HIV/AIDs	1.9%
alcohol	0.5%
allergies	0.5%
Alzheimer's/dementia/memory loss	3.9%
anemia	0.5%
arthritis	1.4%
asthma	1.0%
autism	1.0%
benefits	0.5%
body	1.0%
bone care	0.5%
brain tumor	0.5%
brown skin spots	0.5%
cancer (breast, prevention, cervical, ovarian, skin, prostate)	15.5%
cholesterol	1.4%
congenital disorders	0.5%
copd	0.5%
depression	1.4%
diabetes	9.7%
diet/nutrition/overall nutrition as you get older	2.4%
diverticulitis	0.5%
down syndrome	0.5%
drugs	1.0%
e coli poison	0.5%
Psoriasis/eczema	1.0%
exercise/staying physically fit	1.0%

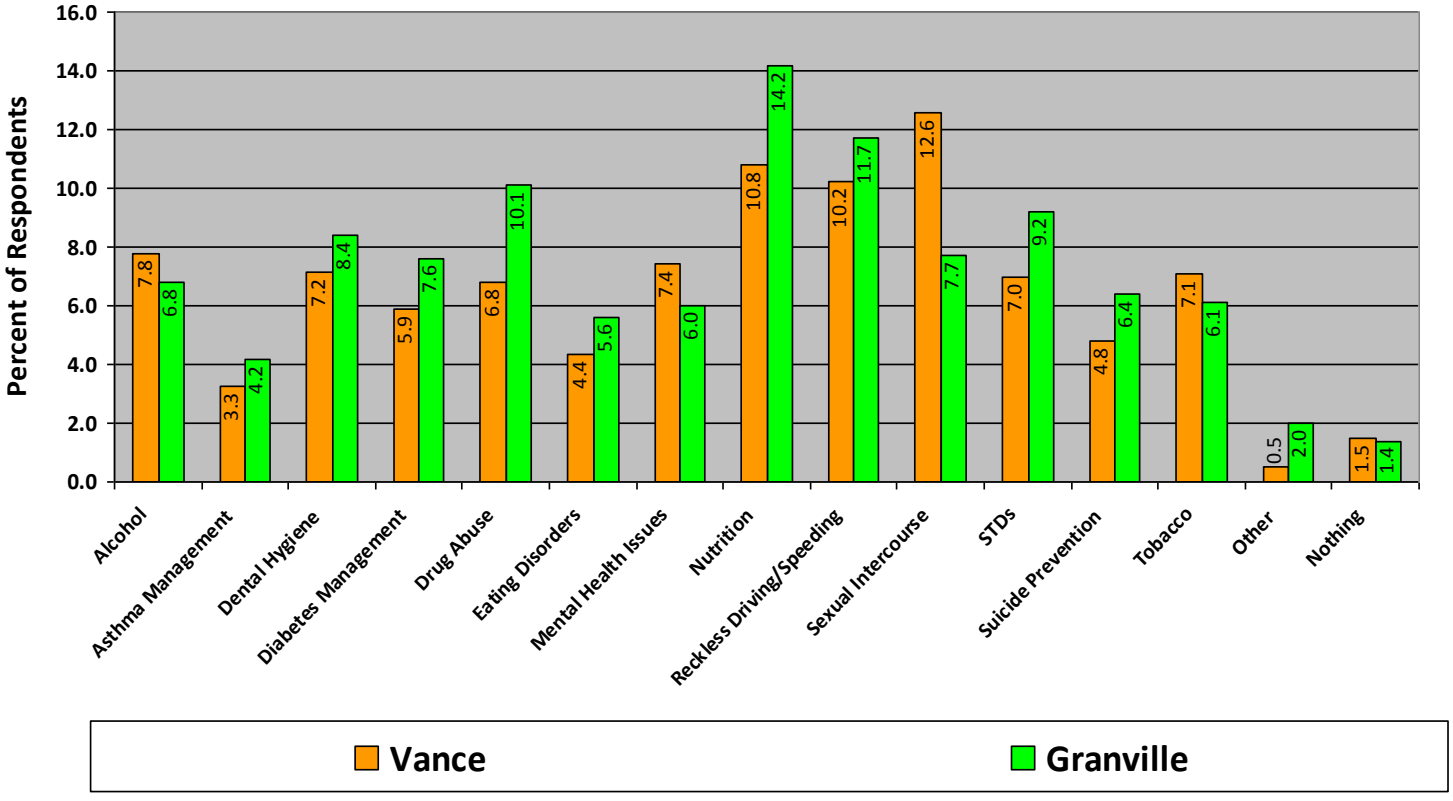
general health/health issues	1.4%
gout	0.5%
heart disease/heart health	6.3%
high blood pressure	5.3%
how to get medical care	0.5%
how to stay young forever	0.5%
HPV	0.5%
kidney failure/kidney disease	1.0%
leukemia	0.5%
lifestyle pacing	0.5%
maternal health	0.5%
menopause	0.5%
mental health/schizophrenia	1.0%
multiple sclerosis	1.0%
muscular diseases/muscular problems	1.0%
neurological disorders	0.5%
obesity/overweight/weight control/ weight loss	1.9%
peripheral neuropathy	0.5%
rare diseases	0.5%
seizures	0.5%
sleep apnea	0.5%
smoking cessation	0.5%
spinal fusion	0.5%
STDS	1.4%
supervirus	0.5%
tick fever	0.5%
upper respiratory	0.5%
unsure/don't know	3.4%
no answer/none/I have enough information	13.0%

Question 12


Do you have children between the ages of 9 and 19 for which you are the caretaker?
Percent of Repsondents
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
21.9
29.3
78.1
70.7
Yes
No
Vance
Granville

Question 13 HNC2020: PAN, SA, I, MH, OH, STD/UP, CD, T

Which of the following health topics do you think your child/children need(s) more information about?



Breakdown of Other Responses

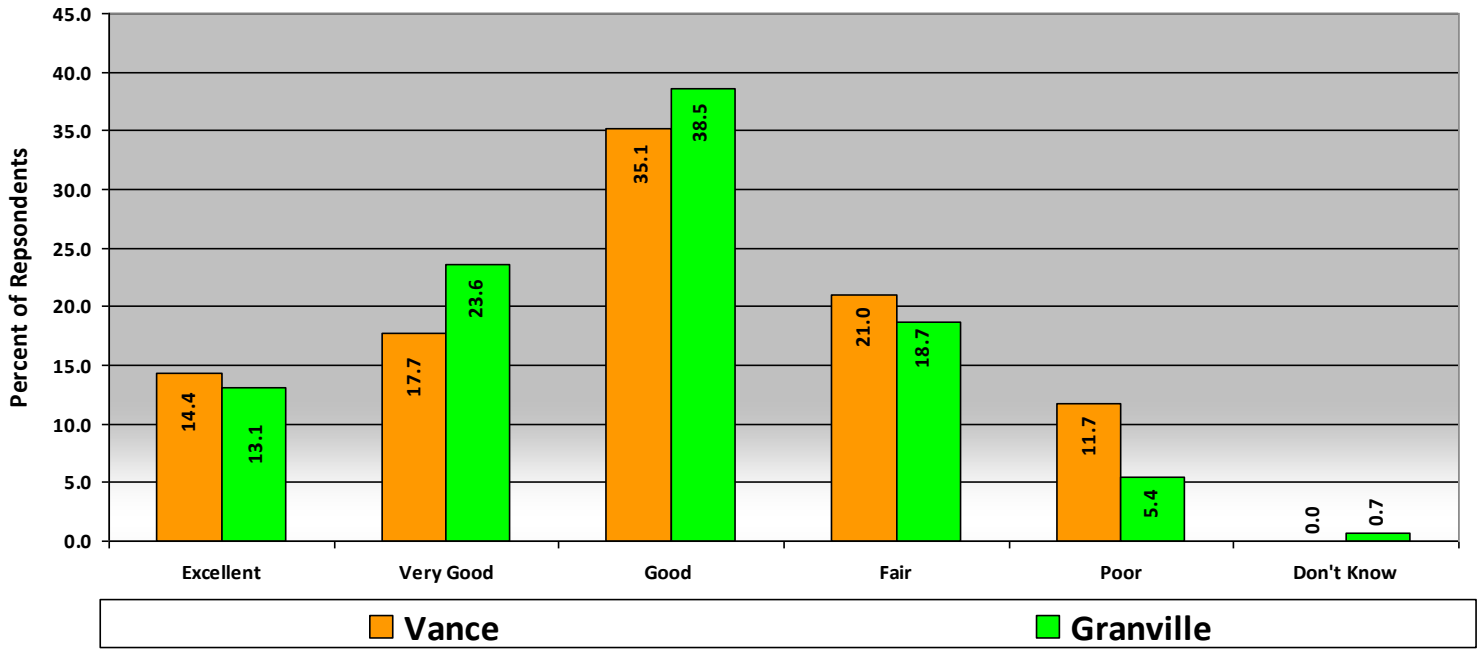
Vance County– .50% of total responses	
None	.5%

Granville County - 2.0% of total responses	
Bullying	14.5%
Depression	17.7%
Exercise	17.7%
Teen pregnancy and birth control	50.2%

Question 14

HNC2020: C

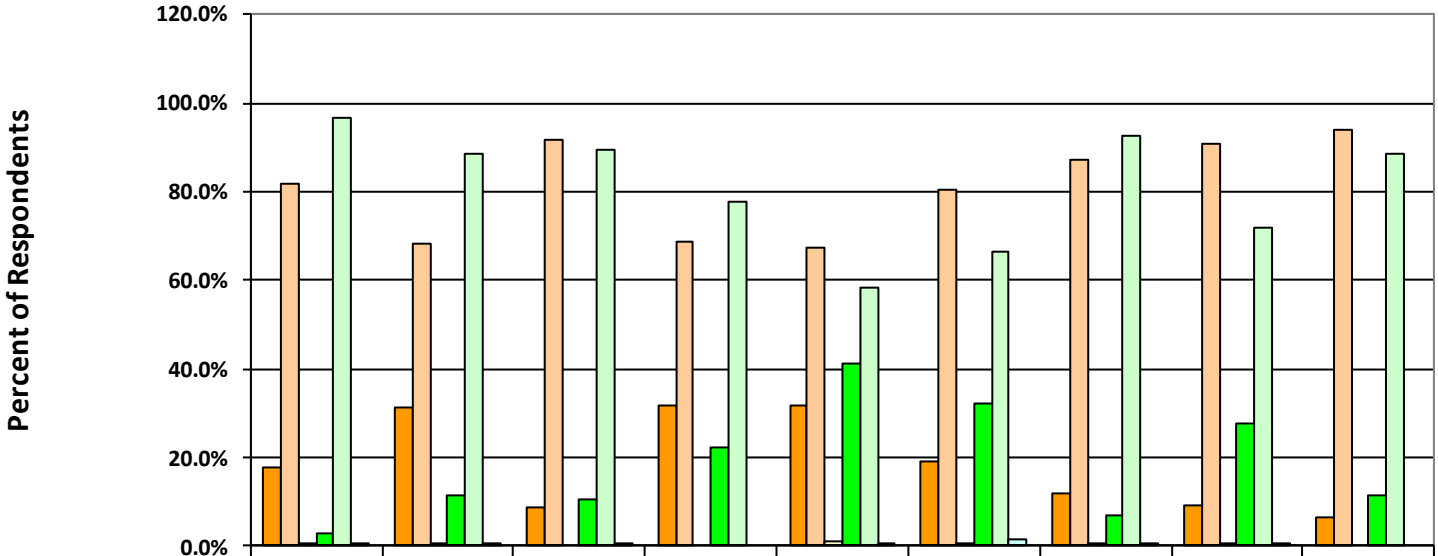
Would you say that, in general, your health is...



Question 15

HNC2020: CD, PAN, MH

Have you ever been told by a health professional that you have any of the following?

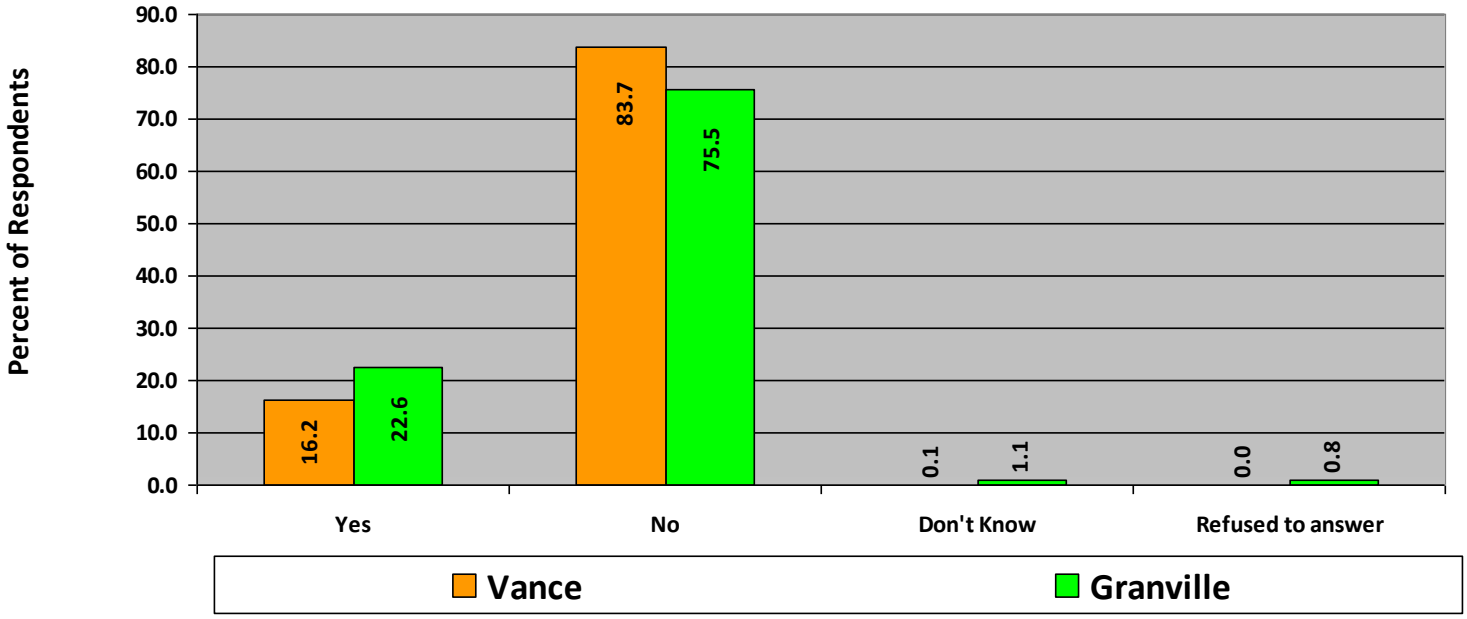


	Asthma	Cholesterol	Cancer	Obesity	HighBP	Depression /Anxiety	Diabetes	Heart Disease	Osteoporosis
Vance Yes	17.8%	31.0%	8.5%	31.6%	31.8%	18.9%	12.0%	9.1%	6.3%
Vance No	81.5%	68.2%	91.5%	68.4%	67.3%	80.5%	87.4%	90.7%	93.7%
Vance I Don't Know	0.6%	0.8%	0.0%	0.0%	0.9%	0.6%	0.6%	0.2%	0.0%
Granville Yes	2.9%	11.3%	10.4%	22.1%	41.2%	32.2%	7.0%	27.8%	11.3%
Granville No	96.6%	88.4%	89.4%	77.9%	58.4%	66.5%	92.8%	71.8%	88.7%
Granville I Don't Know	0.6%	0.4%	0.3%	0.0%	0.4%	1.3%	0.3%	0.4%	0.0%

Question 16

HNC2020: MH

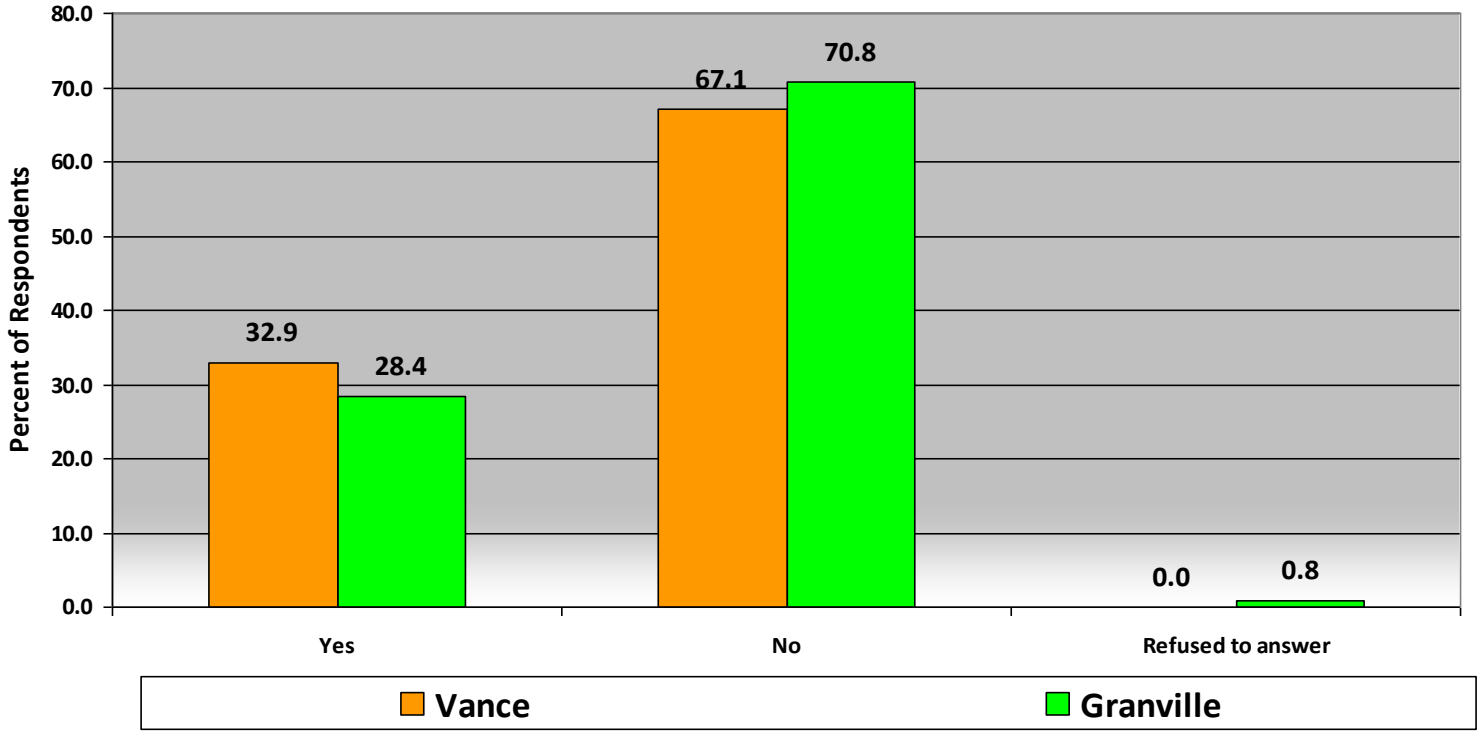
In the past 30 days, have there been any days when feeling sad or worried kept you from going about your normal business?



Question 17

HNC2020: I, CD

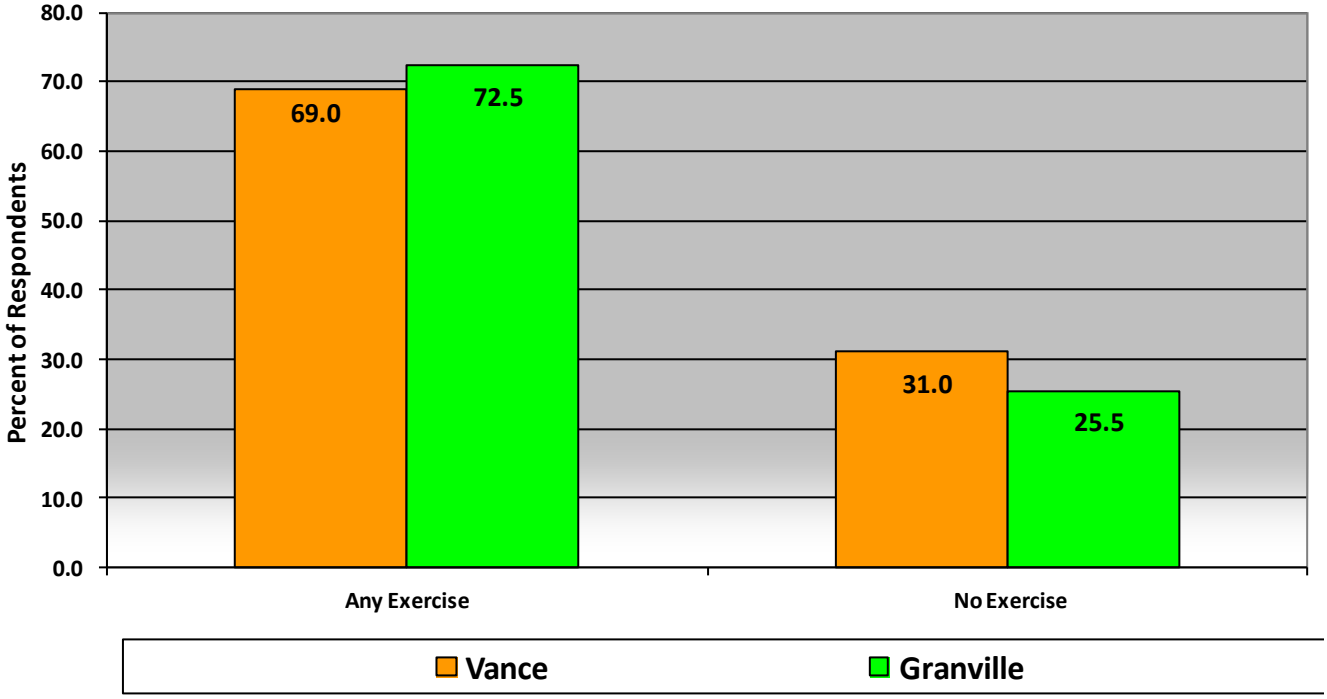
In the past 30 days, have you had any physical pain or health problems that made it hard for you to do your usual activities?



Question 18

HNC2020: PAN

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

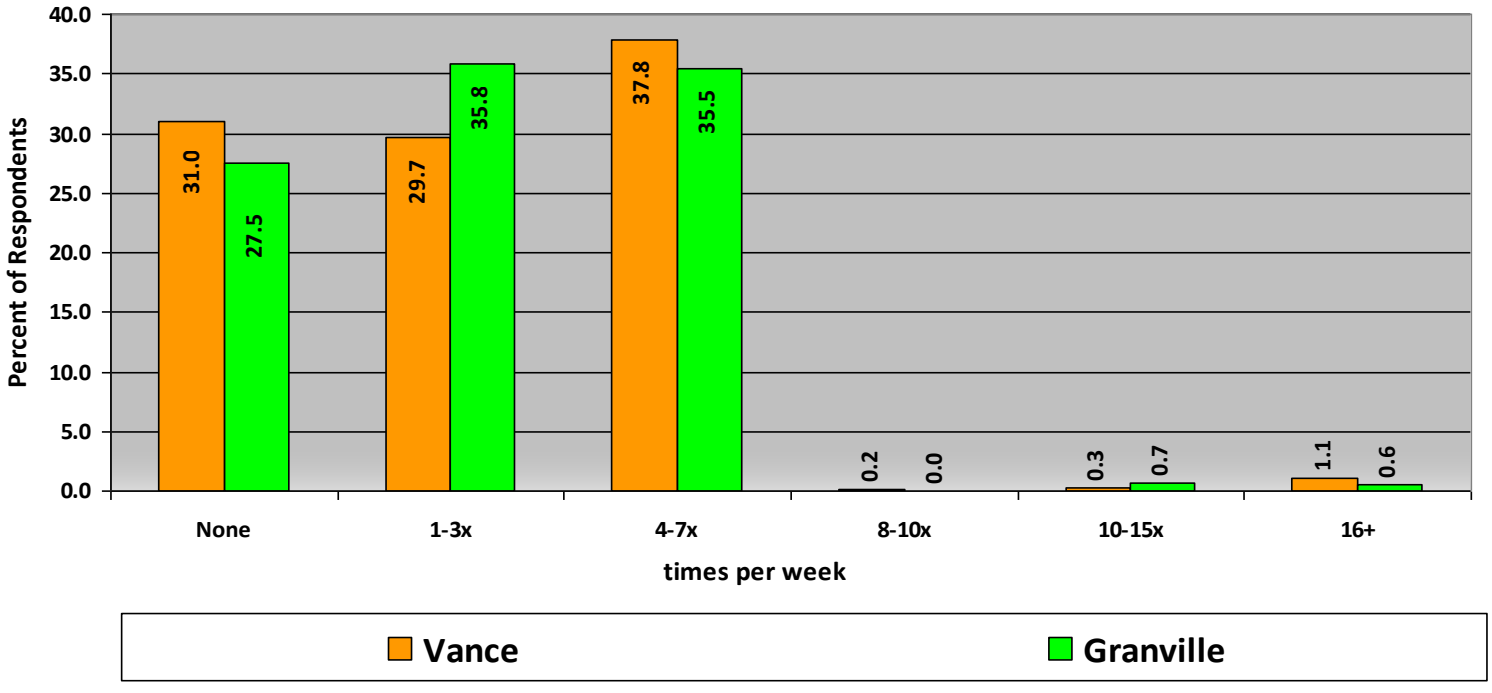


Responses to question 19 were open-ended; hence the responses ranged from 0 to 28 times per week. The responses were grouped into logical increments for the purpose of this graph.

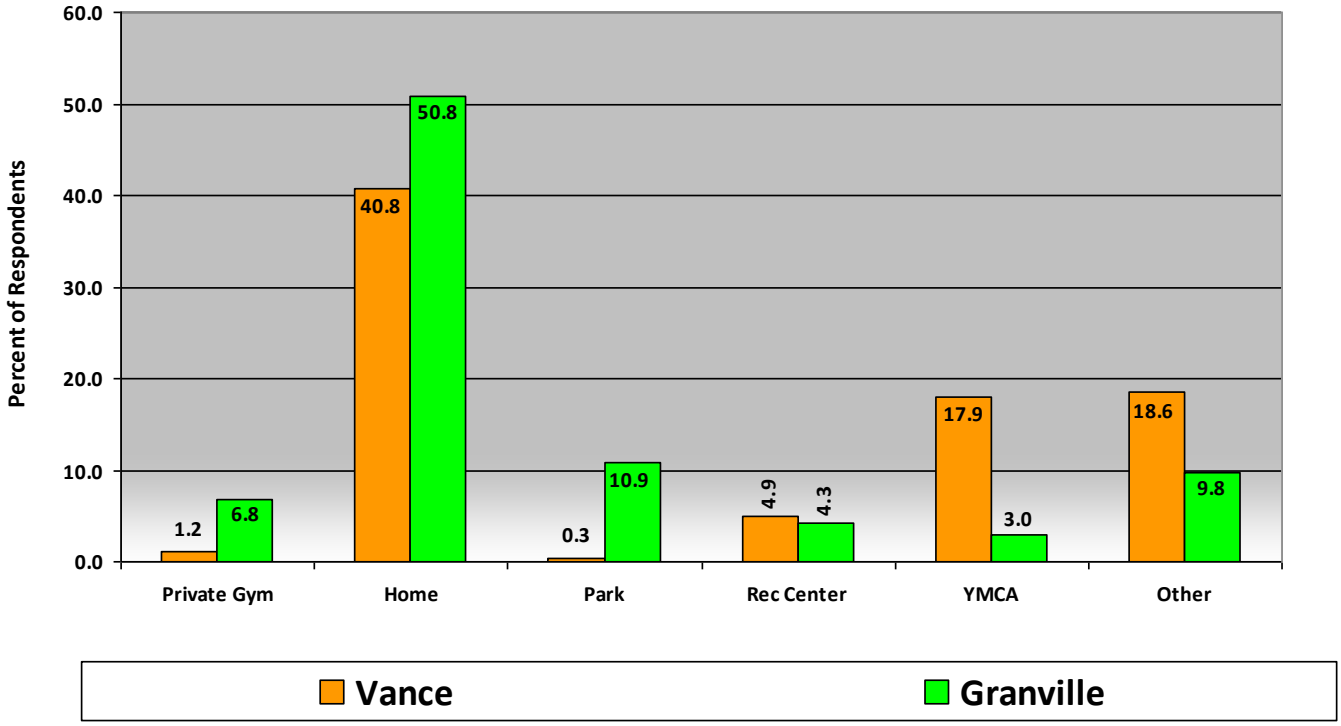
Question 19

HNC2020: PAN

Since you said yes, how many times do you exercise or engage in physical activity during a normal week?



Where do you go to exercise or engage in physical activity?



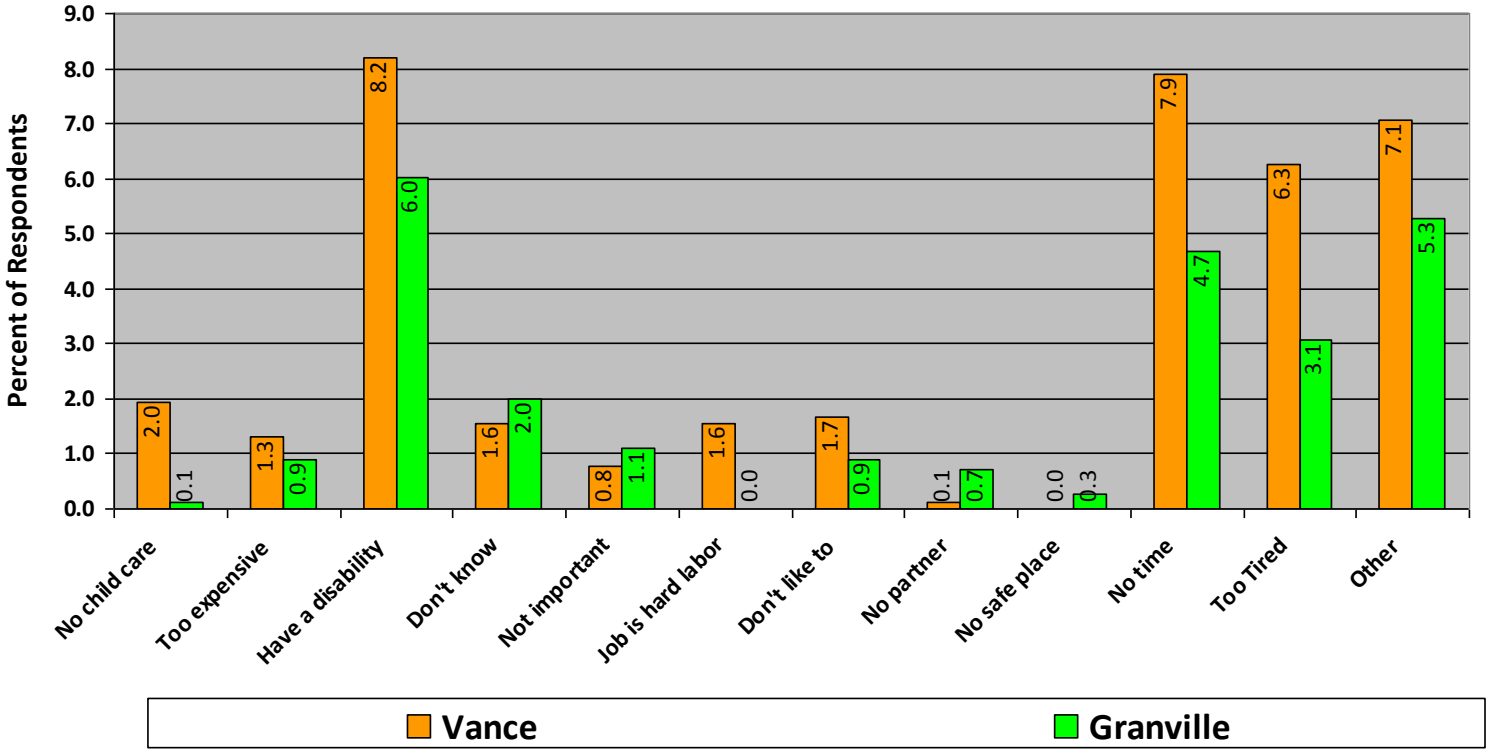
Breakdown of Other Responses

Vance County– 18.6% of total responses	
Church	4.9%
Neighborhood/street/friend's home	50.5%
Lakes	1.2%
Outside	2.8%
Physical therapy	1.6%
Public school gym/Southern Vance	3.5%
VGCC	0.6%
Walked	1.2%
Wal Mart	1.1%
Work/workplace	32.6%

Granville County - 9.8% of total responses	
Work	10.5%
Walking downtown	6.2%
Golf	6.6%
Hospital	2.5%
Mall	10.9%
Neighborhood/streets	20.2%
Old school and hospital building	10.5%
School	13.5%
Team Care	1.3%
Walking track	3.0%
Work/workplace gym	12.1%
Work/neighborhood	2.8%

Question 21

Since you said "no", what are some of the reasons you do not exercise for at least a half an hour during a normal week?



Breakdown of Other Responses

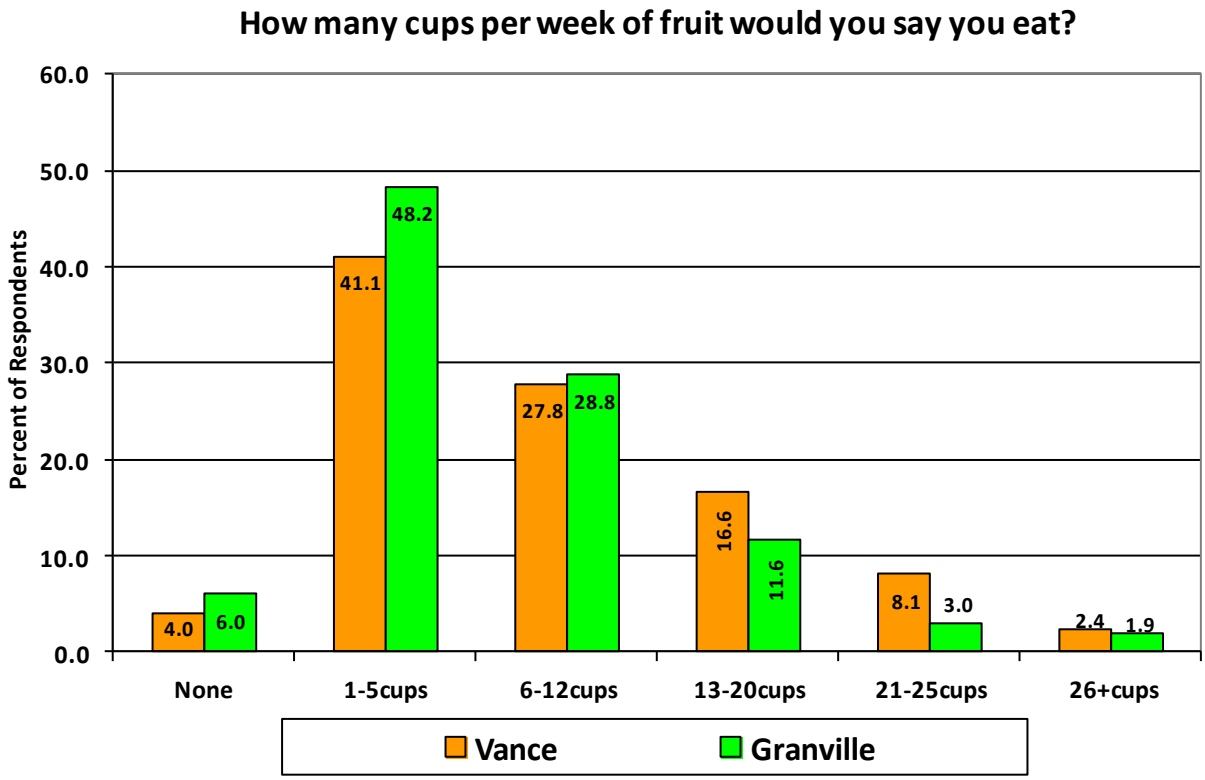
Vance County– 7.1% of total responses	
Age	2.9%
Bad knee	7.3%
Children	1.3%
Don't feel like it	40.2%
Family obligations	7.6%
Health issues	1.6%
I don't want to	2.9%
Lazy	4.2%
Motivation and I get too hot	3.9%
No friends	2.2%
Not motivated	7.4%
Pain	1.9%
Too hot	4.3%
Transportation	1.4%
Work and I am lazy	2.9%
Worried and depressed	7.9%

Granville County - 5.3% of total responses	
Aneurism on his aorta	1.7%
Being pregnant	2.3%
Health problems	14.8%
Heat	2.9%
Hip pain	2.3%
Lack of discipline	6.5%
Pregnant	8.6%
Shortness of breath	6.5%
Surgery	19.1%
Too hot	20.8%
Too old	4.2%
Weather	10.4%

Responses to question 22 were open-ended; hence the responses ranged from 0 to 35 cups per week. The responses were grouped into logical increments for the purpose of this graph.

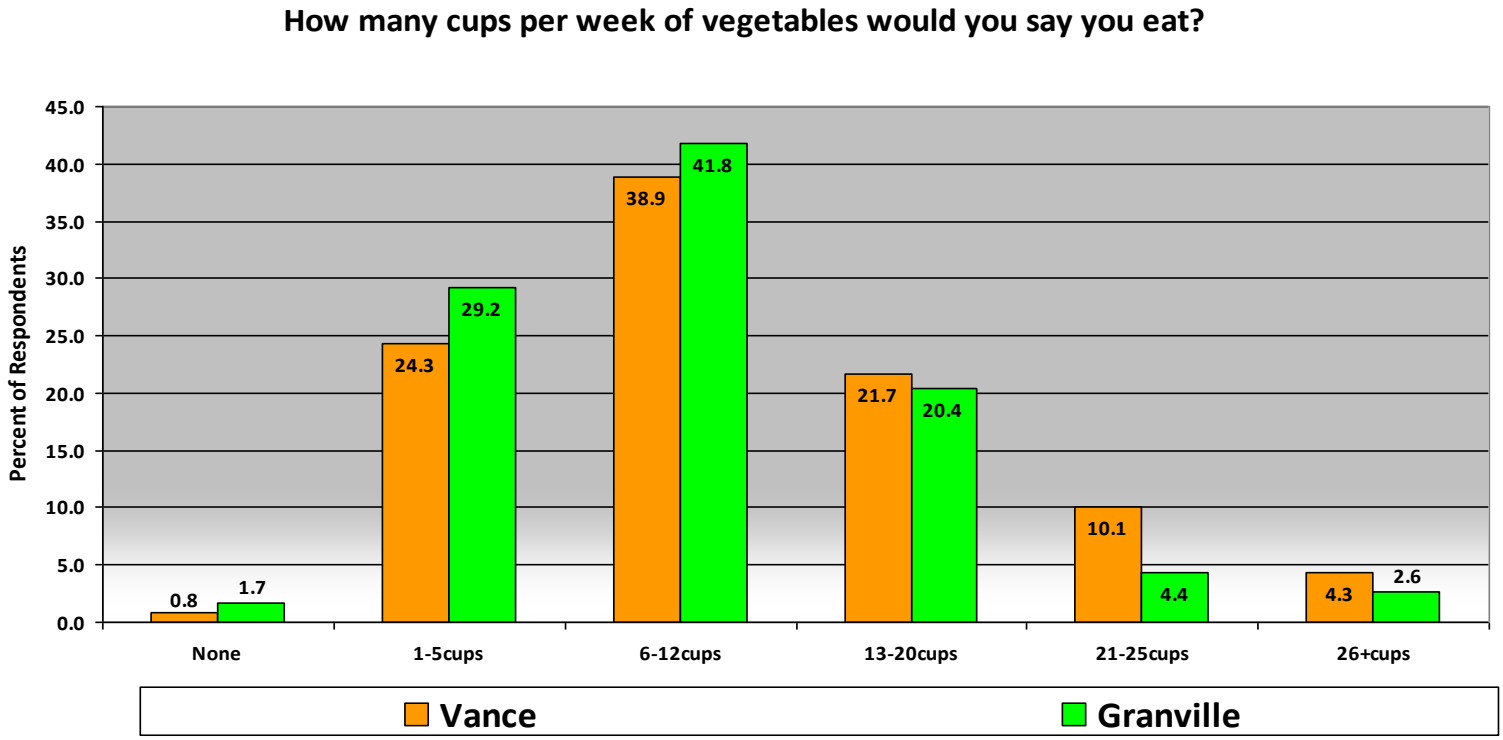
Question 22-A

HNC2020: PAN



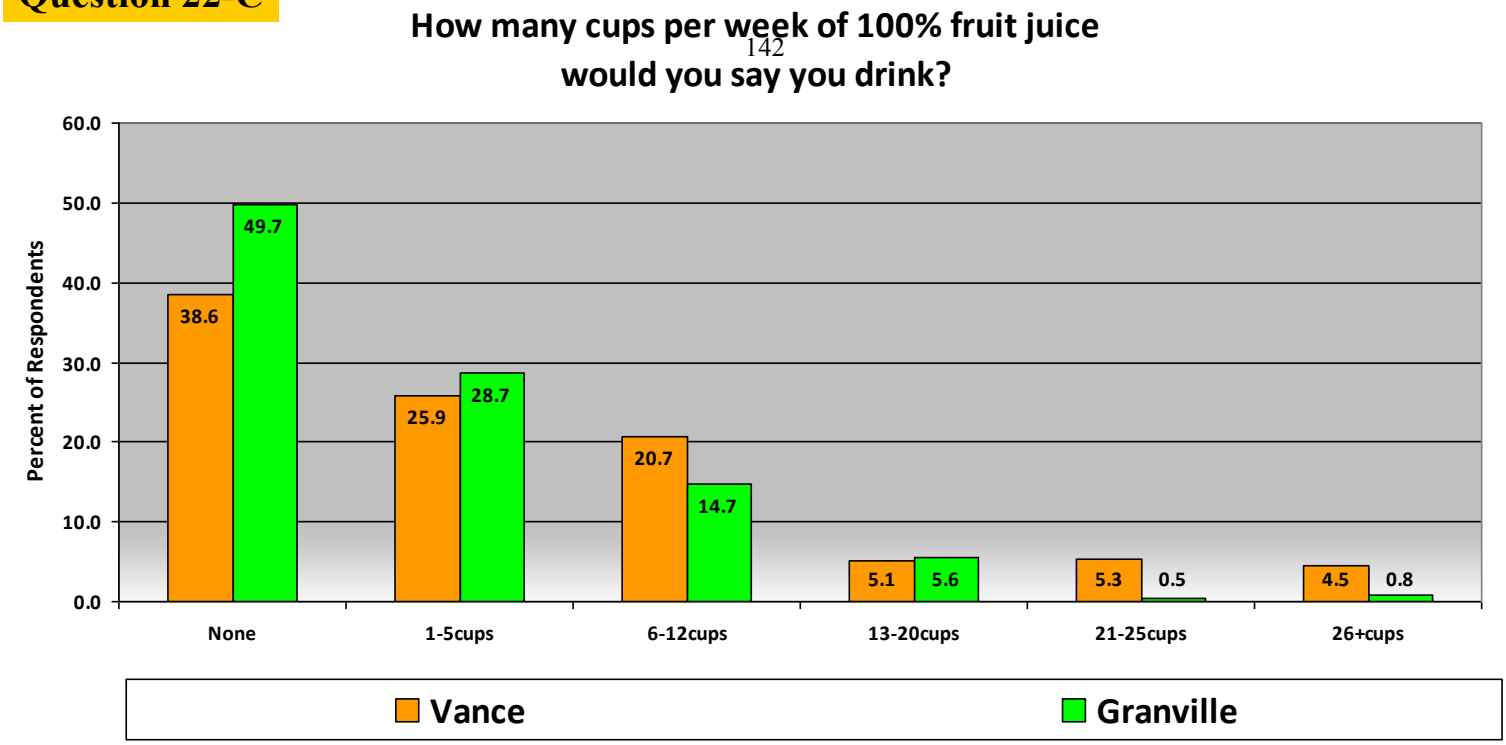
Question 22-B

HNC2020: PAN



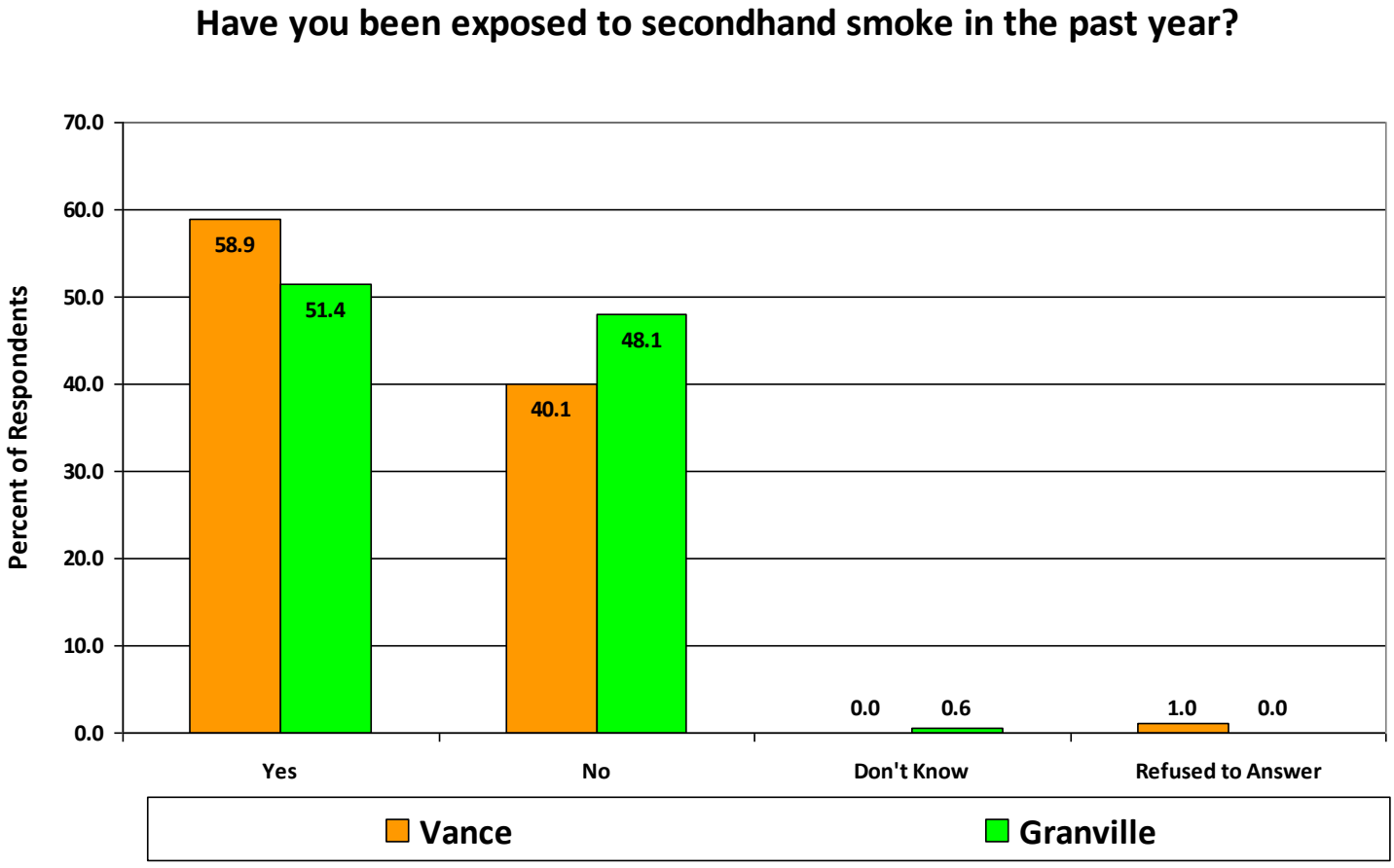
Question 22-C

HNC2020: PAN



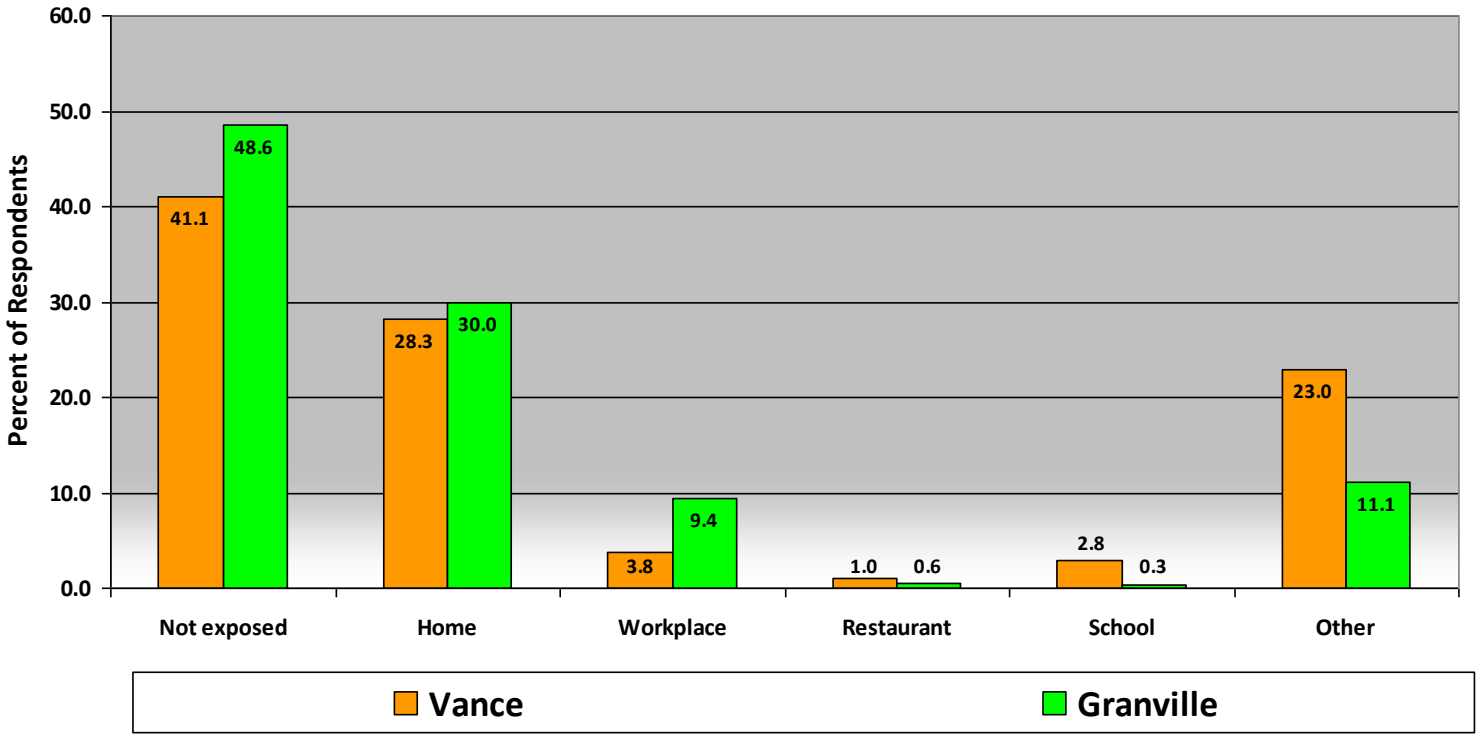
Question 23

HNC2020: T



Question 24

If yes, where do you think you are exposed to secondhand smoke most often?



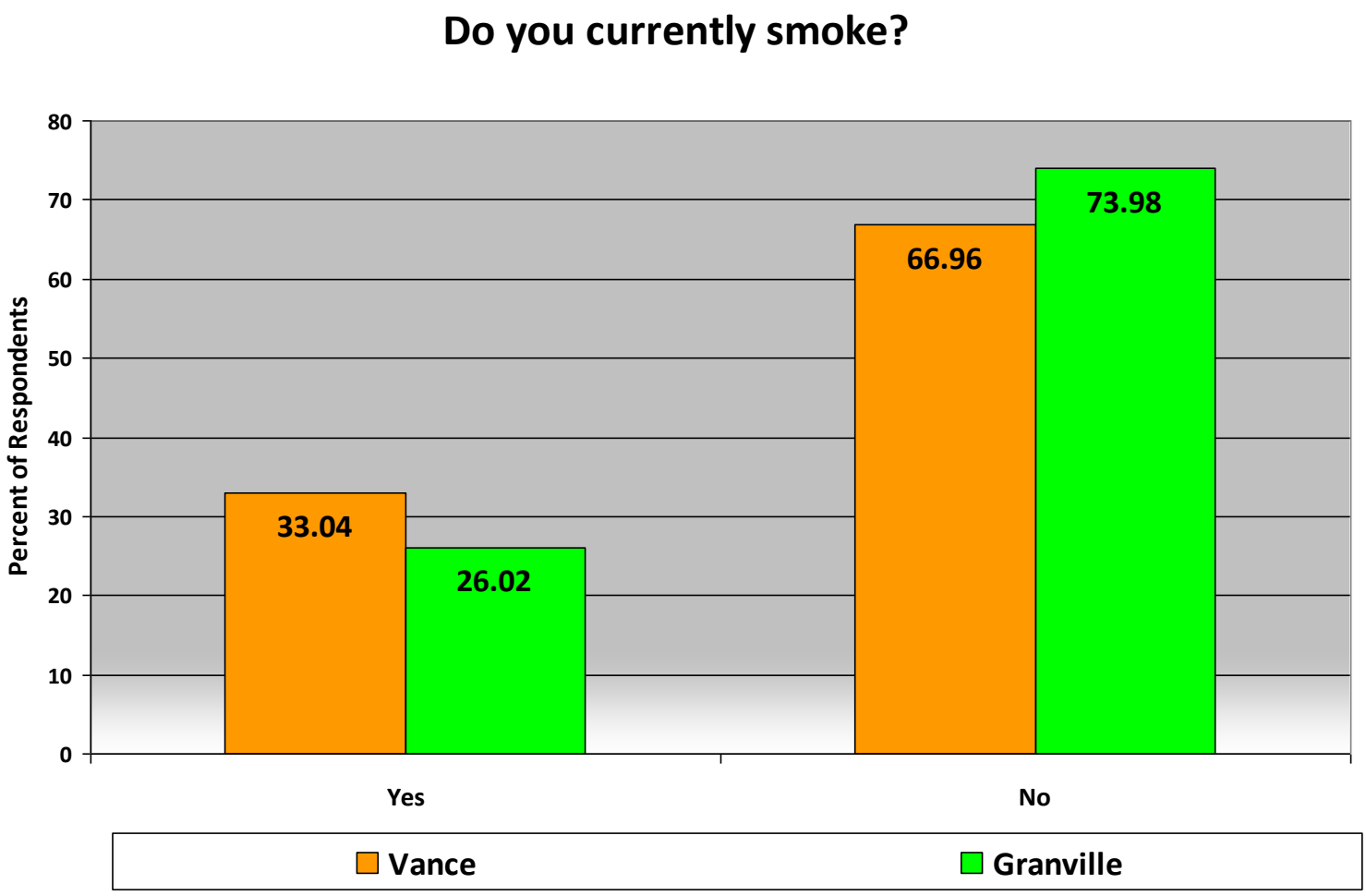
Breakdown of Other Responses

Vance County– 23.0% of total responses	
Bingo hall	5.6%
Car	0.9%
Casino, internet cafe	1.9%
Friends	19.3%
Neighborhood/community	10.7%
Other people houses	0.9%
Outside	2.4%
Public places	3.0%
Social	3.0%
Stores	25.3%
Streets	1.9%
Visiting family	24.1%
Wal-Mart	0.9%

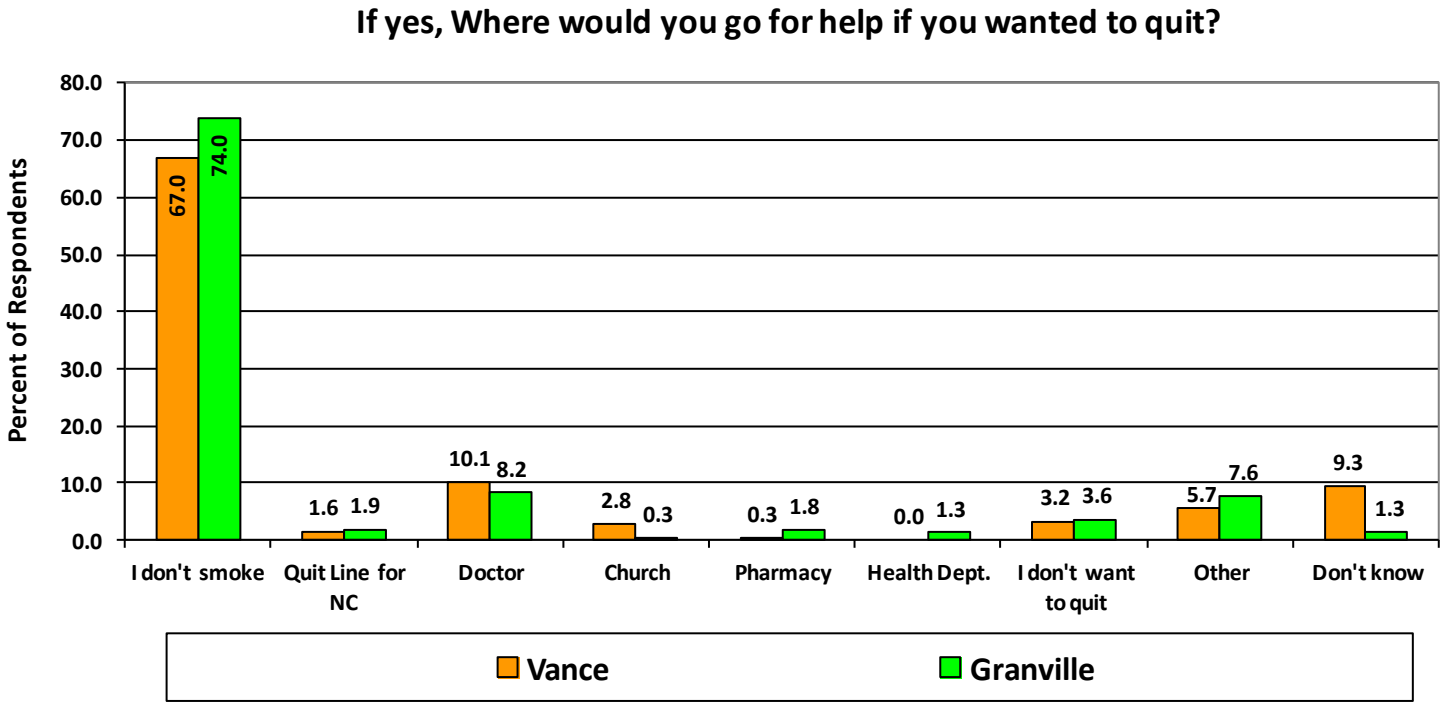
Granville County - 11.1% of total responses	
Family member	2.1%
Family member/relative's house or home	23.2%
Car with other people	11.4%
Family gatherings	2.7%
Friend's house	8.6%
Friends	7.4%
Meetings	2.0%
No response	9.0%
Other homes	1.0%
Out with friends	2.7%
Outdoor events	8.5%
Outside	2.5%
Porch	11.8%
Self	7.4%

Question 25

HNC2020: T



Question 26 HNC2020: T



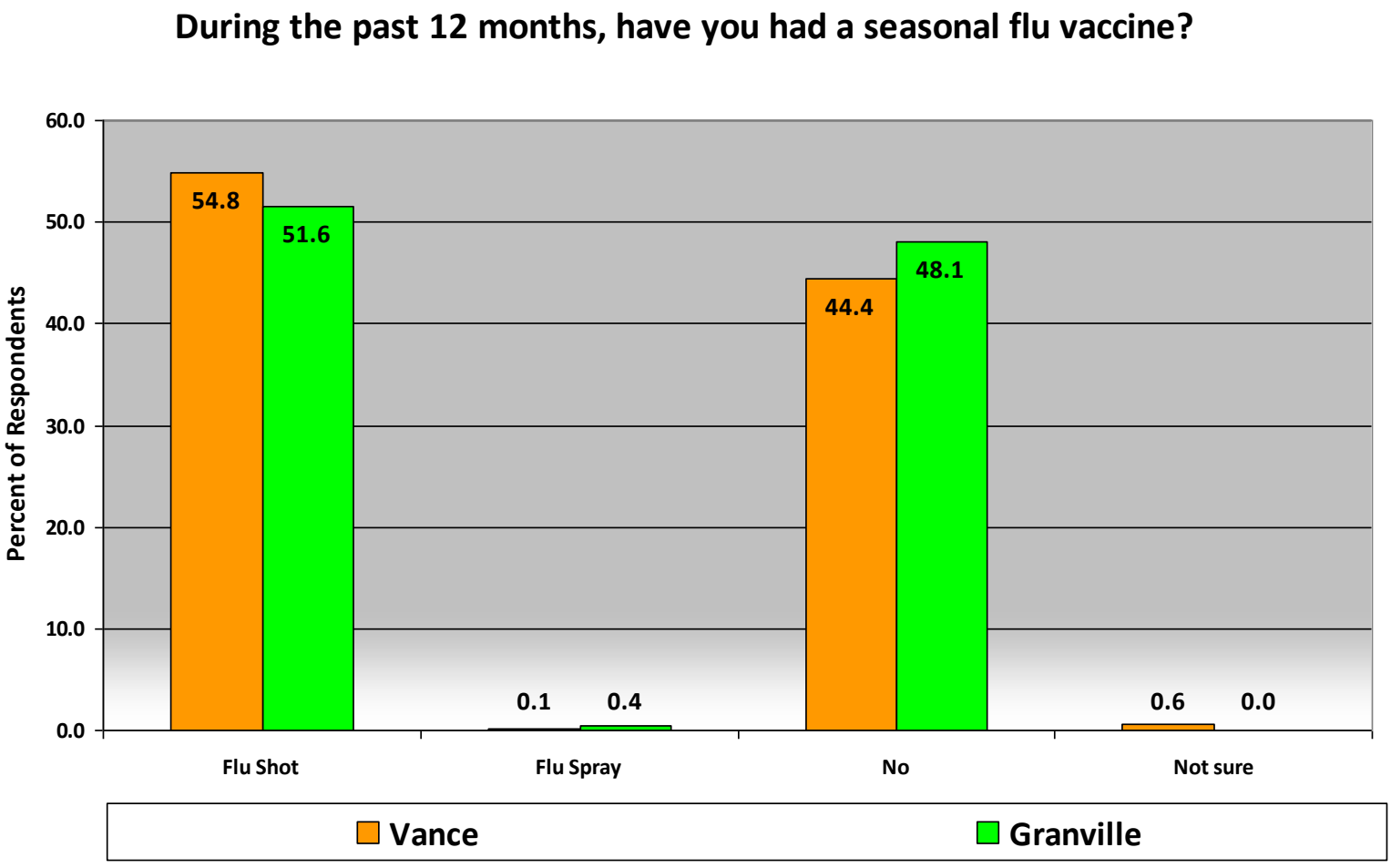
Breakdown of Other Responses

Vance County– 5.7% of total responses	
Buy patches	9.8%
Electronic cigarettes	5.3%
Myself	2.0%
Nowhere	4.9%
Self	9.0%
The Lord	49.4%
VA hospital	3.5%
Work place	16.2%

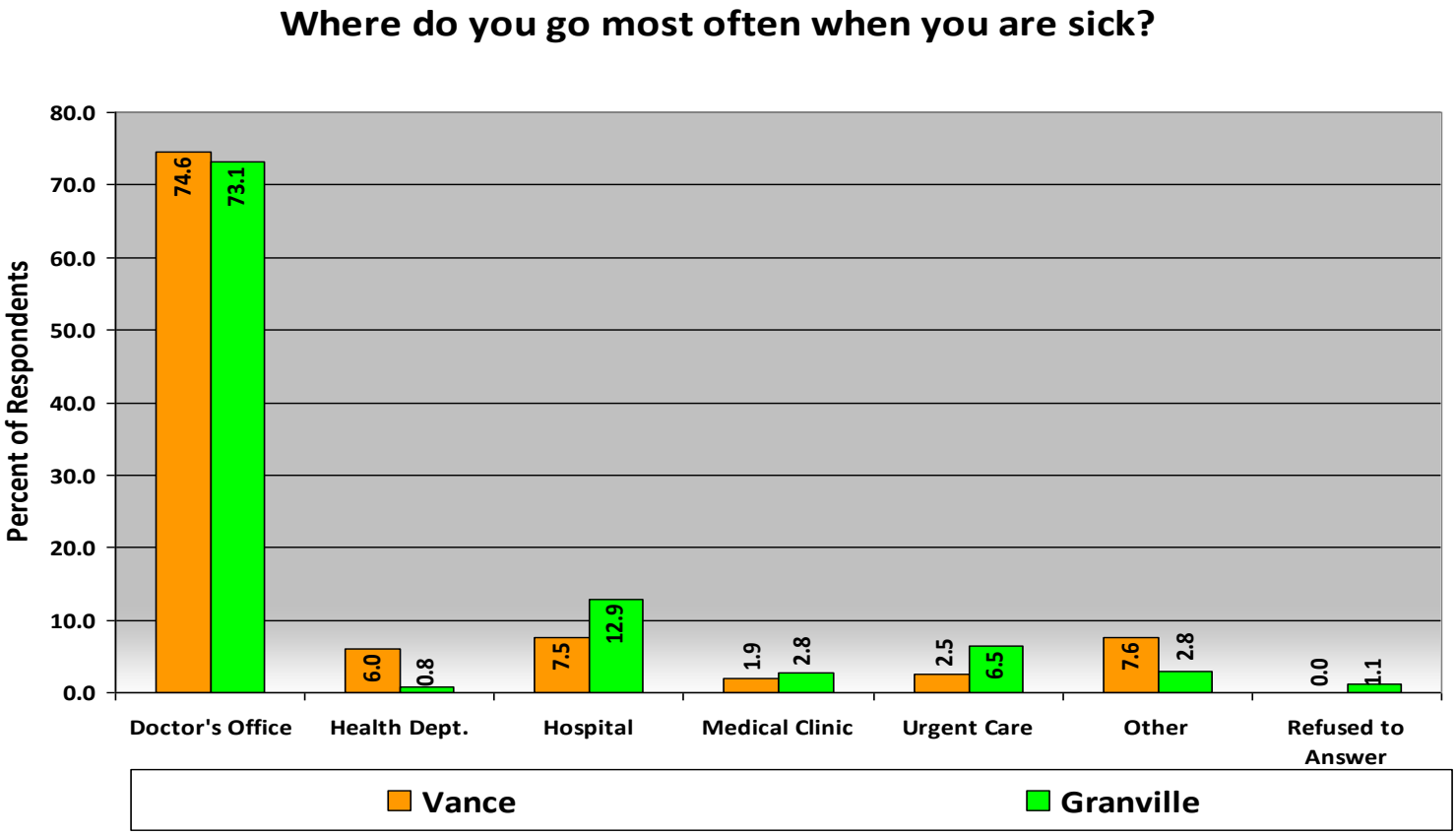
Granville County - 7.6% of total responses	
DUMC	10.6%
God	3.0%
Work	13.2%
Chantix & patch electric cigarette	16.5%
Duke	8.3%
Infomercials	1.7%
Self	5.9%
Smoke cigar occasionally	10.6%
Spouse	16.9%
VA Hospital	1.2%
Work	12.1%

Question 27

HNC2020: ID/FI



Question 28



Breakdown of Other Responses

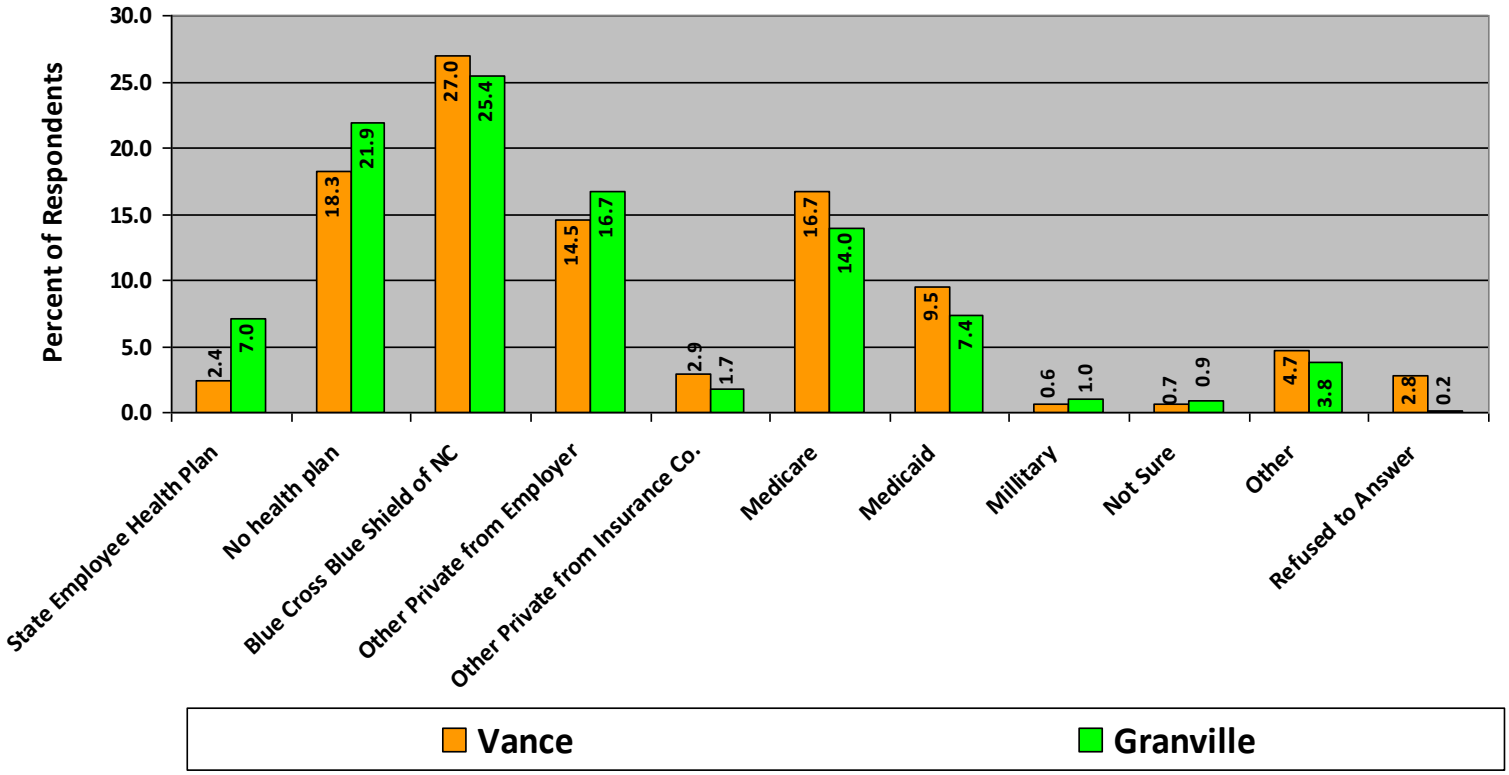
Vance County– 7.6% of total responses	
Don't get sick	5.7%
Home	37.4%
Not sick	13.7%
Nowhere	37.4%
Rural health clinic	3.9%
VA hospital	2.0%

Granville County - 2.8% of total responses	
Cant afford doctor	4.6%
Don't go	66.4%
No where	8.1%
None	10.4%
VA hospital	10.4%

Question 29

HNC2020: C

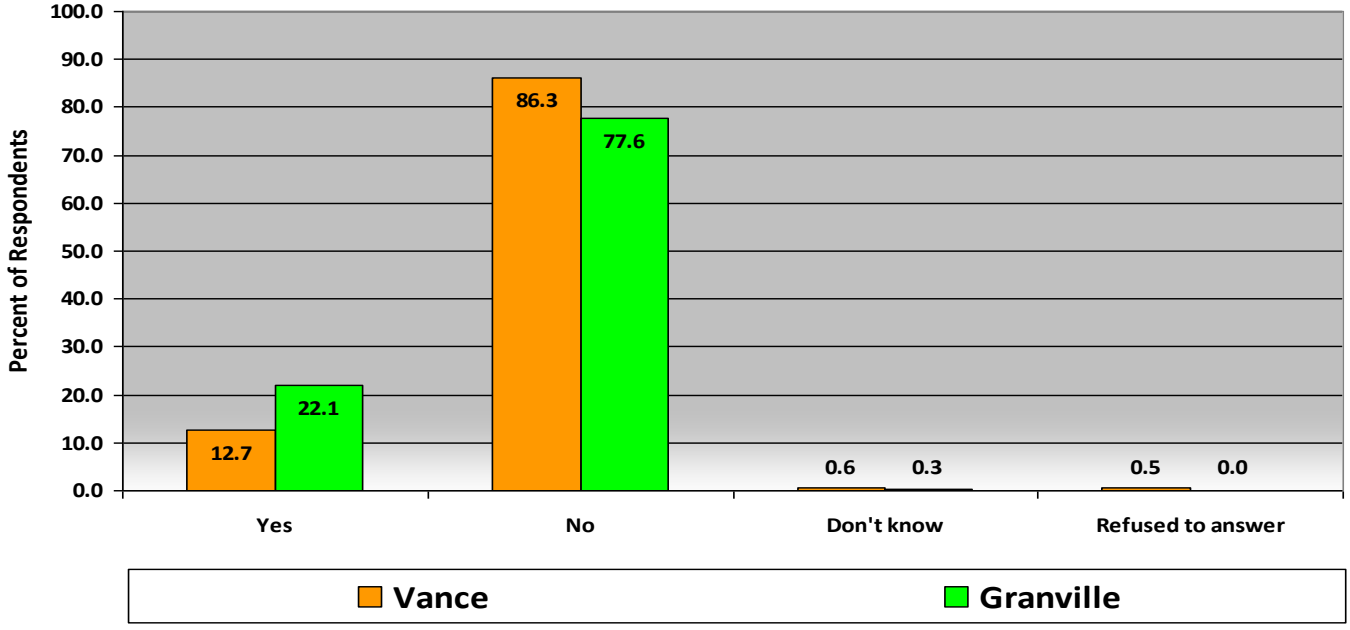
Do you have health insurance?
If yes, what is your primary health insurance plan?



Question 30

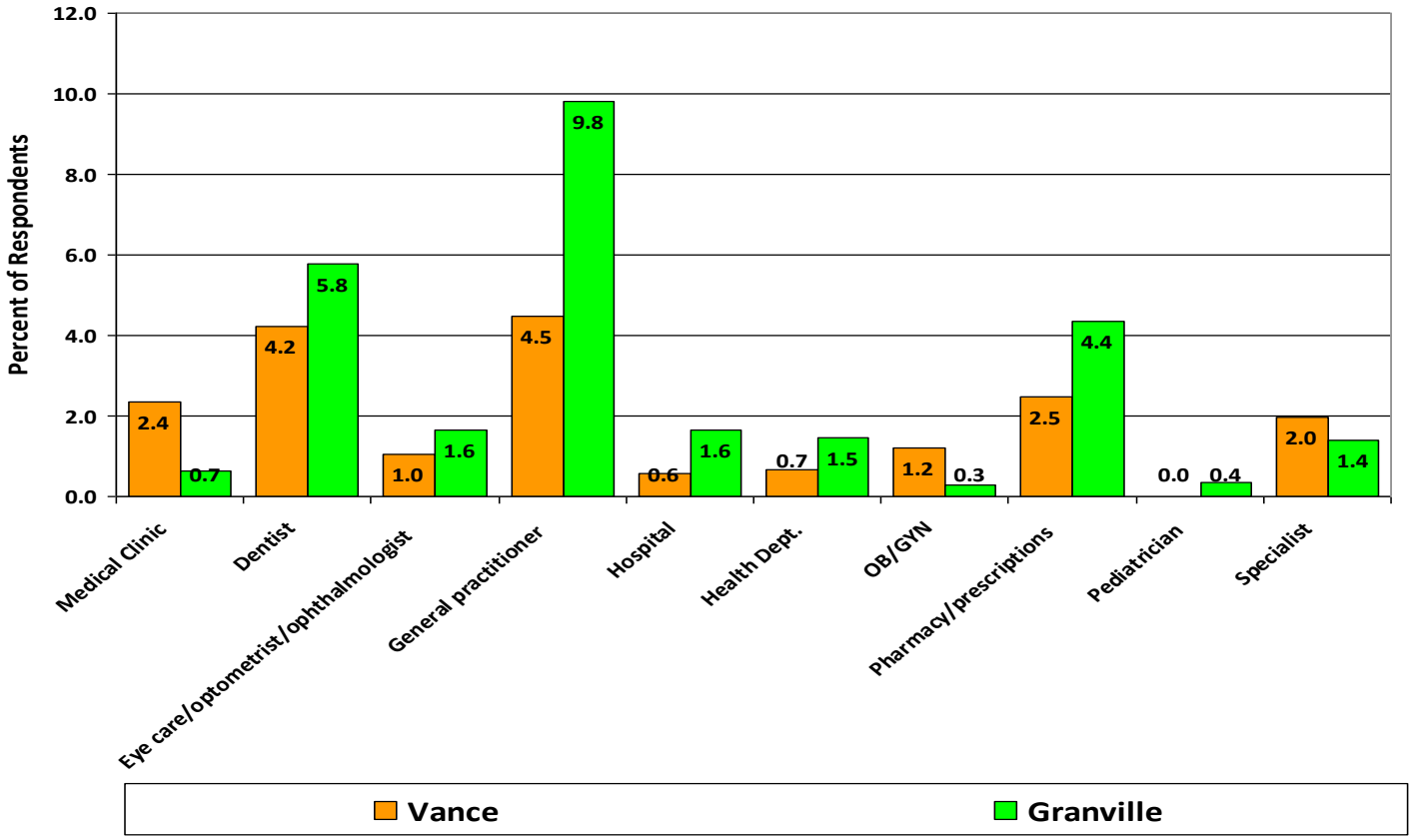
HNC2020: C, OH

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



Question 31 HNC2020: C

Since you said yes, what type of provider or facility did you, or your family member, have trouble getting health care from?



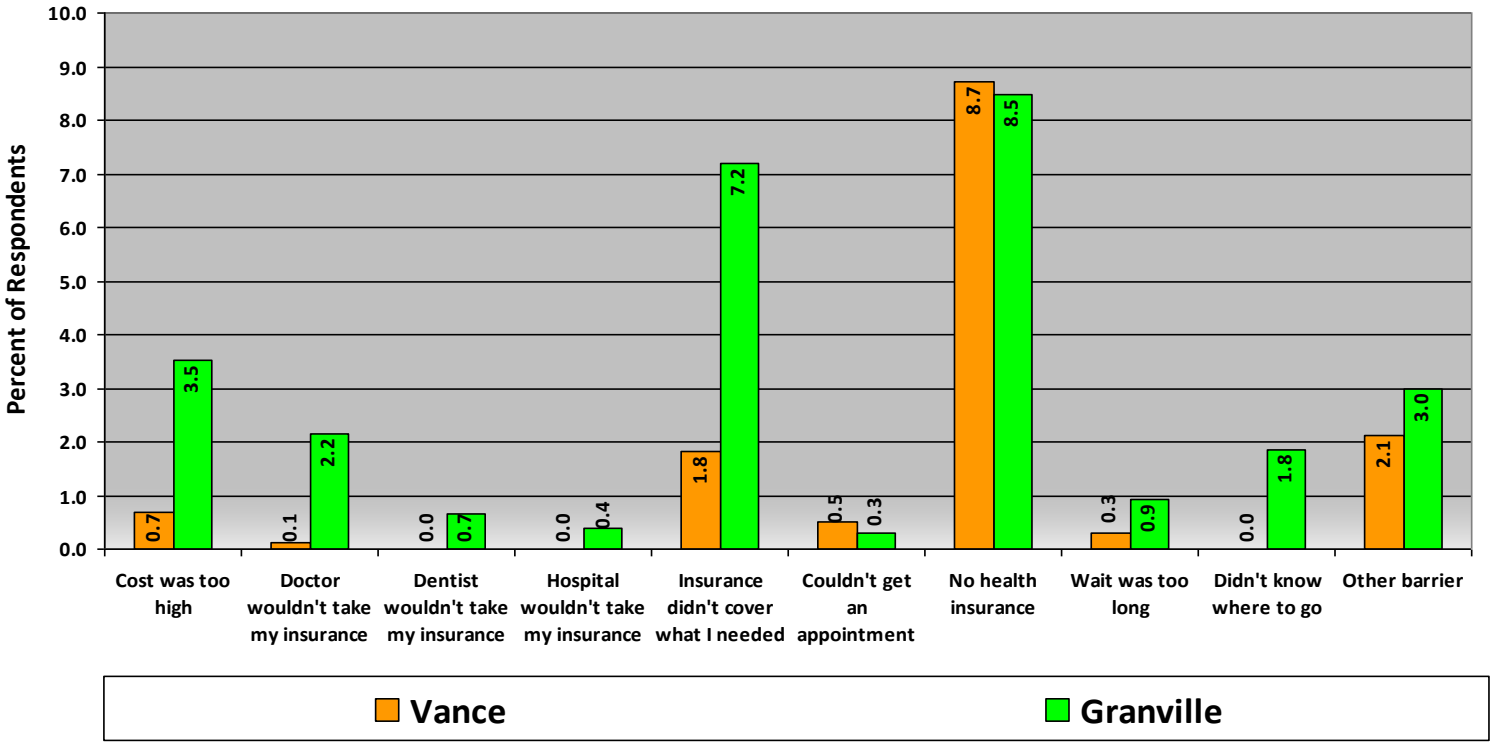
Breakdown of Specialist Responses

Vance County– 2.0% of specialists responses	
Specialist	2.0%
Bariatric surgery	5.7%
Brain	5.7%
Dermatologist	22.0%
Kidney	51.5%
Rural health	15.0%

Granville County - 1.4% of specialists responses	
Gastrologist	21.2%
Mental health	21.2%
Orthopedic	27.2%
Physical therapy and neurologist	21.2%
Surgeon	9.3%

Question 32 HNC2020: C

Which of these problems prevented you or your family member from getting the necessary health care?



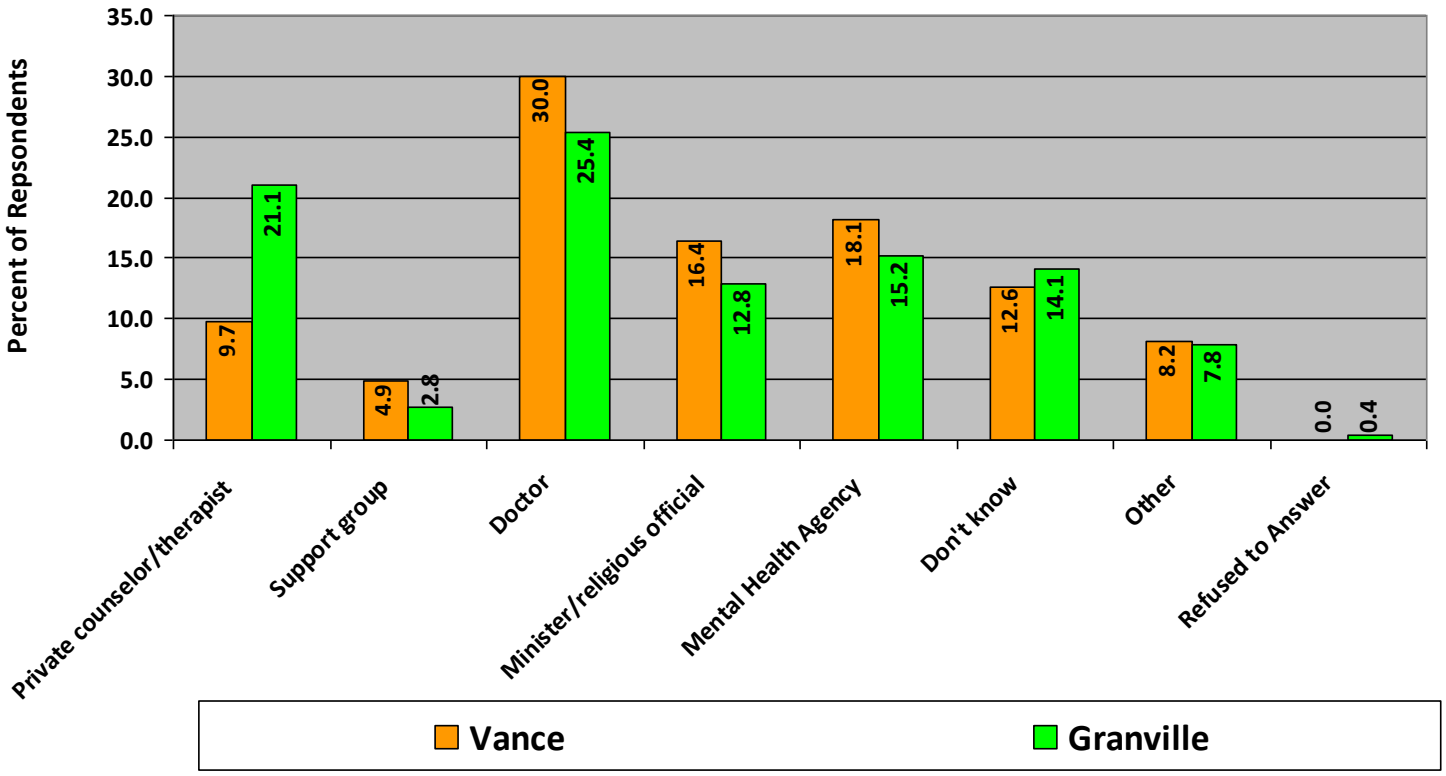
Breakdown of Other Responses

Vance County– 2.1% of total responses	
Administrative error	28.8%
Conflicting condition	16.3%
No income	24.0%
Physician said the test was too expensive	30.8%

Granville County - 3.0% of total responses	
Didn't have service	21.7%
Lack of money	44.0%
Not provided in area	9.9%
Out of stock, gave wrong	8.0%
Physician refused to refer	4.3%
Poor MD cooperation	12.1%

Question 33 HNC2020: MH

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



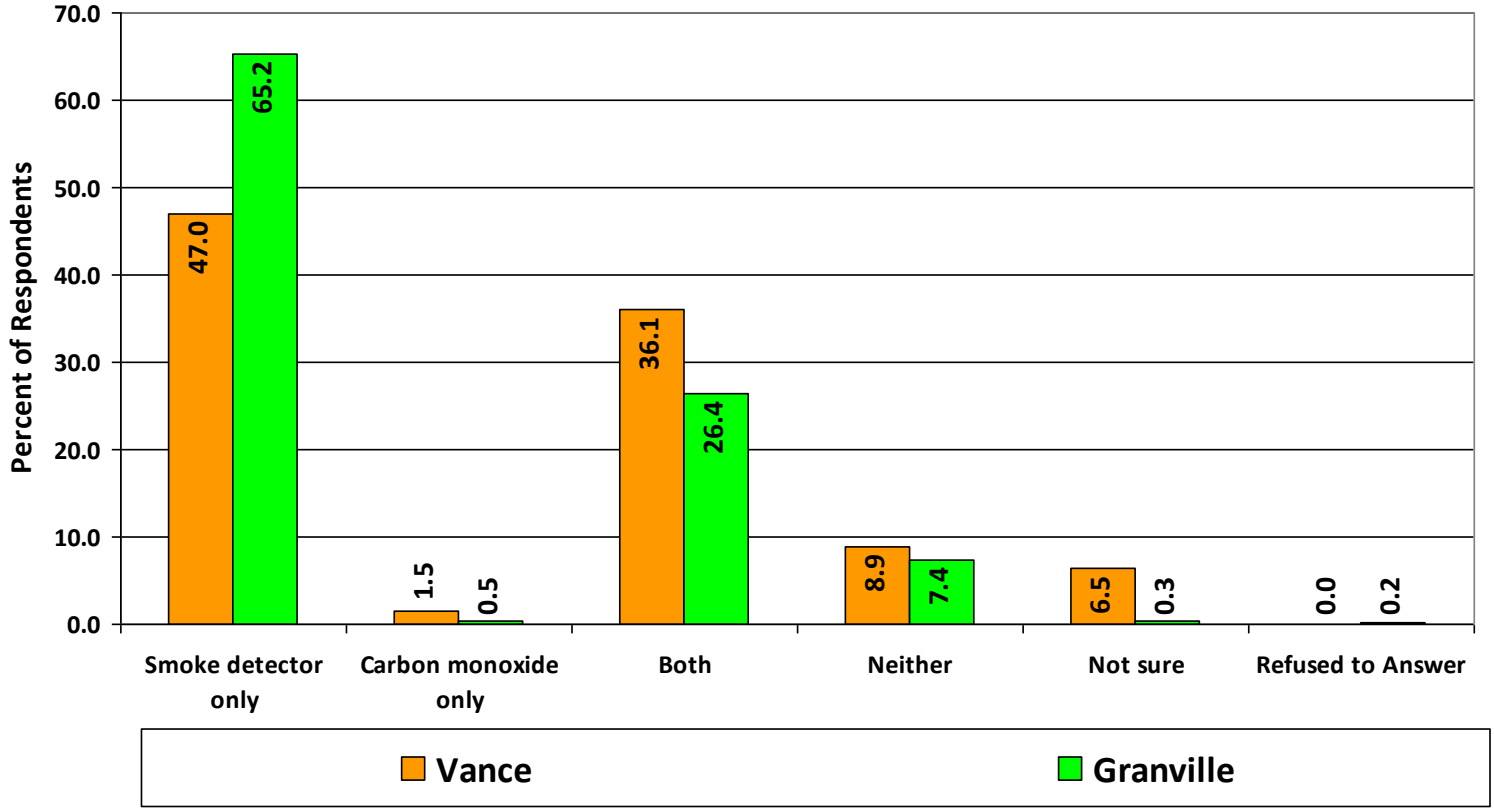
Breakdown of Other Responses

Vance County– 8.2% of total responses	
DSS	3.0%
EAP	3.8%
Hospital	1.4%
Family member/relative	76.7%
God	1.8%
Health department	1.9%
Me	3.4%
Self	1.3%
Sheriff	3.3%
Work out on your own	1.6%

Granville County - 7.8% of total responses	
County Health Dept.	27.6%
Doctor or counselor	3.5%
EAP	15.9%
Family	21.0%
Family member	3.5%
Himself	1.1%
Internet	1.1%
Number to call at work	1.1%
Parents	15.5%
Trosha	9.7%

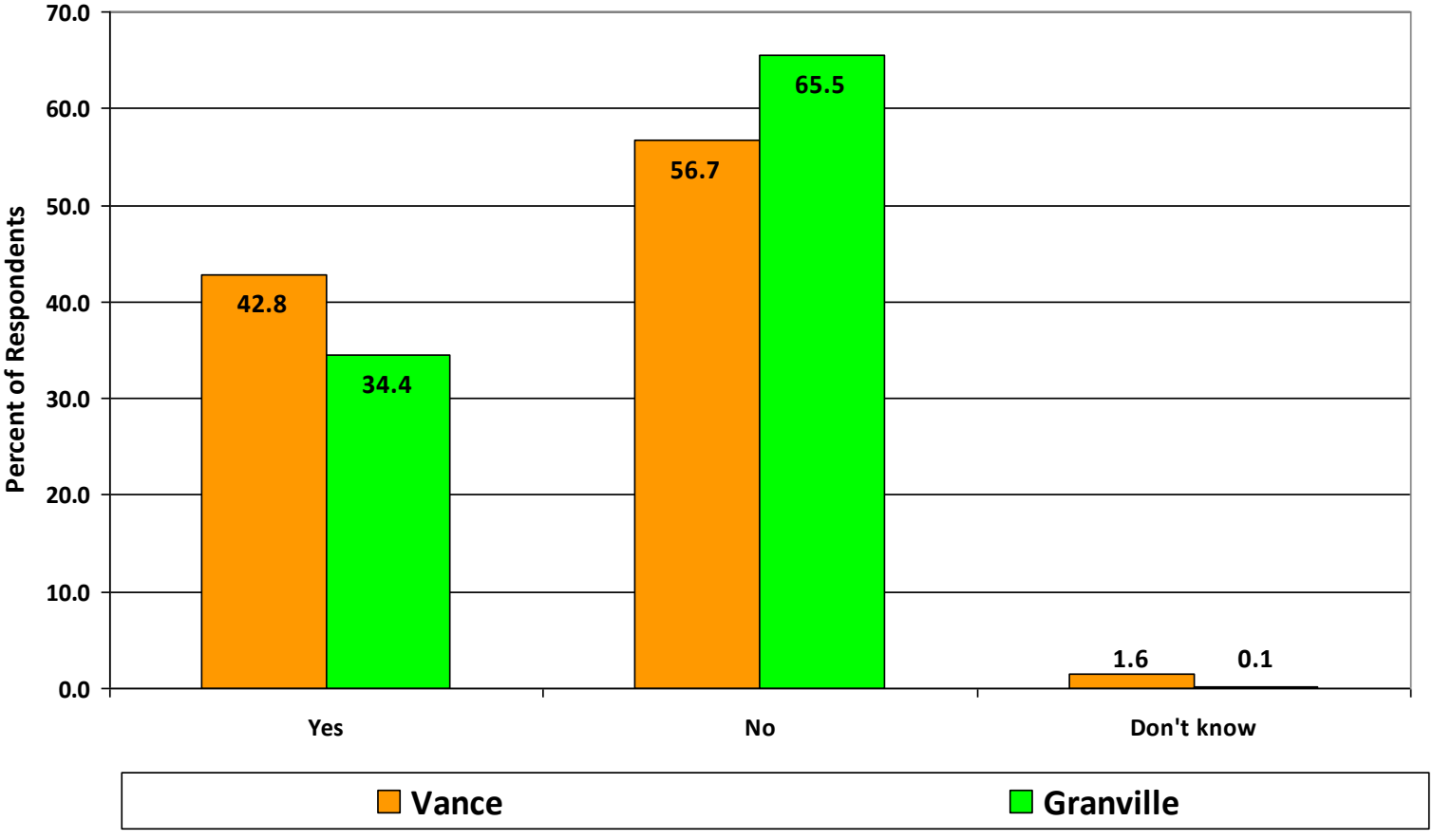
Question 34

Does your household have working smoke and carbon monoxide detectors?



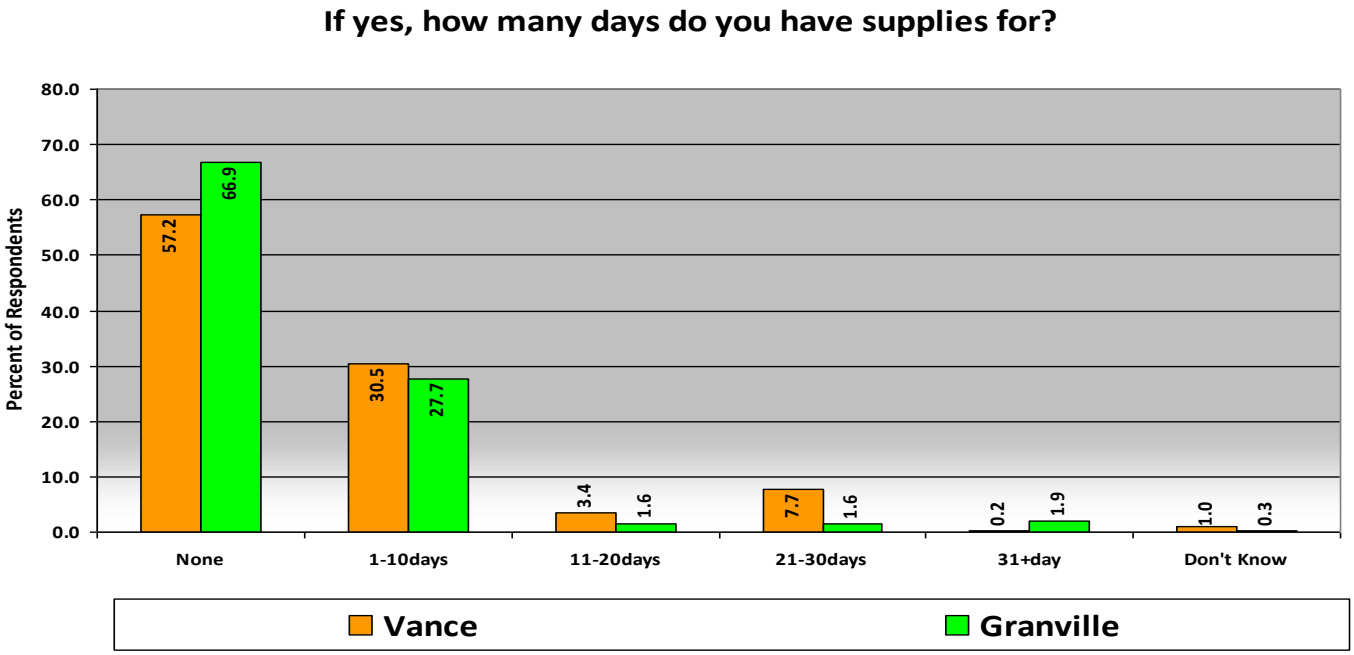
Question 35

Does your family have a basic emergency supply kit?



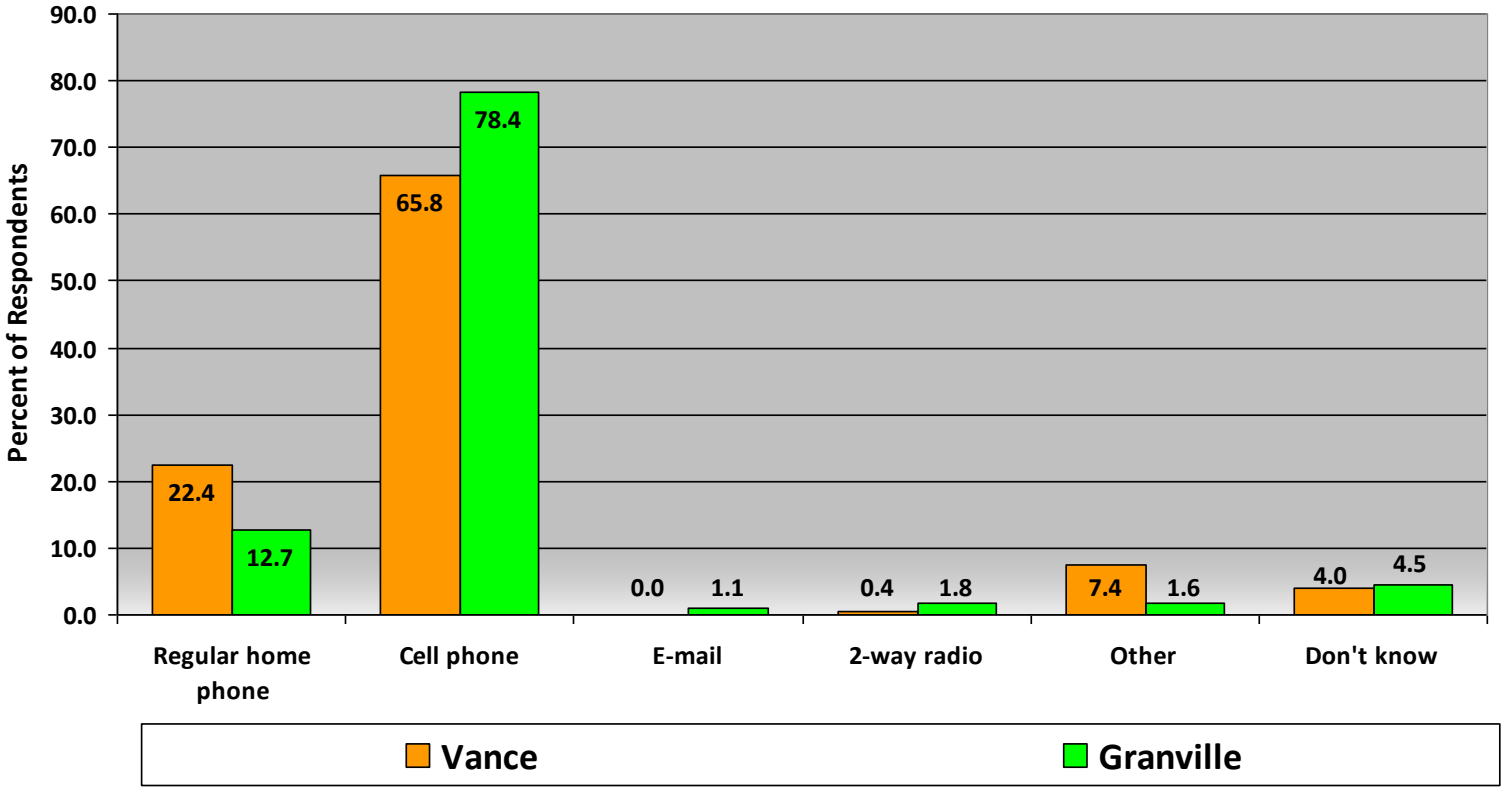
Question 36

Responses to question 36 were open-ended; hence the responses ranged from 0 to 365 days. The responses were grouped into logical increments for the purpose of this graph.



Question 37

In a large-scale disaster or Emergency, what would be your main way of communicating with family?



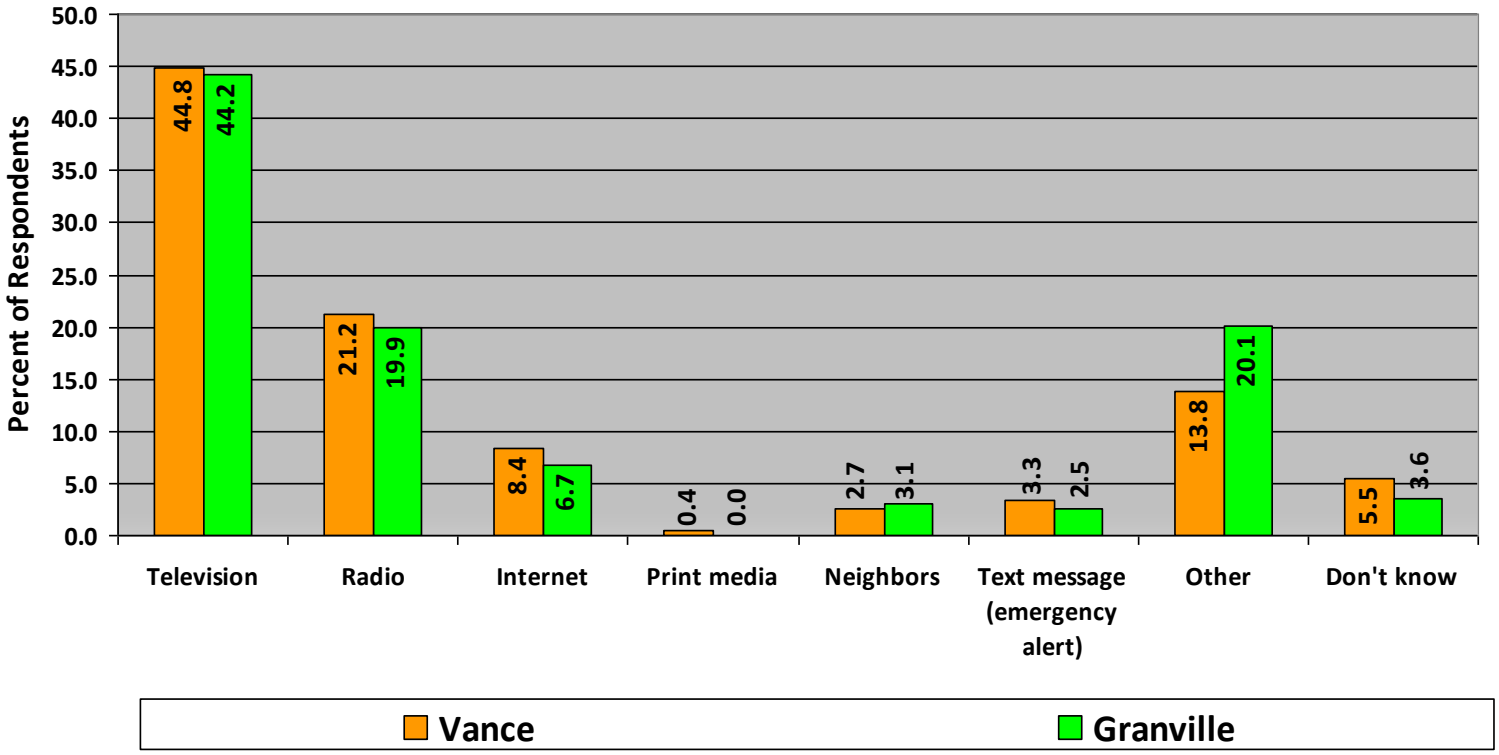
Breakdown of Other Responses

Vance County– 7.4% of total responses	
Drive to family	9.1%
Ham radio	7.0%
Holler	5.3%
Home visit	14.6%
If phones work then phone	5.9%
In person	3.7%
Lives together	4.0%
Neighbors	2.8%
Outside	38.2%
Walk	5.8%
Walk up the road to family's house	3.7%

Granville County - 1.6% of total responses	
Driving	6.7%
Voice because everything would be out	23.0%
Walk to daughter's home	18.0%
Walk, car	16.9%
Walking	11.8%
Yell	23.6%

Question 38

In a large-scale disaster or emergency, what would be your main way of getting information from authorities?

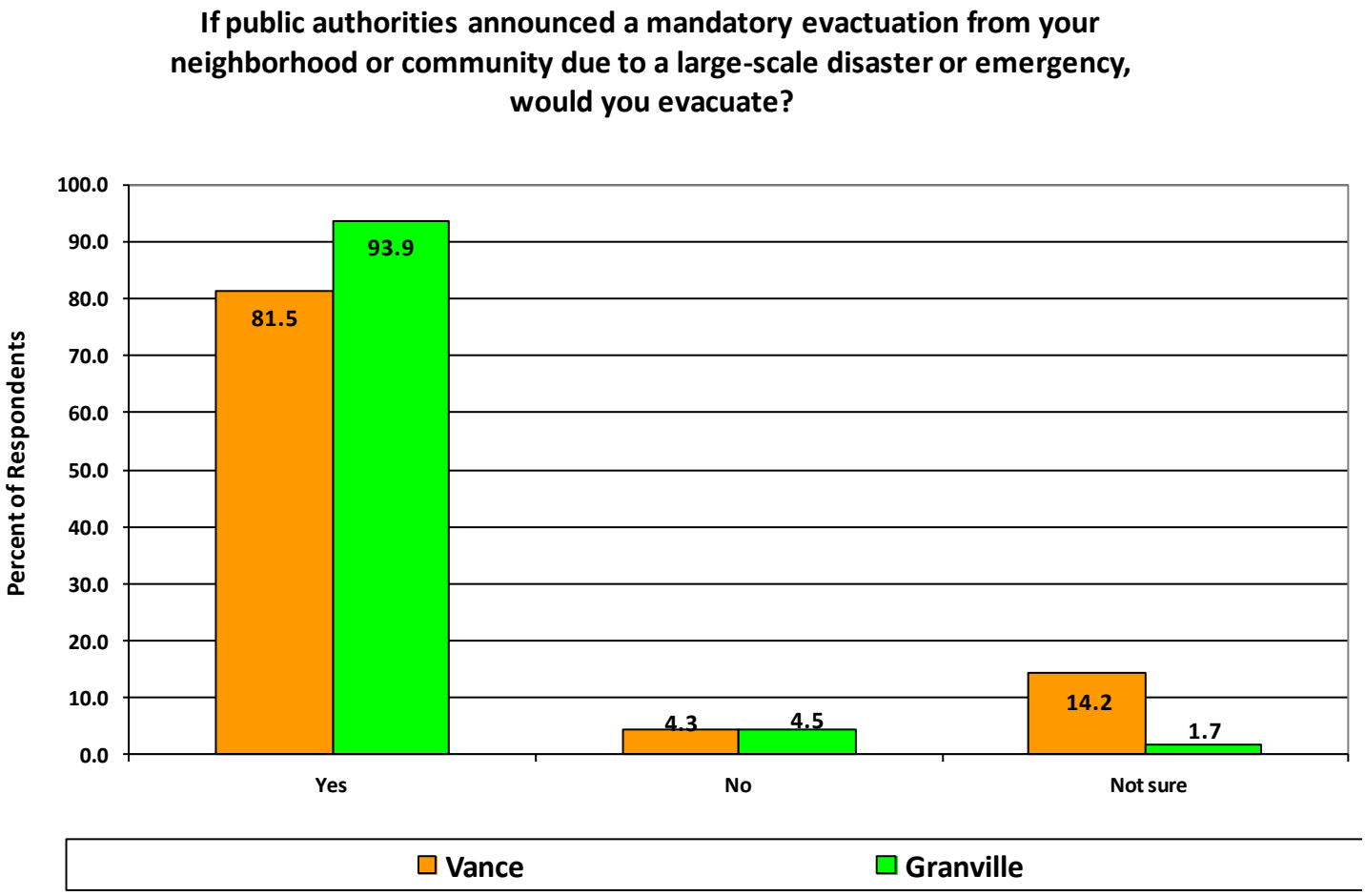


Breakdown of Other Responses

Vance County– 13.8% of total responses	
ADT alarm system	1.5%
Emergency alert system through telephone and email	2.8%
Emergency radio	4.1%
Family member	1.1%
Fire dept	1.5%
Ham radio	3.7%
Husband is police officer	0.8%
Phone	78.6%
Police radio	1.1%
Weather radio	1.1%
Work	3.8%

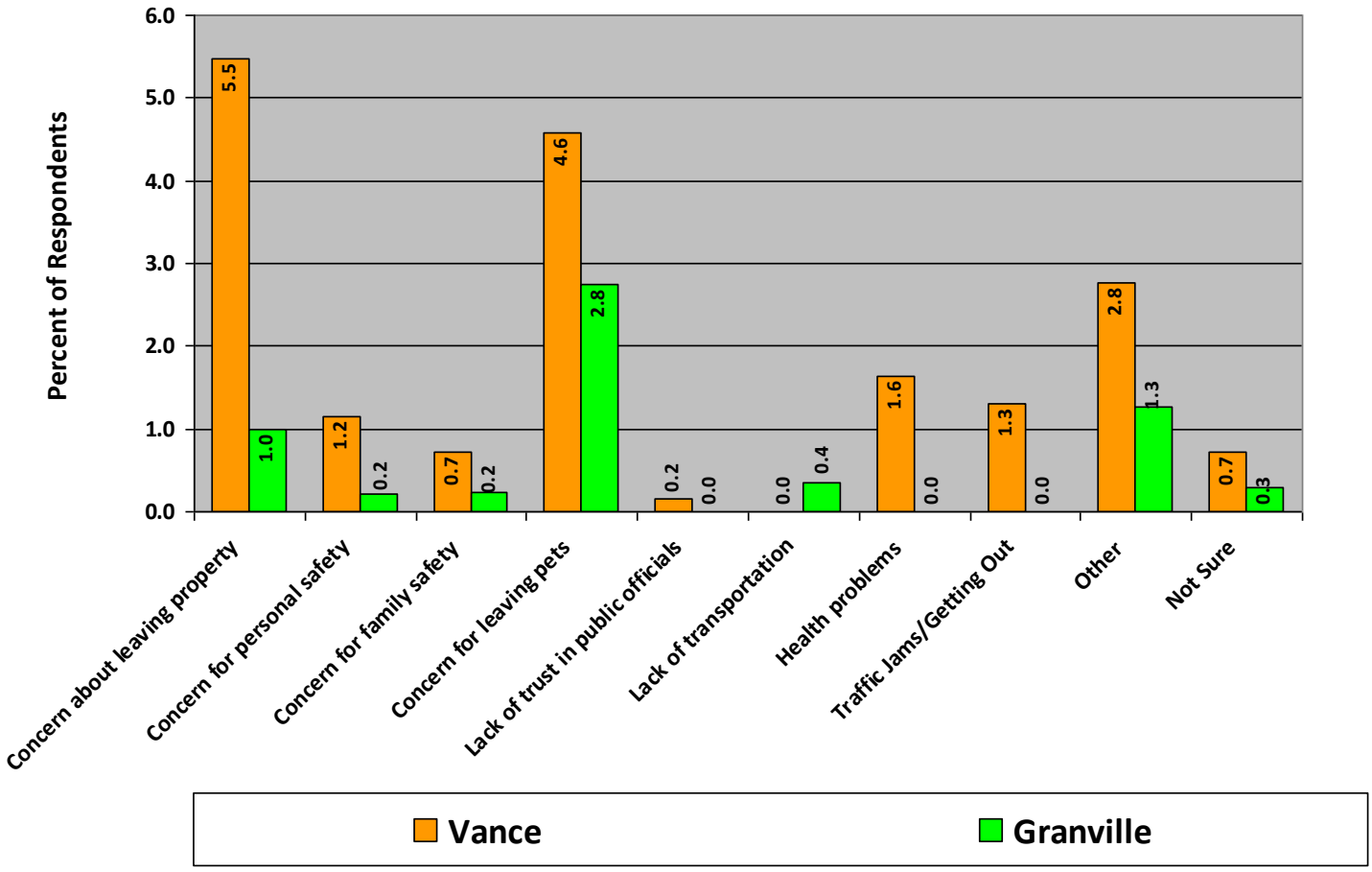
Granville County - 20.1% of total responses	
EMS 911	23.0%
Sister	5.1%
Armory	3.2%
Call sheriff's dept.	6.4%
Cell phone	15.8%
Family	1.5%
In person	4.7%
Telephone	18.9%
Police dept.	7.7%
Scanner	6.5%
Through wire	0.5%
Work	6.8%

Question 39


If public authorities announced a mandatory evactuation from your neighborhood or community due to a large-scale disaster or emergency, would you evacuate?
Percent of Respondents
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
81.5
93.9
4.3
4.5
14.2
1.7
Yes
No
Not sure
Vance
Granville

Question 40

What would be your main reason for not evacuating?

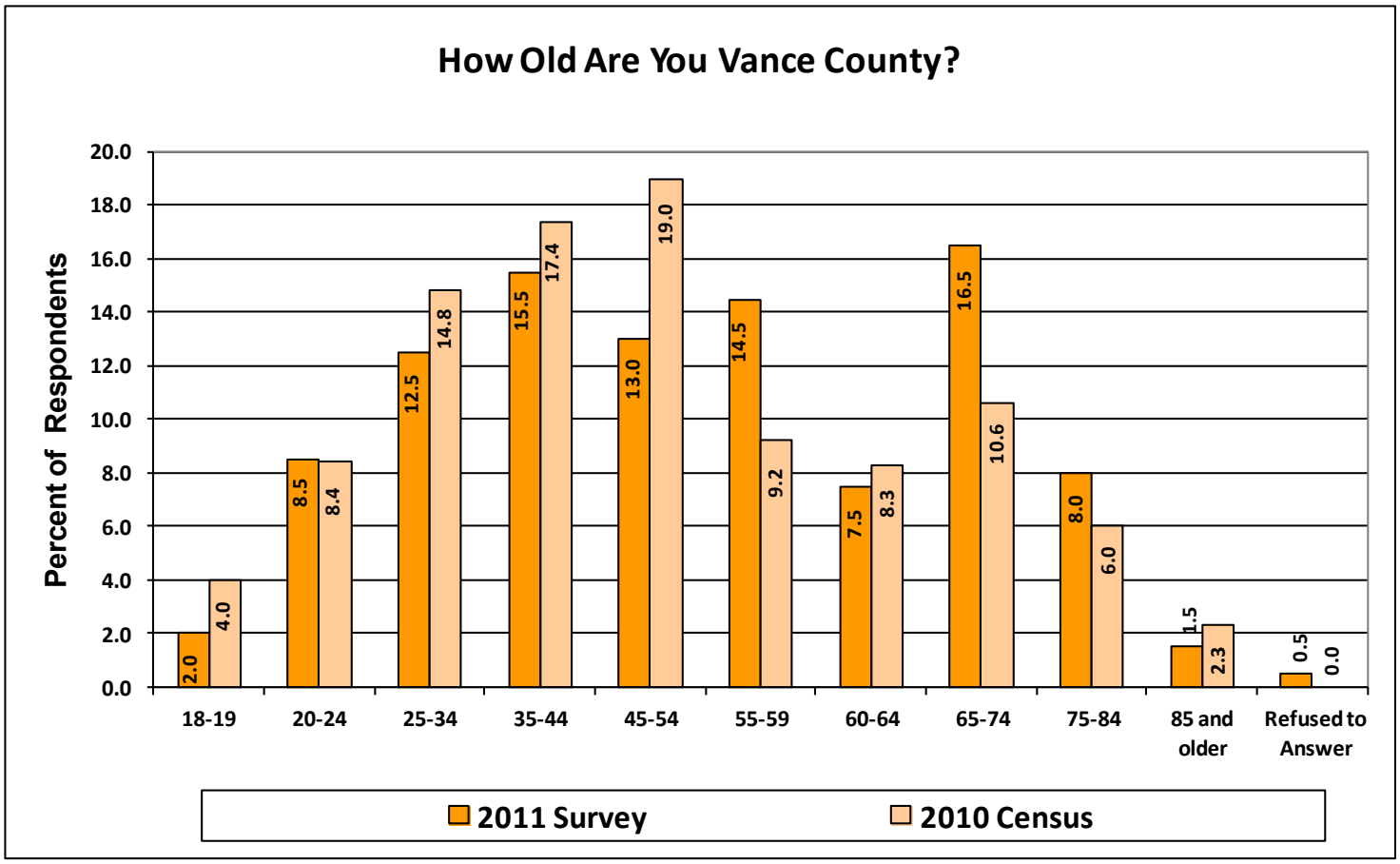


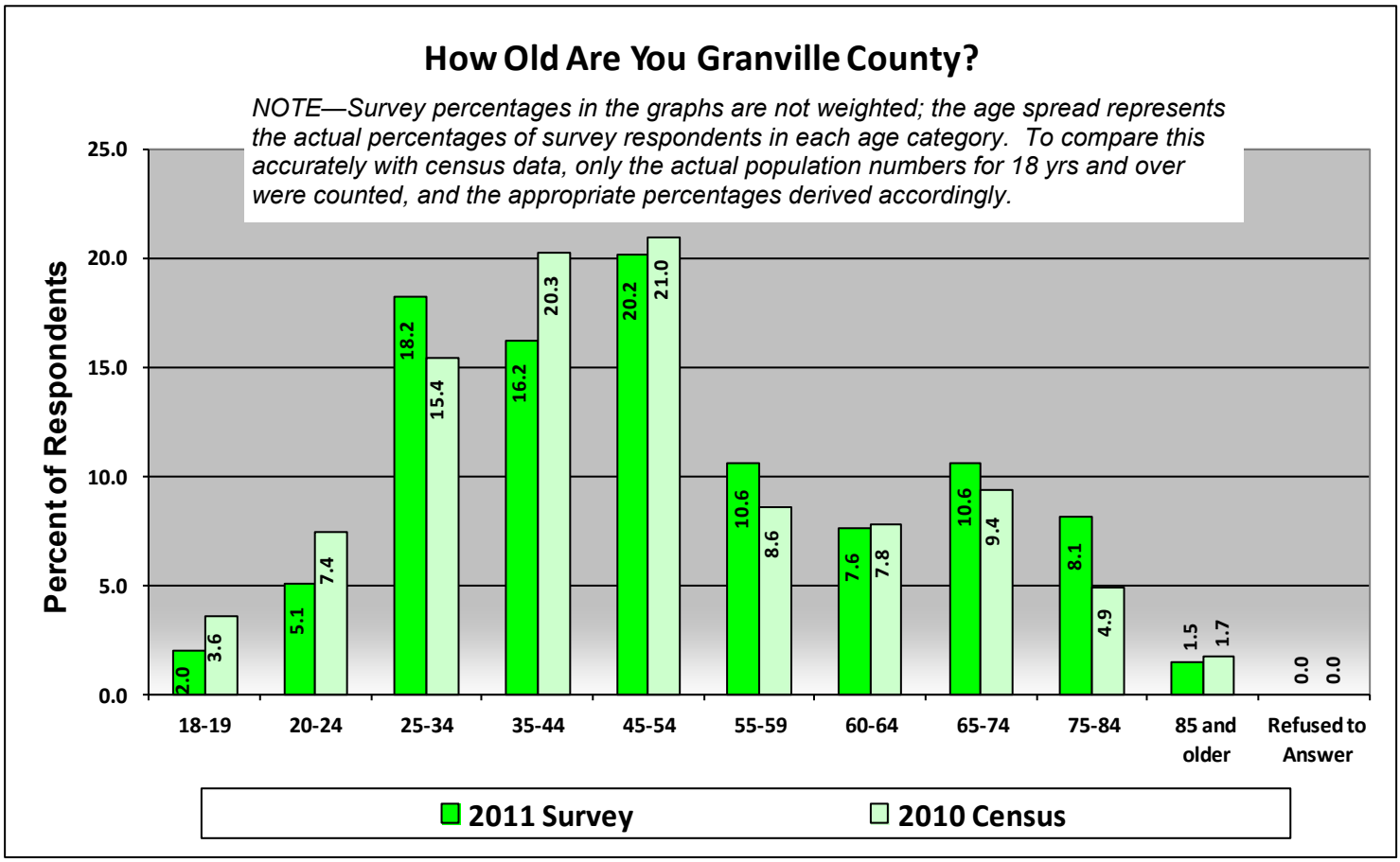
Breakdown of Other Responses

Vance County– 2.8% of total responses	
Brick house	5.4%
Combination of all	18.7%
Depends what type disaster	4.1%
Firefighter	10.8%
Nowhere to go	61.1%

Granville County - 1.3% of total responses	
Don't want to leave home	13.0%
Money	10.1%
Work Responsibility	76.8%

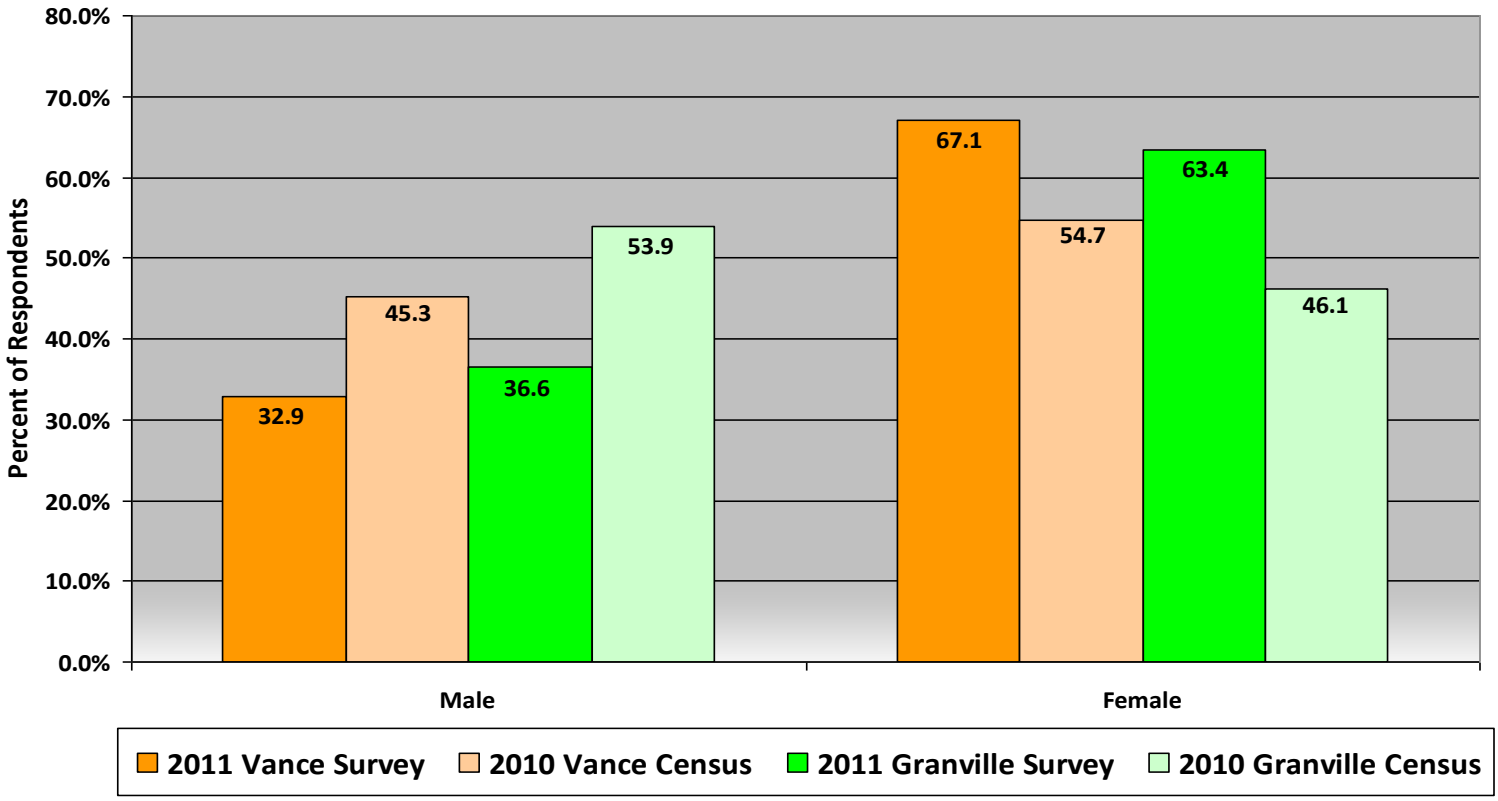
Question 41


How Old Are You Vance County?
Percent of Respondents
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
2.0
4.0
8.5
8.4
12.5
14.8
15.5
17.4
13.0
19.0
14.5
9.2
7.5
8.3
16.5
10.6
8.0
6.0
1.5
2.3
0.5
0.0
18-19
20-24
25-34
35-44
45-54
55-59
60-64
65-74
75-84
85 and older
Refused to Answer
2011 Survey
2010 Census


How Old Are You Granville County?
NOTE—Survey percentages in the graphs are not weighted; the age spread represents the actual percentages of survey respondents in each age category. To compare this accurately with census data, only the actual population numbers for 18 yrs and over were counted, and the appropriate percentages derived accordingly.
Percent of Respondents
25.0
20.0
15.0
10.0
5.0
0.0
2.0
3.6
5.1
7.4
18.2
15.4
16.2
20.3
20.2
21.0
10.6
8.6
7.6
7.8
10.6
9.4
8.1
4.9
1.5
1.7
0.0
0.0
18-19
20-24
25-34
35-44
45-54
55-59
60-64
65-74
75-84
85 and older
Refused to Answer
2011 Survey
2010 Census

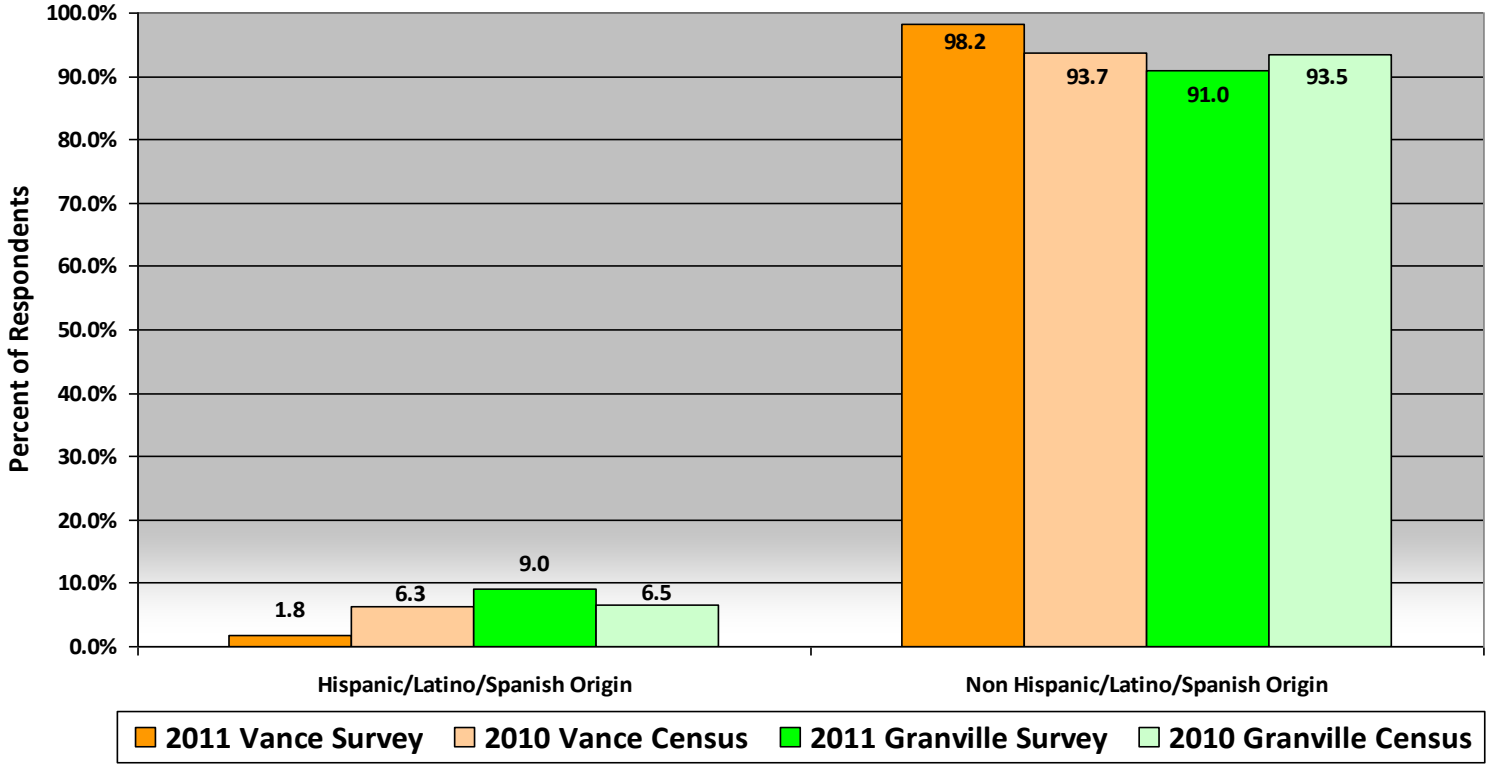
Question 42

Are You Male or Female?



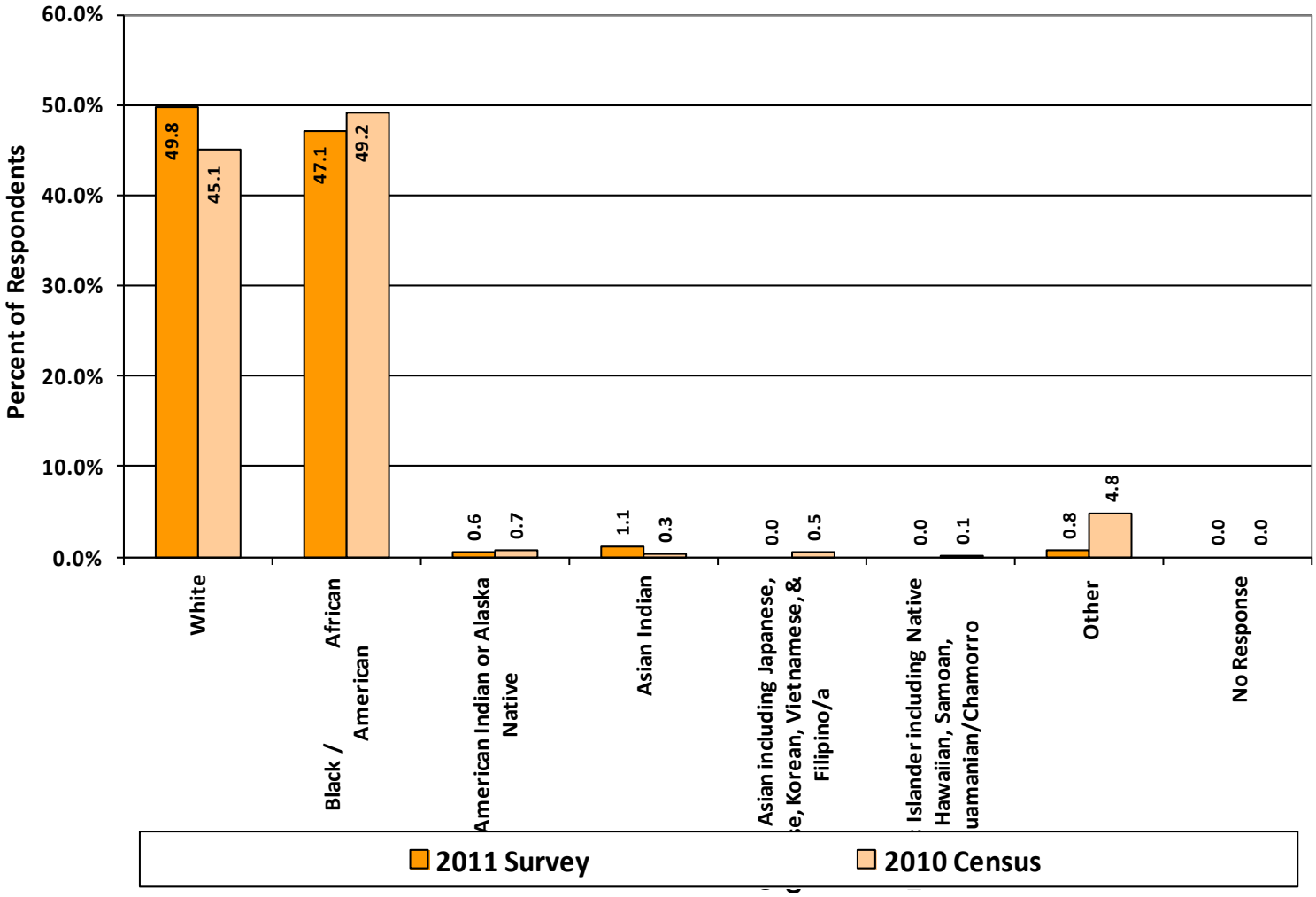
Question 43

Are You Hispanic, Latino, or Spanish Origin?



Question 44

What Is Your Race Vance County?



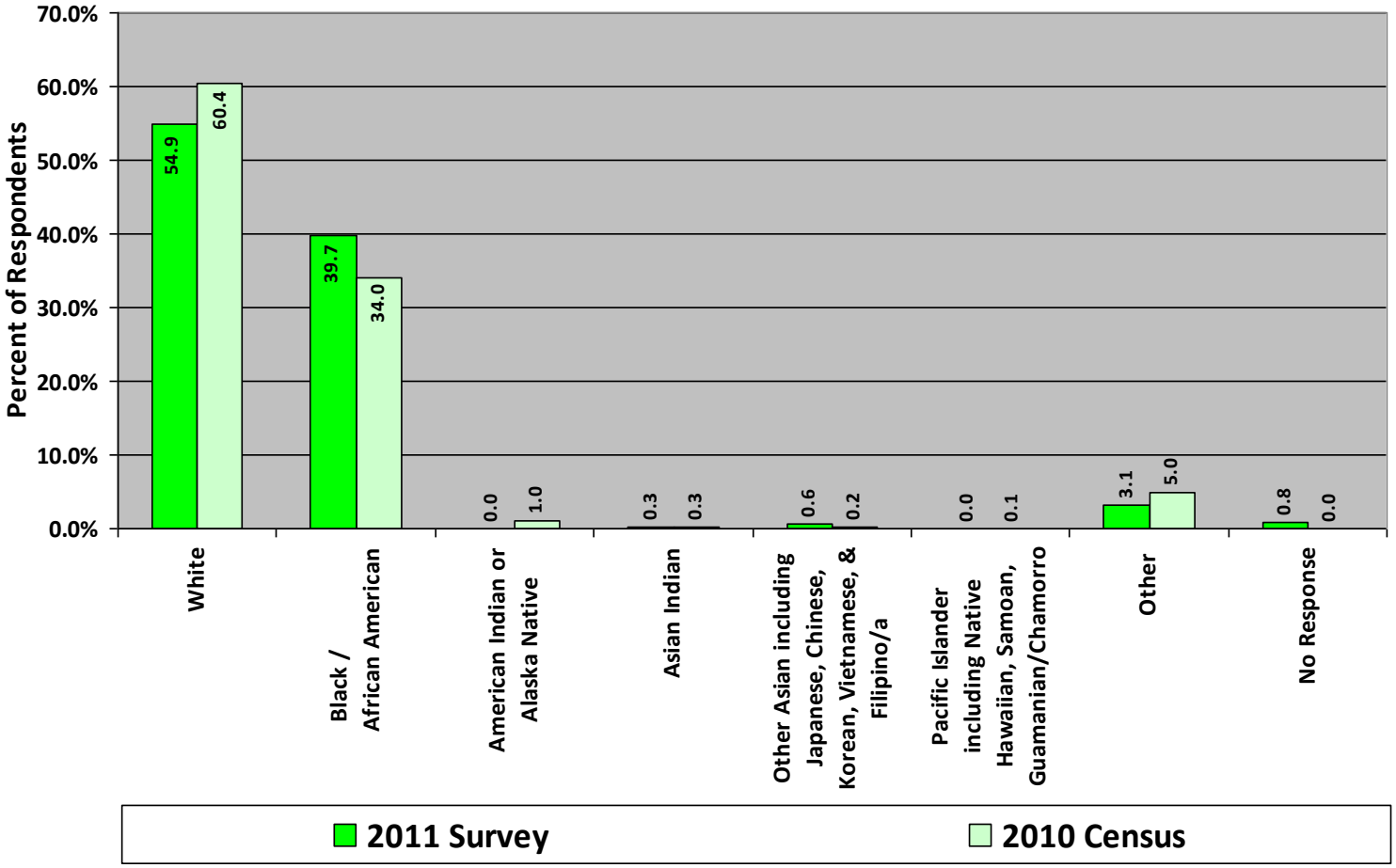
Breakdown of Other Responses

Vance County– 0.8% of total responses	
Muslim	0.5%
Mestizo	0.5%
Cherokee	0.5%

Granville County - 3.1% of total responses	
The Granville County graph is on the next page	
Hispanic	2.0%
Filipino	0.5%
Chinese	0.5%

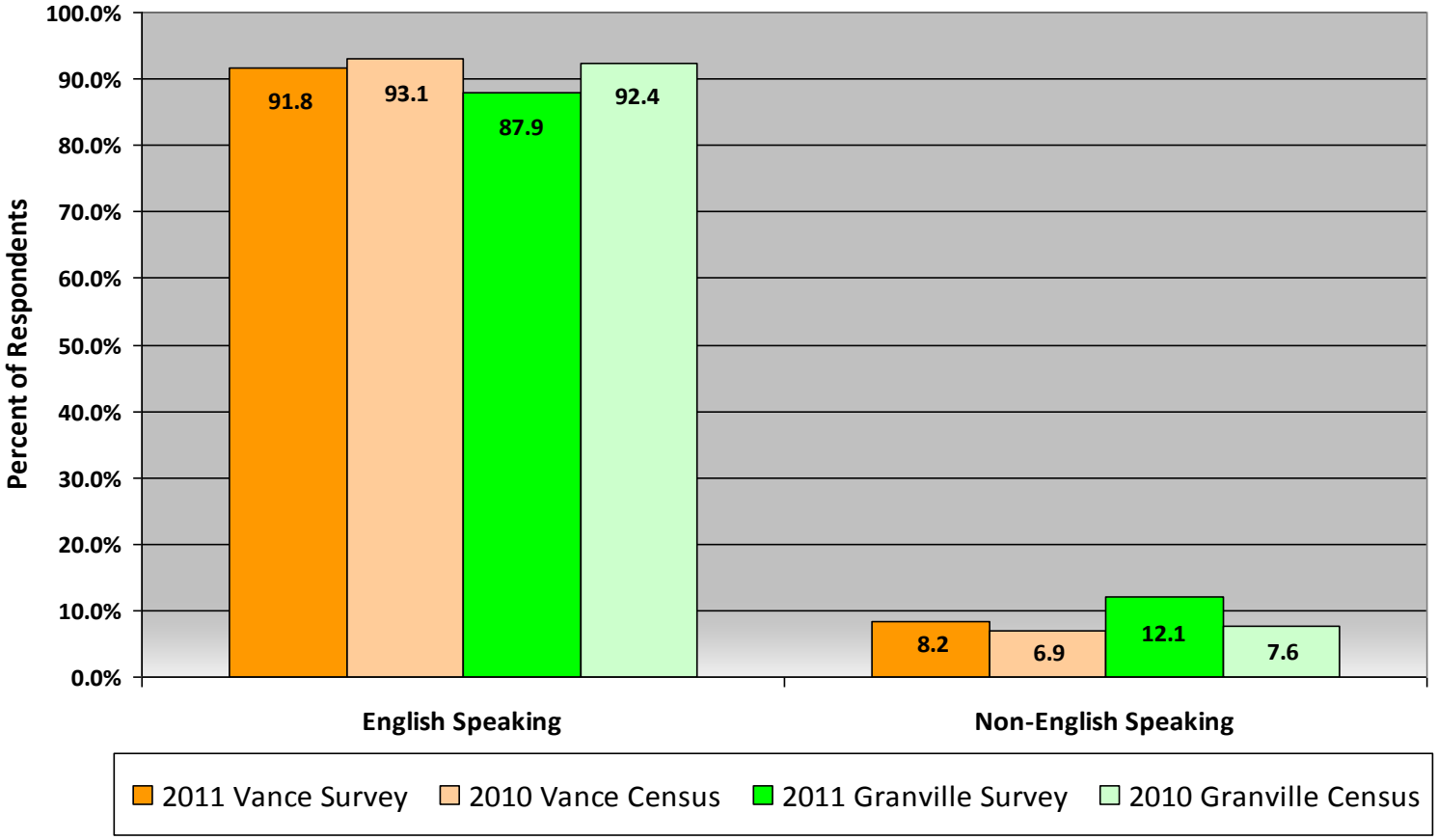
Question 44

What Is Your Race Granville County?



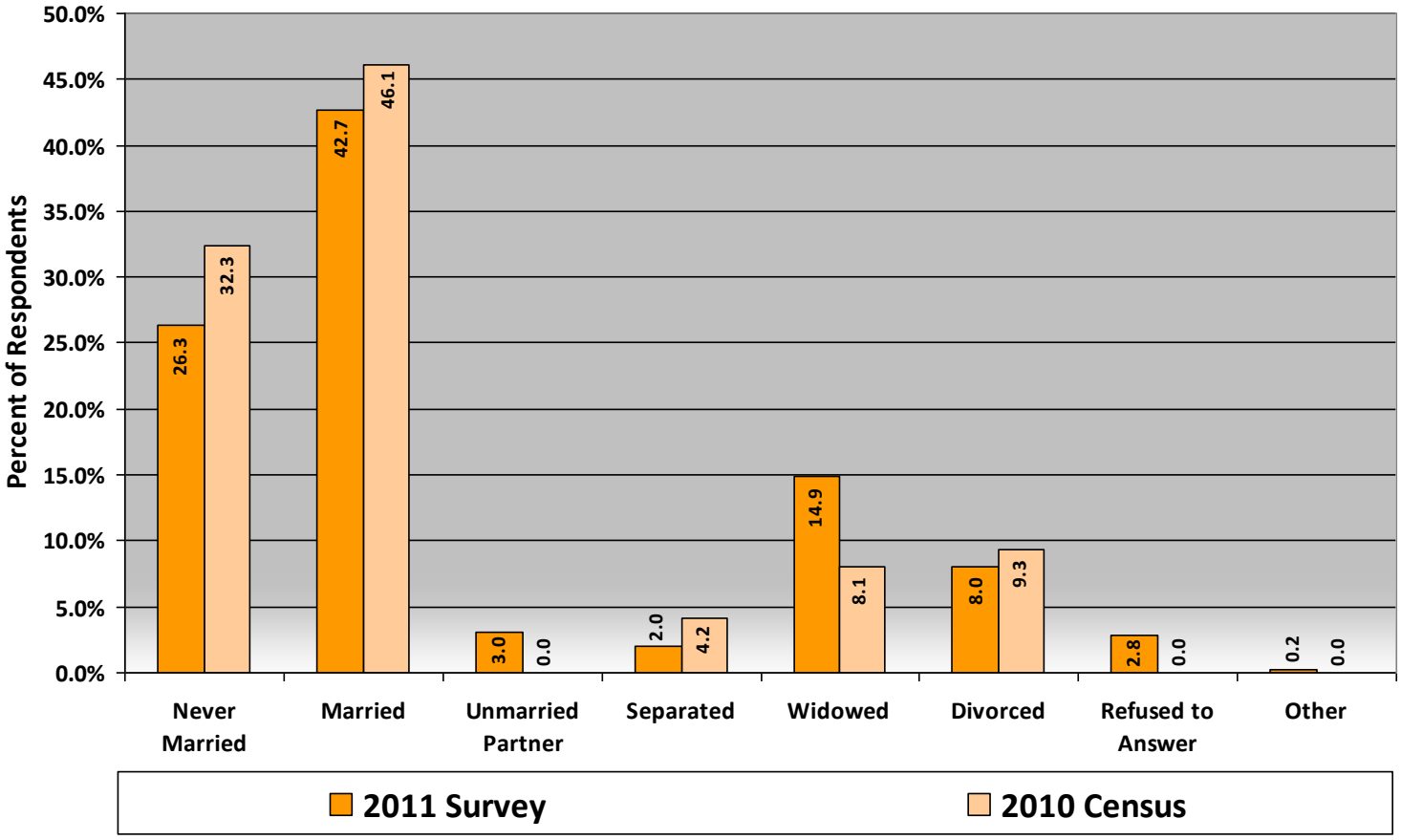
Question 45

Do You Speak A Language Other Than English At Home?

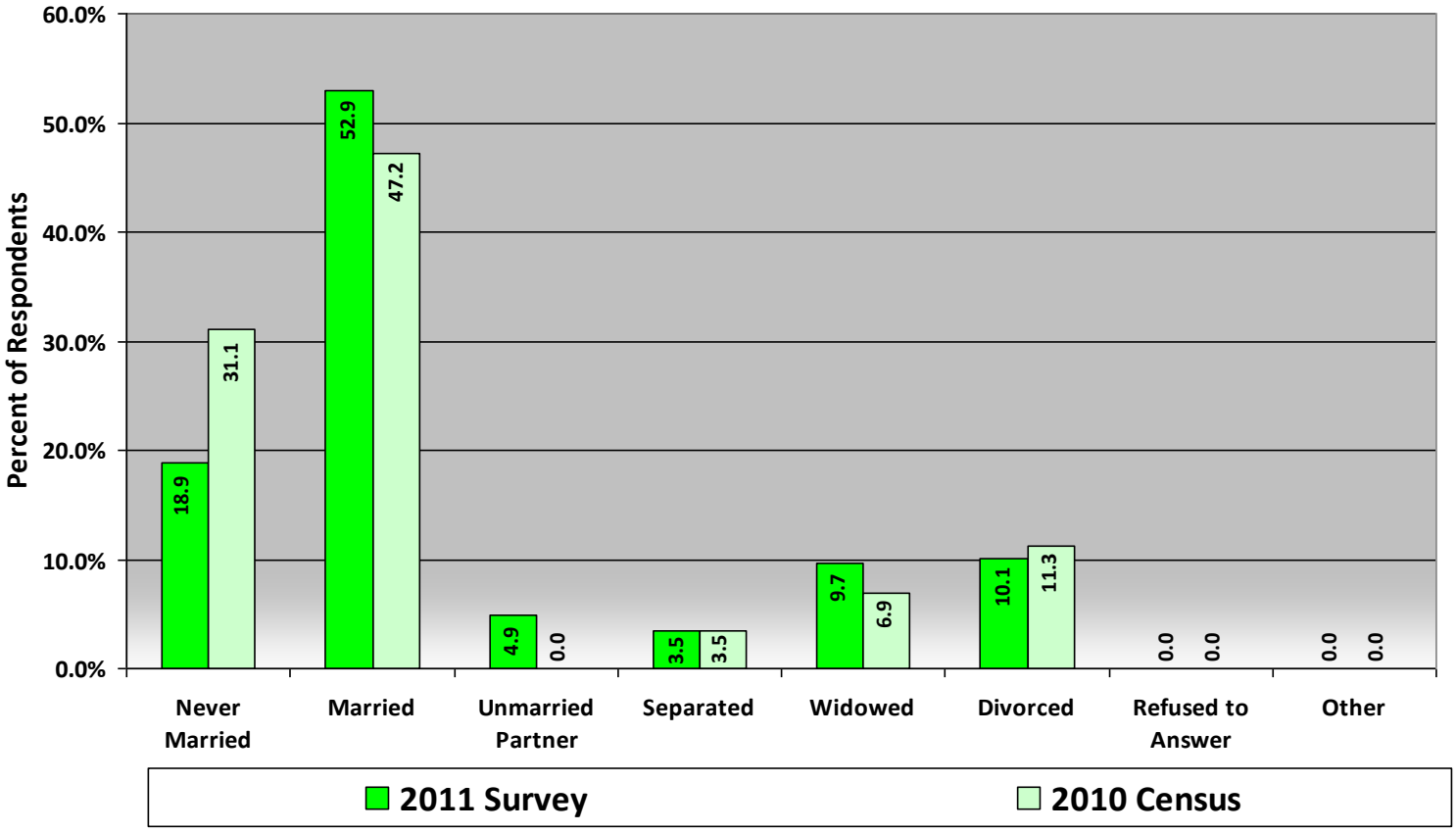


Question 46

What Is Your Marital Status Vance County?

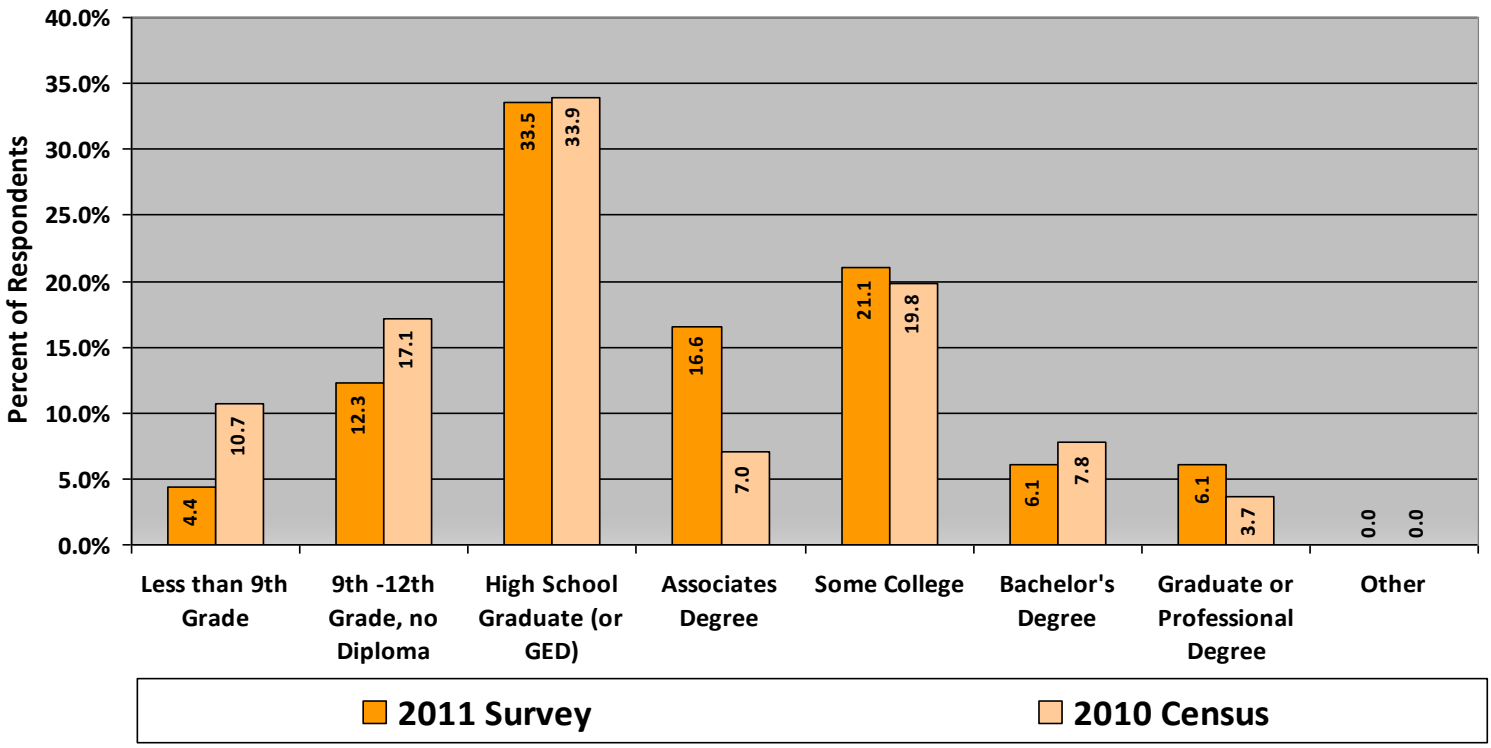


What Is Your Marital Status Granville County?

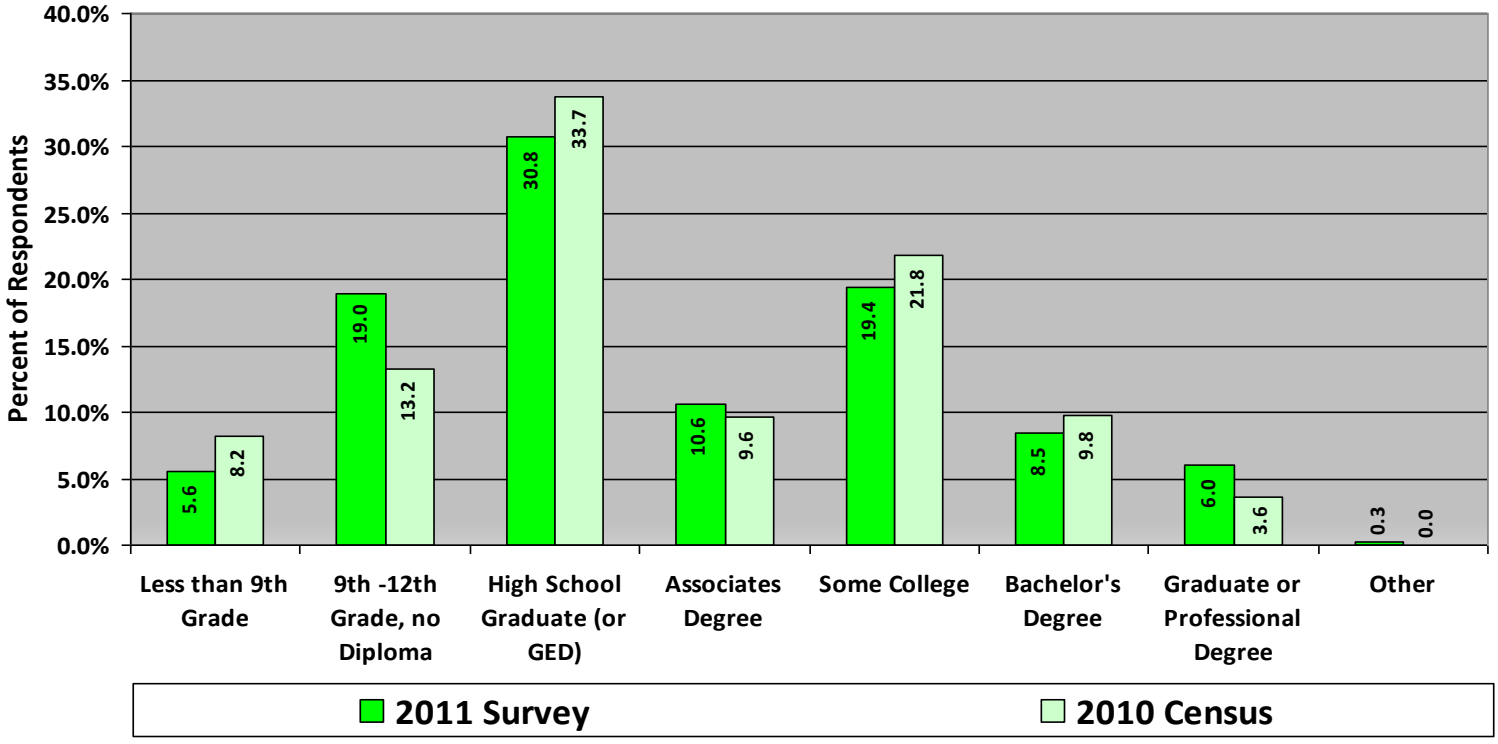


Question 47

What Is Your Highest Level Of School, College Or Vocational Training That You Have Finished Vance County?

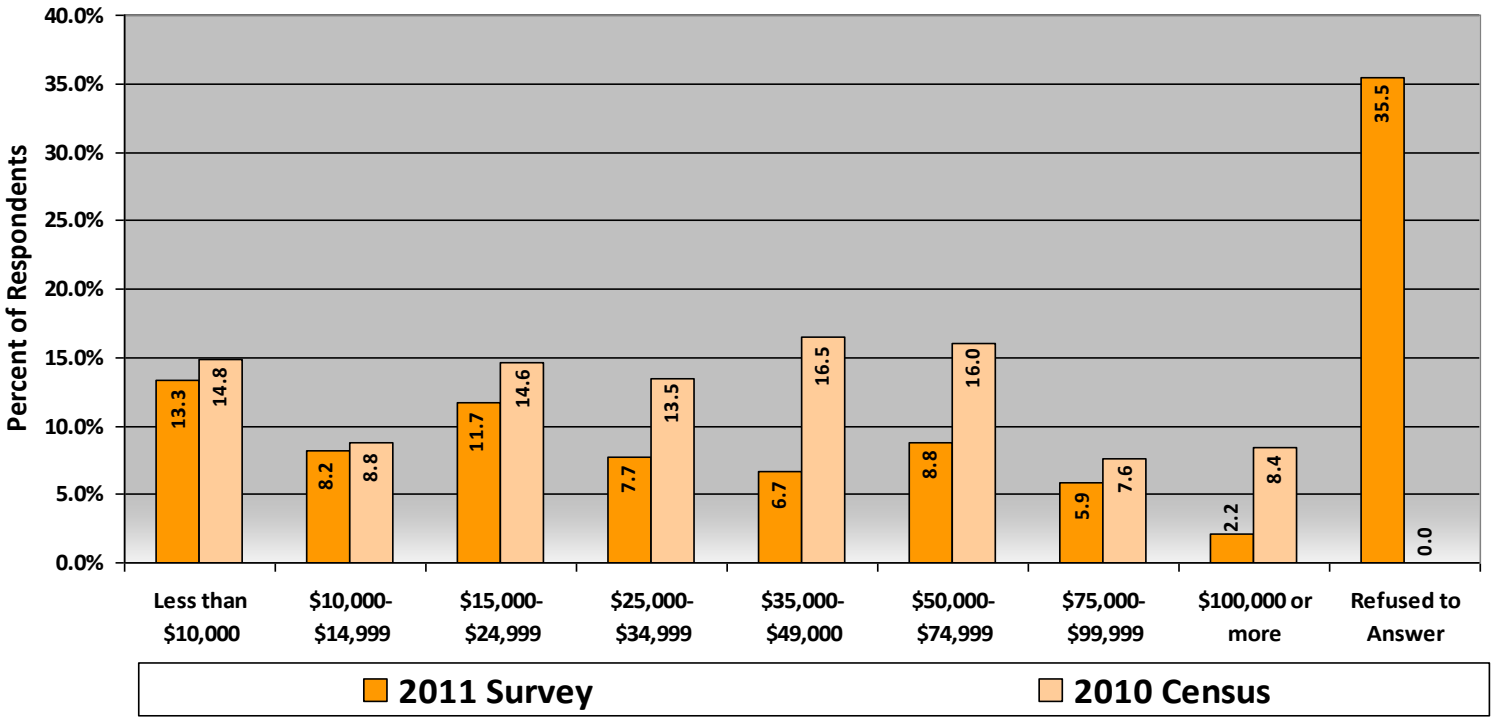


What Is Your Highest Level Of School, College Or Vocational Training That You Have Finished Granville County?

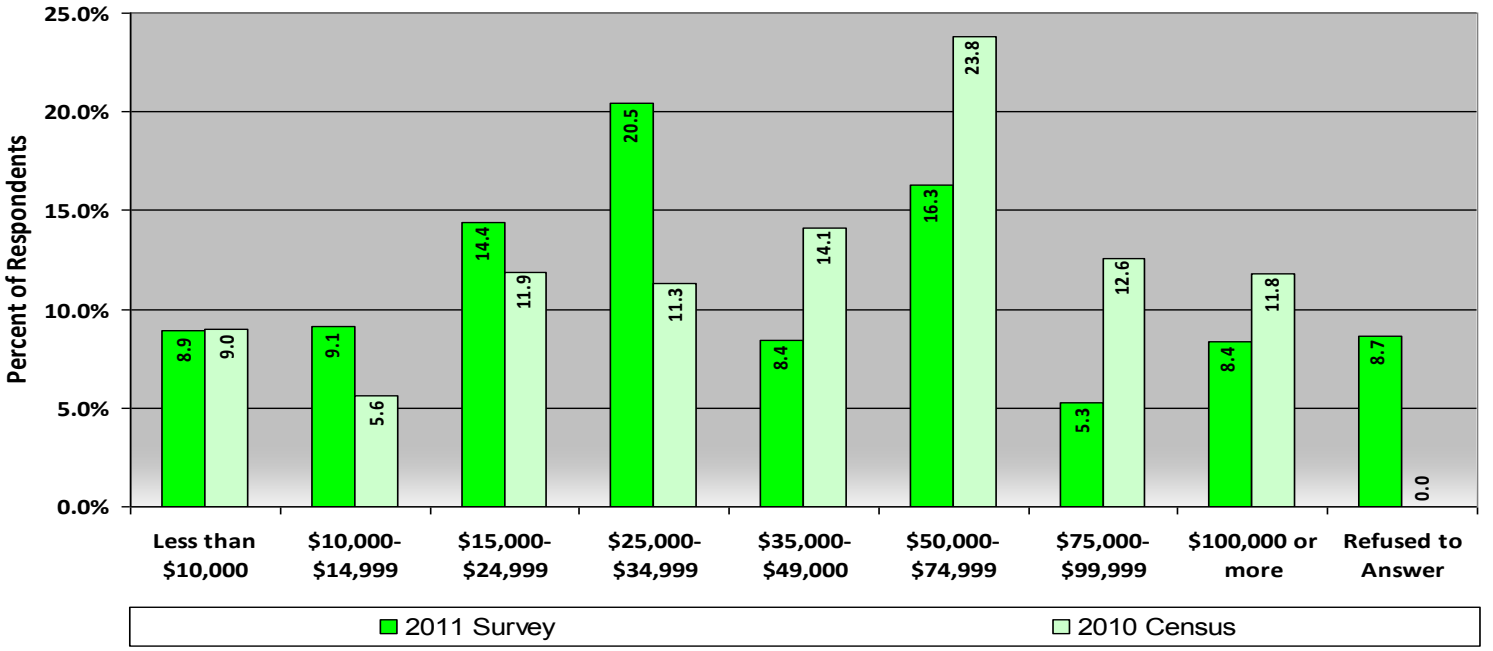


Question 48 HNC2020: SDH

What was your total household income last year, before taxes Vance County?



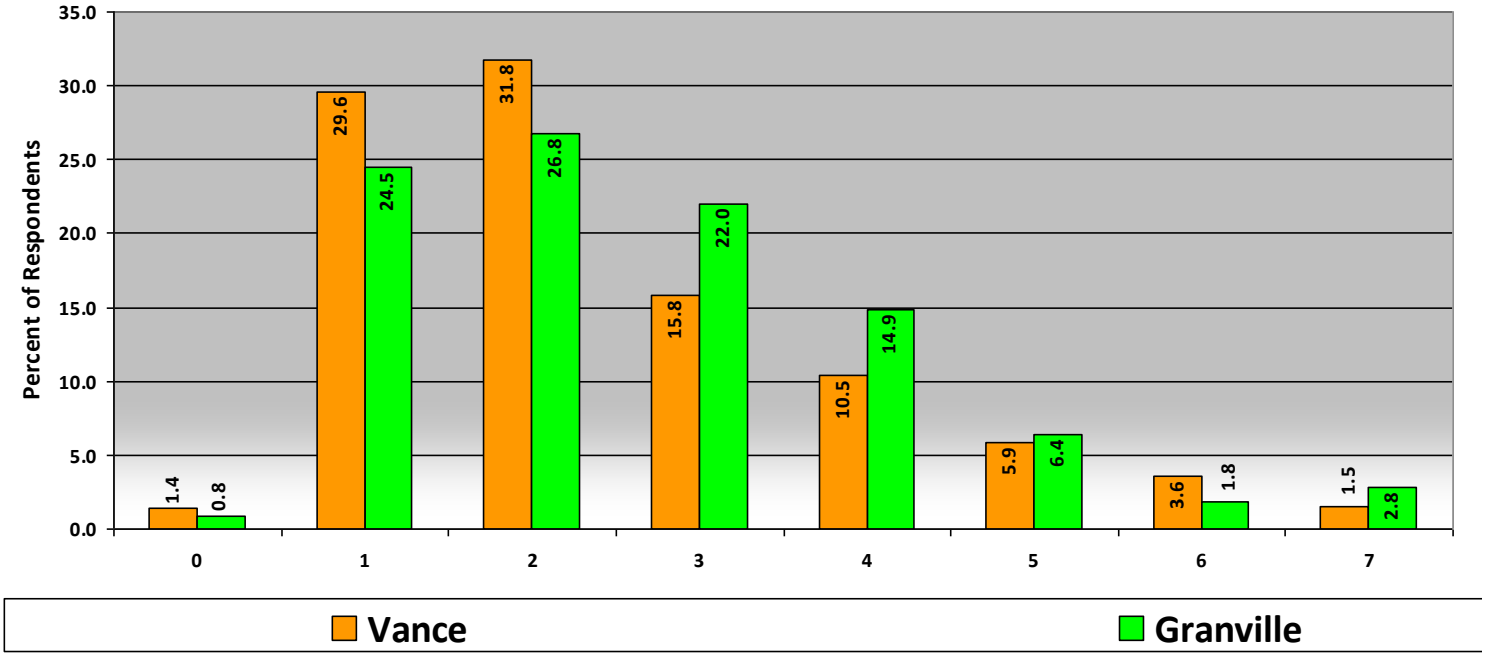
What was your total household income last year, before taxes Granville County?



HNC2020: SDH

Question 49

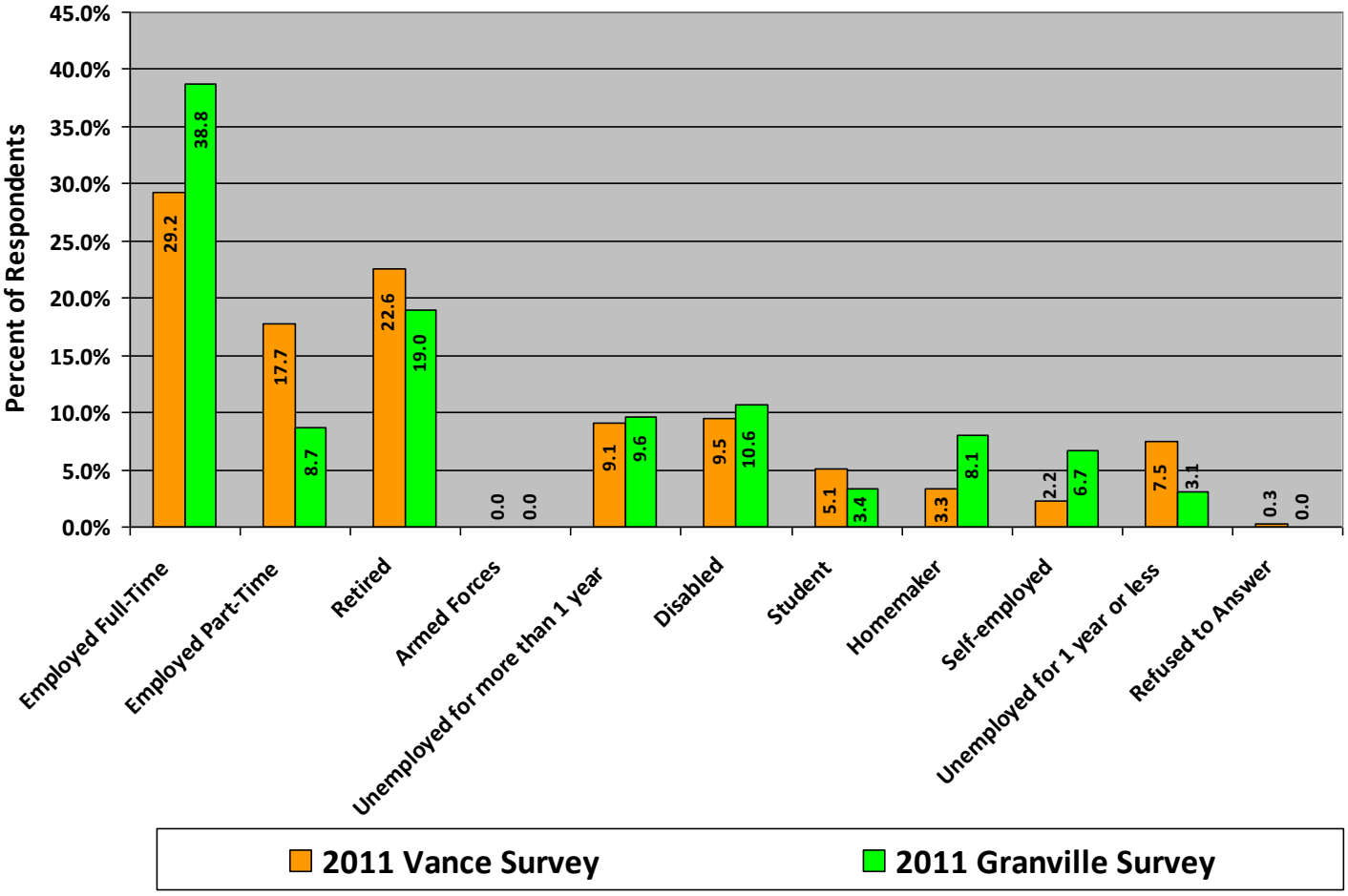
Including yourself, how many people does this income support?



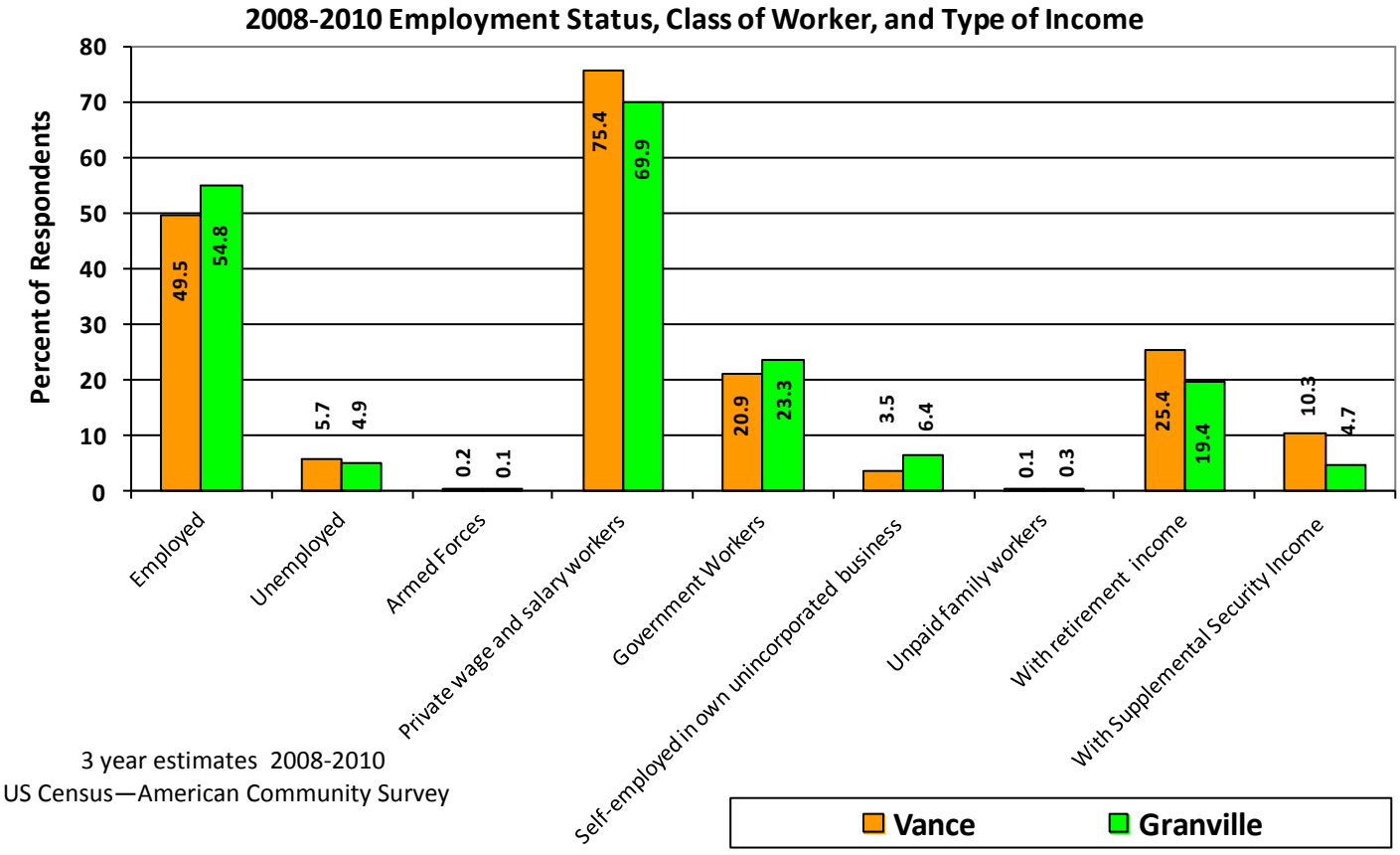
Question 50

HNC2020: SDH

What Is Your Employment Status?

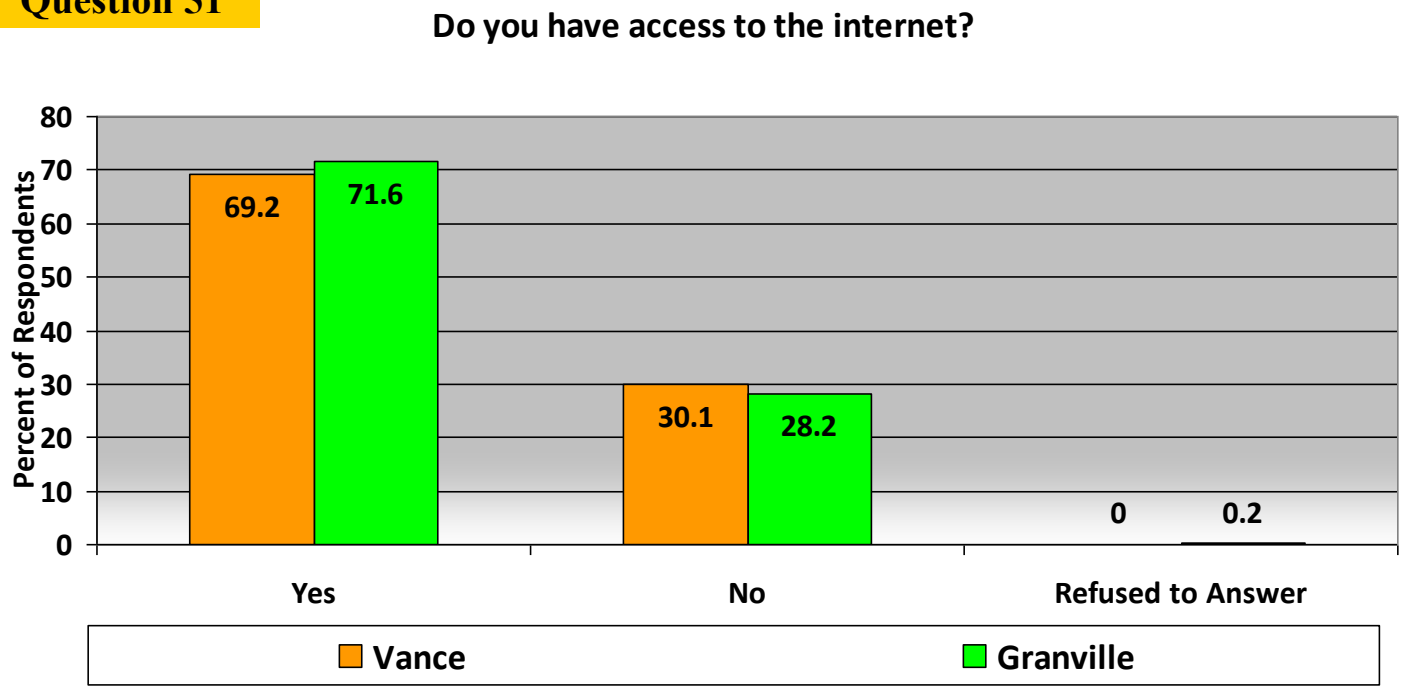


Note—Census data was not available in precisely the same format as survey question #50. Additional information on what is available from the Census Bureau is presented below.

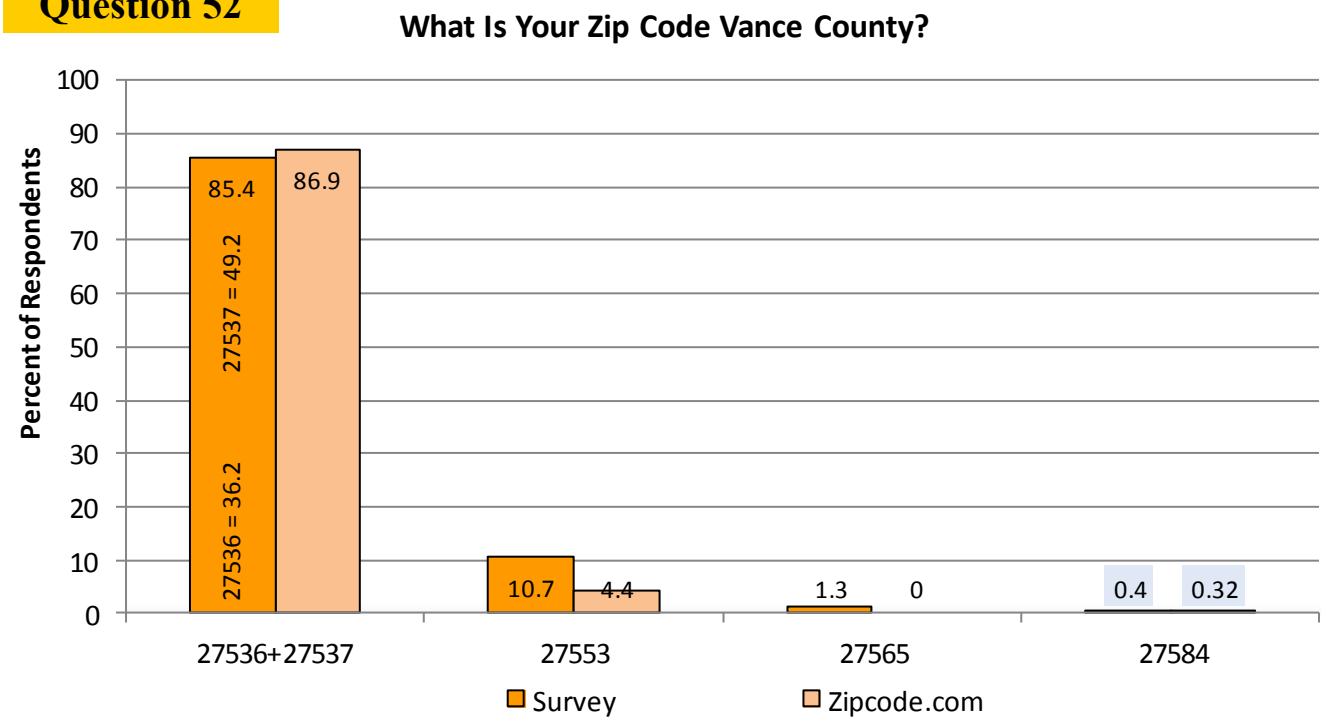


3 year estimates 2008-2010
US Census—American Community Survey

Question 51

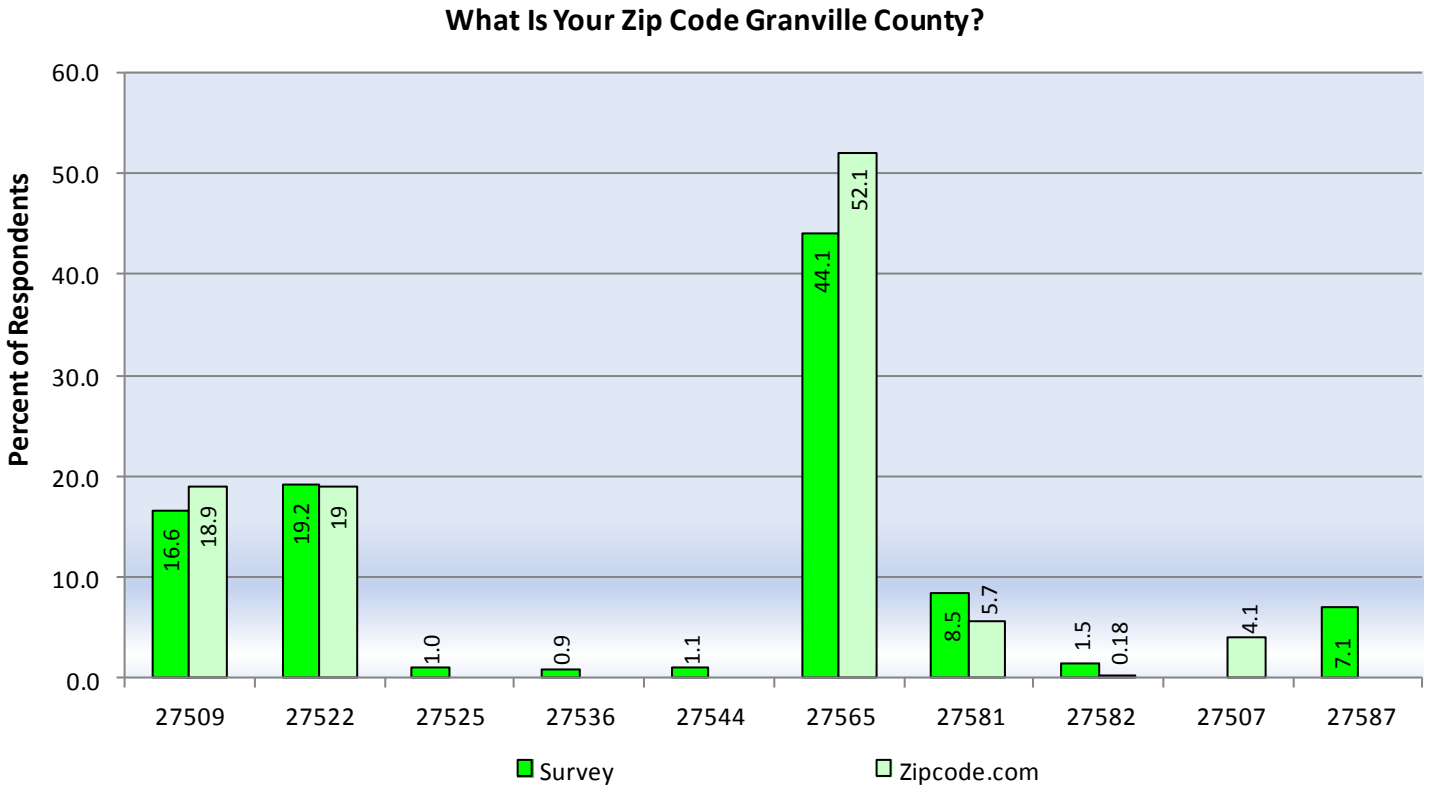


Question 52



http://www.mapszipcode.com/north%20carolina/county/vance

http://www.mapszipcode.com/north%20carolina/county/granville



References by Topic Area

County Demographics

Granville County Schools. *School Directory.* Oxford, NC: GCS; 2010. <http://www.gcs.k12.nc.us/1676107393951357/site/default.asp>

Vance County Schools. *District Links.* Henderson, NC: VCS; 2012. < http://www.vcs.k12.nc.us/>

Office of State Budget and Management. Socioeconomic Data. *July 2010 Municipal Estimates by County and State Populations for Reference.* Raleigh, NC: NC OSBM; 2012. <http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/muniestbycounty_2010.html>

Population

NC Office of State Budget and Management. Socioeconomic Data. *2010 Certified County Population Estimates.* Raleigh, NC: NC OSBM; 2012. <http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/countygrowth_cert_2010.html>

NC Office of State Budget and Management. Socioeconomic Data. *County Population Growth: 2010-2020.* Raleigh, NC: NC OSBM; 2012. <http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/countygrowth_2020.html>

NC Office of State Budget and Management. Socioeconomic Data. *County Population Growth: 2020-2030.* Raleigh, NC: NC OSBM; 2012. <http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/countygrowth_2030.html>

US Census Bureau. State and County Quickfacts. *North Carolina, and Granville, Vance, and Franklin Counties.* Washington, DC: US Census Bureau; 2012. <http://quickfacts.census.gov/qfd/states/37/37000.html>

US Census Bureau. American FactFinder. *Profile of General Demographic Characteristics: 2000; Census 2000 Summary File 1 (SF 1).* Washington, DC: US Census Bureau; 2012. <http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_00_SF1_DP1&prodType=table>

Granville-Vance District Health Department (GVDHD). Granville-Vance Community Health Assessment. Health Education Department. Oxford, NC: GVDHD; 2007. <www.gvdhd.org>

US Census Bureau. State and County Quickfacts. *Granville County, Vance County, Franklin County and North Carolina 2010*. Washington, DC: US Census Bureau; 2012. <http://quickfacts.census.gov/qfd/index.html>

NC Office of State Budget and Management. Socioeconomic Data. *2010 County Municipal Tools; Municipal and Non-Municipal Population by County.* Raleigh, NC: NC OSBM; 2012. <http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/muninonmunipop_2010.html>

NC Office of State Budget and Management. Socioeconomic Data. *2010 County Municipal Tools; Municipal and Non-Municipal Land Area by County.* Raleigh, NC: NC OSBM; 2012. <http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/muninonmunila_2010.html>

Access NC. County Report. Raleigh, NC: NC Department of Commerce; 2012. <http://accessnc.commerce.state.nc.us/EDIS/demographics.html>

NC Employment Security Commission. Labor Market Information Division. Raleigh, NC: NC ESC; 2012. <http://esesc23.esc.state.nc.us/d4/AnnounceSelection.aspx>

Vance County Economic Development Commission. Data Center. *Retail Sales.* Henderson, NC: EDC; 2009. <http://www.vancecountyedc.com/pages.php?page_id=24>

Vance County Economic Development Commission. Data Center. *Major Employers.* Henderson, NC: EDC; 2009. <http://www.vancecountyedc.com/pages.php?page_id=57>

US Department of Energy. Washington, DC: USDOE; 2011. < http://energy.gov/articles/solar-startup-semprius-create-250-jobs-north-carolina-cutting-edge-pilot-plant>

NC Department of Commerce. Division of Employment Security. *Opportunity North Carolina.* Raleigh: NC DOC, 2012. Raleigh, NC: NC DES; 2012. < http://www.ncesc1.com/main/ONC.asp>

US Census Bureau. American Fact Finder. *Profile of General Demographic Characteristics: 2000 Census 2000 Summary File 1 (SF 1) 100-Percent Data – Franklin County.* Washington, DC: US Census Bureau; 2012. <http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_00_SF1_DP1&prodType=table >

NC Department of Health and Human Services. State Center for Health Statistics. *North Carolina Health Statistics Pocket Guide – 2009.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/data/pocketguide/2009/table7b.html>

NC Department of Health and Human Services. Division of Social Services. *Individuals On Active Work First Cases by Month.* Raleigh, NC: DHHS; 2011. <http://www.ncdhhs.gov/dss/stats/docs/wfim/wfim1210.pdf>

NC Department of Health and Human Services. Division of Social Services. *North Carolina Food and Nutrition Services Participation Report.* Raleigh, NC: DHHS; 2010. <http://www.ncdhhs.gov/dss/stats/docs/FNS_Participation_FFY2010_Q4.pdf>

Annie E. Casey Foundation. Kids Count Data Center. Data by State. Baltimore, MD: Annie E. Casey Foundation; 2012. <http://datacenter.kidscount.org/data/bystate/stateprofile.aspx?state=NC&cat>

US Department of Agriculture. Food and Nutrition Service. Alexandria, VA: USDA; 2012. <http://www.fns.usda.gov/cnd/Governance/notices/iegs/IEGs11-12.pdf>

NC Employment Security Commission. Occupational Employment and Wages. Raleigh, NC: NC ESC; 2012. <http://eslmi23.esc.state.nc.us/oeswage/>

US Census Bureau. American FactFinder. *Granville County, Vance County & North Carolina.* Washington, DC: US Census Bureau; 2012. <http://www.factfinder.census.gov>

Tobacco Use

North Carolina Institute of Medicine. *Healthy North Carolina 2020: A Better State of Health*. Morrisville, NC: North Carolina Institute of Medicine; 2011.

NC Department of Health and Human Services. State Center for Health Statistics. Piedmont Region & NC *BRFSS Survey Results 2003-2010 for Franklin/Granville/Vance Counties; Tobacco Use.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/brfss/2003/fgv/_rfsmok2.html>

NC Department of Health and Human Services. Division of Public Health. Chronic Disease and Injury Section; Tobacco and Prevention Branch. *2003-2009 Youth Tobacco Survey.* Raleigh, NC: DHHS; 2012. <http://www.tobaccopreventionandcontrol.ncdhhs.gov/data/index.htm>

Physical Activity & Nutrition

NC Department of Public Instruction & Department of Health and Human Services. NC Healthy Schools. 2003, 2005, 2007, & 2009 NC Youth Risk Behavior Survey (YRBS). Raleigh, NC: DPI & DHHS; 2010. <http://www.nchealthyschools.org/data/yrbs/>

Eat Smart, Move More NC. NC Division of Public Health. Nutrition Services Branch. NC Nutrition and Physical Activity Surveillance System (NC-PASS). 2005, 2007 & 2009 NC-PASS Data on Childhood Overweight. County Specific BMI for ages 2 to 18. Raleigh, NC: ESMM; 2010. <http://www.eatsmartmovemorenc.com/Data/Texts/2005%20Ages%202%20to%2018.pdf>

Eat Smart, Move More NC. NC Division of Public Health. Nutrition Services Branch. NC Nutrition and Physical Activity Surveillance System (NC-PASS). 2006 & 2009 NC PASS Data on Childhood Overweight. County Specific BMI for ages 2-4, 5-11and 12-18. Raleigh, NC: ESMM; 2010. <http://www.eatsmartmovemorenc.com/Data/ChildAndYouthData.html>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2003, 2005, 2007 & 2009 BRFSS Survey Results: Piedmont North Carolina *Physical Activity.* Raleigh, NC: DHHS; 2012.<http://www.schs.state.nc.us/SCHS/brfss/2009/pied/_RFPAREC.html>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2003, 2005, 2007 & 2009 BRFSS Survey Results: North Carolina *Physical Activity.* Raleigh, NC: DHHS; 2012.
< http://www.schs.state.nc.us/SCHS/brfss/2009/nc/all/_RFPAREC.html>

Centers for Disease Control and Prevention. Physical Activity and Health. Atlanta, GA: CDC; 2011. <http://www.cdc.gov/physicalactivity/everyone/health/index.html>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2003, 2005, 2007 & 2009 BRFSS Survey Results: Piedmont North Carolina *Fruits and Vegetables.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/brfss/2009/pied/_FV5SRV.html>

Injury and Violence

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2004, 2006, 2007, 2008, 2009 & 2010 Detailed Mortality Statistics. *Falls and Poisoning.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm>

US Census Bureau. State and County QuickFacts. Washington, DC: US Census; 2012. <http://quickfacts.census.gov/qfd/states/37000.html>

NC Office of State Budget and Management. Socioeconomic Data. 2004 & 2007 Population/ Growth. Raleigh, NC: NC OSBM; 2012. <http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/county_estimates.shtm>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. Mortality Statistics Summary for 2010 North Carolina Residents *Homicide.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/deaths/lcd/2010/homicide.html>

Maternal and Infant Health

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. *Communication with Sid Evans, State Center for Health Statistics Statistician.* Raleigh, NC: DHHS; February 16, 2012.

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2006, 2007, 2008, 2009, & 2010 Infant Mortality Statistics. Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/data/vitalstats.cfm>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. Infant Mortality Statistics 2010. *2010 North Carolina Infant Mortality Report, Table 1.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/schs/deaths/ims/2010/2010rpt.html>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2012 County Health Data Book. Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/schs/data/databook/>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2006-08 PRAMS Survey *Piedmont Region IV Northeast and NC.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/schs/prams/results.html>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2011 County Health Data Book. *NC Resident Births 2005-2009: Number and Percent Low (<=2500 GRAMS) and Very Low (<=1500 GRAMS) Birthweight.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/data/databook/2011/CD5%20LBW%20VLBW.html>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2011 County Health Data Book. *Number and Percent of Women Receiving Prenatal Care in the First Trimester (Total, Black, and Native American), 2005-2009.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/data/databook/2011/CD7%20PNC%201st%20trimester.html>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2011 County Health Data Book. *Resident Births 2005-2009: Number and Percent of Births to Mothers Who Smoked Prenatally.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/data/databook/2011/CD10%20mom%20smoked %20while%20preg.html>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. Women's and Children's Health Section. *2010 Infant and Child Deaths in North Carolina.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/deaths/child/CFbyCO2010.pdf>

NC Office of State Budget and Management. Log Into North Carolina (LINC). *Population and Housing.* Raleigh, NC: NC OSBM. < http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show>

Sexually Transmitted Disease and Unintended Pregnancy

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. *2009 Pregnancy Risk Assessment Monitoring System Survey Results.* Raleigh, NC: DHHS; 2012. < http://www.schs.state.nc.us/schs/prams/2009/intend.html>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. NC PRAMS. *North Carolina Mothers Who Report Unintended Pregnancies.* Raleigh, NC : DHHS; 2012. <http://www.schs.state.nc.us/SCHS/pdf/PRAMS_SU_2_WEB.pdf>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. *Pregnancy, Fertility, Abortion Rates and Abortion Fractions by Race for Females Ages 15-19, North Carolina Regions and Counties, 2000.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/data/pregnancies/2000/preg1519.pdf>

NC Department of Health and Human Services. Division of Public Health. Epidemiology Branch. Communicable Disease Branch. Facts and Figures NC. Communicable Disease Reports. *2002-2010 AIDS/HIV and STD Reports.* Raleigh, NC: DHHS; 2012. <http://epi.publichealth.nc.gov/cd/figures.html>

Substance Abuse

NC Department of Health and Human Services & Department of Public Instruction. NC Healthy Schools. NC Youth Risk Behavior Survey (YRBS). 2003, 2005, 2007 & 2009 High School State and Central Region Reports. Raleigh, NC: DPI and DHHS; 2010. <http://www.nchealthyschools.org/data/yrbs/>

HSM Internet Services. Learn About Alcoholism. *Effects on Teens*. Long Island: NY; 2012. <http://www.learn-about-alcoholism.com/effects-of-teenage-drinking.html>

NC Division of Motor Vehicle. Crash Report Forms & Reporting Systems. Raleigh, NC: NCDOT; 2012. <http://www.ncdot.gov/dmv/forms/default.html>

Substance Abuse and Mental Health Services Administration. Rockville, MD: SAMHSA; 2011. <http://oas.samhsa.gov/substate2k10/StateFiles/NC.htm>

Substance Abuse and Mental Health Services Administration. *Appendix B: Tables of Model-Based Estimates (50 States and the District of Columbia), by Substance.* Rockville, MD: SAMHSA; 2011. <http://www.samhsa.gov/data/2k5state/pdf/AppB.pdf>

Centers for Disease Control and Prevention. Health Topics: *Alcohol and Other Drug Use.* Atlanta, GA: CDC; 2012. <http://www.cdc.gov/healthyyouth/alcoholdrug/index.htm>

Mental Health

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2011 County Health Data Book. Raleigh, NC: DHHS; 2012. 2005-2009 Race-Specific and Sex-Specific Age-Adjusted Death Rates by Countyhttp://www.schs.state.nc.us/SCHS/data/databook/2011/

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2007 County Health Data Book. Raleigh, NC: DHHS; 2012. 2001-2005 Race-Specific and Sex-Specific Age-Adjusted Death Rates by Countyhttp://www.schs.state.nc.us/SCHS/data/databook/2007/

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2010 BRFSS Topics for Piedmont North Carolina. Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/brfss/2010/pied/topics.html>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2004, 2006, 2008 & 2010 Healthy Days. Raleigh, NC: DHHS: 2012. < http://www.schs.state.nc.us/SCHS/brfss/results.html>

NC Department of Health and Human Services. Division of Mental Health, Developmental Disabilities and Substance Abuse Services. Raleigh, NC: DHHS; 2012. <http://www.ncdhhs.gov/mhddsas/statspublications/Reports/DivisionInitiativeReports/qualitymgmt/EDadmissions/edadmissionsSFY10-11quarter4.pdf>

NC Department of Health and Human Services. Division of Mental Health, Developmental Disabilities and Substance Abuse Services. 1st, 2nd, 3rd & 4th Quarter 200-2009 and 2009-2010 *Reports Regarding LMEs and Providers: Emergency Department Admissions Quarterly Reports.* Raleigh, NC: DHHS; 2012. <http://www.ncdhhs.gov/mhddsas/statspublications/Reports/lmesproviders/EDAdmissions/>

Oral Health

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. *Data for Children Enrolled in Medicaid Who Received Any Dental Service During the Previous 12 Months North Carolina vs. HNC 2020 Target, 200-2010.* Raleigh, NC: DHHS; 2011. <http://healthstats.publichealth.nc.gov/indicator/view_numbers/MdcdChildDentalSvc.HNC2020.html>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. *Data for Children Enrolled in Medicaid Who Received Any Dental Service During the Previous 12 Months By County, 2010.* Raleigh, NC: DHHS; 2011. <http://healthstats.publichealth.nc.gov/indicator/view_numbers/MdcdChildDentalSvc.County.html>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. *2004-2005, 2006-2007 and 2008-2009 NC County Level Oral Health Assessment Data by Year*. Raleigh, NC: DHHS; 2011. <http://www.ncdhhs.gov/dph/oralhealth/stats/MeasuringOralHealth.htm>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. *2010 BRFSS Topics for Piedmont North Carolina.* Raleigh, NC; DHHS; 2012. <http://www.schs.state.nc.us/SCHS/brfss/2010/pied/topics.html>

Centers for Disease Control and Prevention. Chronic Disease Prevention and Health Promotion. *Oral Health: Preventing Cavities, Gum Disease, Tooth Loss, and Oral Cancers At A Glance 2011.* Atlanta, GA: CDC; 2011. <http://www.cdc.gov/chronicdisease/resources/publications/AAG/doh.htm>

Environmental Health

NC Department of Environment and Natural Resources. Division of Air Quality. *North Carolina Counties with 8-Hour Ozone Violations, 2008-2010.* Raleigh, NC: NCDENR; 2011. <http://daq.state.nc.us/monitor/data/o3design/o3nc08-10.pdf>

NC Department of Environment and Natural Resources. Division of Air Quality. *2011 North Carolina Air Monitoring Network.* Raleigh, NC: NCDENR; 2012. <http://daq.state.nc.us/monitor/data/monitorsites2011.pdf>

US Environmental Protection Agency. Air and Radiation. *What are the six common air pollutants?* Washington, DC: US EPA; 2011. <http://www.epa.gov/air/urbanair/>

US Environmental Protection Agency. Air and Radiation. *Ground-level Ozone.* Washington, DC: US EPA; 2011. <http://www.epa.gov/air/ozonepollution/>

NC Department of Environment and Natural Resources. Division of Air Quality. *2004-2006, 2005-2007, 2006- 2008, 2007-2009, 2008-2010 Monitoring Data.* Raleigh, NC: NCDENR: 2012. <http://daq.state.nc.us/monitor/data/>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. *Data for Population Being Served by Community Water Systems (CWS)) with no Maximum Containment Level Violations North Carolina vs. HNC 2020 Target, 2009-2010.* Raleigh, NC: DHHS; 2011. <http://healthstats.publichealth.nc.gov/indicator/view_numbers/CWSnoMCL.HNC2020.html>

Granville County Community Water Systems.
Personal communications February and March 2012.
City of Creedmoor – Tom Mercer, City Manager
111 Masonic Street; Creedmoor, NC 27522 (919) 528-3332

City of Oxford – Larry Thomas, Public Works Director
300 Williamsboro Street, Oxford, NC 27565 (919) 603-1110
South Granville Water and Sewer Authority – Lindsay Mize, Executive Director
415 Central Avenue, Suite B Butner, NC 27509 (919) 575-3367
Town of Stovall – Janet Parrott, Mayor/City Clerk
107 Main Street Stovall, NC Stovall 27582 (919) 693-4646.

Vance County Community Water System.
Personal communications February and March 2012.
Kerr Lake Regional Water System – Clarissa Lipscomb, Director;
PO Box 1434, Henderson, NC 27536 252-438-2142

NC Department of Environment and Natural Resources. Division of Water Resources. Public Water Supply Section. *North Carolinas Annual State Public Water Systems Compliance Report for the Calendar Year 2010.* Raleigh, NC: NCDENR; 2011. <http://www.ncwater.org/pws/AnnualReports/2010AnnualComplianceReport.pdf.>

NC Office of State Budget and Management. Log Into North Carolina (LINC). *Environment, Recreation, and Resources – Water Use.* Raleigh, NC: NC OSBM. <http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show>

U.S. Census Bureau. State & County Quickfacts. *Granville County (Oxford & Butner) and Vance County (Henderson).* Washington, DC: US Census; 2012. <http://quickfacts.census.gov/qfd/states/37000.html>

World Health Organization. *Disinfectants and Disinfection By-Products.* Geneva, Switzerland: WHO; 2012. <http://www.who.int/water_sanitation_health/dwq/S04.pdf>

NC Department of Labor (DOL). NC DOL Statistical Reports. Raleigh, NC: NCDOL; 2012. <http://www.nclabor.com/dol_statistics/stats.htm>

LINC (Log Into North Carolina). Raleigh, NC: NC OSBM <http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show>

North Carolina Institute of Medicine. *Healthy North Carolina 2020: A Better State of Health.* Morrisville, NC: North Carolina Institute of Medicine; 2011.

Infectious Disease and Food Borne Illness

NC Department of Health and Human Services. Division of Public Health. Womens and Childrens Health. Immunization Branch. Raleigh, NC: DHHS; 2012. <http://www.immunize.nc.gov/data/immunizationrates.htm#annual>

North Carolina Immunization Registry; General website http://immunize.nc.gov/providers/ncir.htm. Limited Access Resource – accessed via Granville-Vance District Health Department Staff (Vickie Boyd and Billie Sue James) February 2012.

Center for Disease Control and Prevention. Vaccines and Immunizations. *Vaccines and Preventable Diseases.* Atlanta, GA: CDC; 2012. < http://www.cdc.gov/vaccines/vpd-vac/default.htm>

Center for Disease Control and Prevention. Food Safety at CDC. Atlanta, GA: CDC; 2012. <http://www.cdc.gov/foodsafety/facts.html#mostcommon>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2012 County Health Data Book. *2006-2010 Age-Adjusted Death Rates by County.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/data/databook/>

Center for Disease Control and Prevention. Seasonal Influenza. *Key Facts About Influenza (Flu) & Flu Vaccine.* Atlanta, GA: CDC; 2012. <http://www.cdc.gov/flu/keyfacts.htm>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2012 County Health Data Book. *2006-2010 Race-Specific and Age-Adjusted Death Rates by County; Pneumonia/Flu.* Raleigh, NC: DHHS; 2012. 2006-2010 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County <http://www.schs.state.nc.us/SCHS/data/databook/>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2011 County Health Data Book. *2005-2009 Age-Adjusted Death Rates by County; Pneumonia/Flu.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/data/databook/2011/CD21B%20racespecificsexspecific%20rates.rtf>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2007 County Health Data Book. *2001-2005 Age-Adjusted Death Rates by County; Pneumonia/Flu.* Raleigh, NC: DHHS; 2012. <http://www.schs.state.nc.us/SCHS/data/databook/2007/CD21B%20racespecificsexspecific%20rates.xls>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. *Data for Average Number of Critical Violations per Restaurant/Food Stand North Carolina vs. HNC 2020 Target, 2009.* Raleigh, NC: DHHS; 2011. <http://healthstats.publichealth.nc.gov/indicator/view_numbers/CriticalViolationFoodEst.HNC2020.html>

Center for Disease Control and Prevention. *Estimates of Food Borne Illness in the United States.* Atlanta, GA: CDC; 2012. <http://www.cdc.gov/foodborneburden/>

Granville-Vance District Health Department; Environmental Health Department.
Personal communications February and March 2012.
Wallace Vaughan - Supervisor
Granville Office: 101 Hunt Drive, Oxford, NC 27565 919-693-2688
Vance Office: 125 Charles Rollins Road, Henderson, NC 27565 252-492-5263

Social Determinants of Health

US Census Bureau. State and County QuickFacts. Washington, DC: US Census; 2012. <http://quickfacts.census.gov/qfd/index.html>

Answers. Gale Encyclopedia of Public Health: *Poverty and Health.* The Gale Group, Inc. 2002. <http://www.answers.com/topic/poverty-and-health>

US Census Bureau. State and County Quickfacts. 2005-2010 *Granville County, Vance County, North Carolina & 2006-2010 Franklin County.* Washington, DC: US Census; 2012. <http://quickfacts.census.gov/qfd/states/37/37077.html>

The Annie E. Casey Foundation. Kids County Data Center. Data Book/Reports. *Definitions and Data Sources.* Baltimore, MD: Annie E. Casey Foundation; 2012. <http://datacenter.kidscount.org/DataBook/2011/DefinitionsSources.aspx#Poverty>

The Annie E. Casey Foundation. Kids Count Data Center. Data by State. *Granville County, Vance County, Franklin County & North Carolina Economic Well Being Category.* Baltimore, MD: Annie E. Casey Foundation; 2012. <http://datacenter.kidscount.org/data/bystate/stateprofile.aspx?state=NC&cat=1445&group=Category&loc=35&dt=1%2c3%2c2%2c4>

NC Department of Public Instruction. Accountability Services Division. *Graduating 2005-2006, 2007-2008 and 2010-2011.* Raleigh, NC: NC DPI; 2012. <http://www.dpi.state.nc.us/accountability/reporting/cohortgradrate>

Demand Media, Inc. eHow. Education and Activities. *Importance of a High School Education by Shane Hall.* Kirkland, WA: eHow; 2012. <http://www.ehow.com/about_4815076_importance-high-school-education.html#ixzz1o7LyMelf>

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. *Indicator Report-Four-Year High School Graduation Rate by County, 2010-2011.* Raleigh, NC: DHHS; 2012. <http://healthstats.publichealth.nc.gov/indicator/view/HSGradRate.County.html>

US Census Bureau. American FactFinder. *Selected Housing Characteristics: 2008-2010 American Community Survey 3-Year Estimates.* Washington, DC: US Census; 2012. <http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_3YR_DP04&prodType=table>

Appendices

Appendix A—*Community Resource List*
The resources are too numerous to list.

- PBH Five County Community Operations Center shared their list of area Mental Health Providers.
- Granville County United Way accessed their professional website to acquire the list of Granville and Vance non-profits and related financial data.
- The internet and phone books were used copiously to locate various organizations.
  - http://yellowpages.lycos.com/search?what=churches&where=Granville+County%2C+NC
  - http://yellowpages.lycos.com/search?what=churches&where=Vance+County%2C+NC

Appendix B—*County and Municipal Boards and Commissions*
Vance County Administration
122 Young Street; Henderson, NC 27536
252-738-2120

City of Henderson
134 Rose Avenue; Henderson, NC 27536
252-430-5705

No listing or website available for the Towns of Middleburg and Kittrell

Granville County Administration
Williamsboro Street; Oxford, NC 27565
919-693-5240

City of Oxford
300 Williamsboro St; Oxford, NC 27565
919-693-1100

Town of Butner
415 Central Avenue, Suite B Butner, NC 27509
919-575-3367

City of Creedmoor
111 Masonic Street
Creedmoor, NC 27522
919-528-3332

Town of Stovall
107 Main Street Stovall, NC Stovall 27582
919-693-4646.

Town of Stem
Tally Ho Road; Stem NC 27581
Email Communication with the Town Clerk
townofstem@gmail.com

Appendix C—*Census QuickFacts*
US Census Bureau. State and County Quickfacts. *North Carolina, Granville, and Vance Counties.* Washington, DC: US Census; 2012. <http://quickfacts.census.gov/qfd/states/37/37000.html>

Granville County—http://quickfacts.census.gov/qfd/states/37/37077.html

Vance County—http://quickfacts.census.gov/qfd/states/37/37181.html

Appendix D—*Economic County Profiles*
NC Department of Commerce: Thrive in North Carolina; Access NC County Profiles: *Granville, Vance, North Carolina* Raleigh, NC: NC Department of Commerce; 2012. <http://www.thrivenc.com/accessnc/community-demographics>

Appendix E—*Tobacco and Physical Activity Fact Sheets*
NC Department of Health and Human Services. Division of Public Health. Chronic Disease and Injury Section, Tobacco Prevention and Control Branch. North Carolina 2009 Youth Tobacco Survey High School Fact Sheet Central/Piedmont Region. Raleigh, NC: DHHS; March 2010. http://www.tobaccopreventionandcontrol.ncdhhs.gov/data/yts/yts09/highschool/2009hsfactsheetregion2.pdf

NC Department of Health and Human Services, Division of Public Health, Center for Heath Informatics and Statistics. Child Health Assessment and Monitoring Program. Children's Physical Activity, NC 2010. Raleigh, NC: DHHS; July 2011.
<http://www.schs.state.nc.us/schs/pdf/CHAMP_FS_PhysicalActivity_WEB.pdf>

Appendix F—*State and County Health Trends*
NC Department of Health and Human Services, Division of Public Health, Center for Heath Informatics and Statistics. North Carolina Statewide and County Trends in Key Health Indicators (*Granville and Vance Counties).* Raleigh, NC: DHHS; February 2010. http://www.schs.state.nc.us/schs/data/trends/pdf/

Appendix G—*Falls Fact Sheet*
NC Department of Health and Human Services. Division of Public Health. Chronic Disease and Injury Section, Injury and Violence Prevention Branch; Injury Epidemiology & Surveillance Unit. Unintentional Falls in North Carolina. Raleigh, NC: DHHS; August 2011.
<http://www.injuryfreenc.ncdhhs.gov/DataSurveillance/Falls%20NC%202009%20Fact%20sheet%20update2011.pdf>

Appendix H—*Action for Children NC County Profiles*
Annie E. Casey Foundation. Kids Count Data Center. Data by State. *County Profiles All Indicators (Granville and Vance Counties).* Baltimore, MD: Annie E. Casey Foundation; 2012.
<http://datacenter.kidscount.org/data/bystate/stateprofile.aspx?state=NC&group=All&loc=4948&dt=1%2c3%2c2%2c4>
<http://datacenter.kidscount.org/data/bystate/stateprofile.aspx?state=NC&group=All&loc=5000&dt=1%2c3%2c2%2c4>

Appendix I—*Mortality Statistics by Age, Gender, Race, and County*
NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2011 County Health Data Book. Raleigh, NC: DHHS; 2012.
<http://www.schs.state.nc.us/schs/data/databook/2011/>

- 2005-2009 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County <http://www.schs.state.nc.us/SCHS/data/databook/2011/CD21B%20racespecificsexspecific%20rates.rtf>

- 2005-2009 Race-Sex-Specific Age-Adjusted Death Rates by County

- Death Counts and Crude Death Rates per 100,000 Population for Leading Causes of Death, by Age Groups NC 2005-2009

- Unadjusted Death Rates per 100,000 Population, 2009 and 2005-2009

NC Department of Health and Human Services. State Center for Health Statistics. Division of Public Health. 2007 County Health Data Book. Raleigh, NC: DHHS; 2012.
<http://www.schs.state.nc.us/schs/data/databook/2007/ >

2001-2005 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County
< http://www.schs.state.nc.us/SCHS/data/databook/2007/CD21B%20racespecificsexspecific%20rates.xls>

- 2001-2005 Race-Sex-Specific Age-Adjusted Death Rates by County

- Death Counts and Crude Death Rates per 100,000 Population for Leading Causes of Death, by Age Groups NC 2001-2005

- 2001-2005 Race-Sex-Specific Age-Adjusted Death Rates by County

- Unadjusted Death Rates per 100,000 Population, 2005 and 2001-2005

Appendix J—*Public Water Systems by County*
NC Department of Environment and Natural Resources. Division of Water Resources Public Water Supply Section; *Water System ID and Name by County (Franklin, Granville, and Vance Counties).* Raleigh, NC: NCDENR; 2011. <http://xapps.enr.state.nc.us/eh/pws/pwslist.do;jsessionid=8E9BADF511603224D899B7C62F951967>

Appendix K
NC Department of Health and Human Services. Division of Public Health. Diabetes Prevention and Control Branch. The Burden of Diabetes in North Carolina 2010. Raleigh: NC DHHS; October 2010. <http://www.ncdiabetes.org/library/_pdf/Diabetes%20burden%20in%20North%20Carolina%202010%20Fact%20Sheet%20WEB.pdf>

Appendix L
Survey Resource Materials
Granville-Vance District Health Department (GVDHD). Health Education Department. Oxford, NC: GVDHD; 2011. <www.gvdhd.org>

Healthy Carolinians - NC Department of Health and Human Services, Division of Public Health Community Assessment Guidebook and Accompanying Documents. Raleigh: NC DHHS; 2011. <http://www.healthycarolinians.org/assessment/resources/survey.aspx>

UNC Center for Public Health Preparedness
North Carolina Institute for Public Health; Gillings School of Global Public Health; The University of North Carolina at Chapel Hill. Campus Box 8165, Chapel Hill, NC 27599; 919-843-5561 <http://cphp.sph.unc.edu/>