

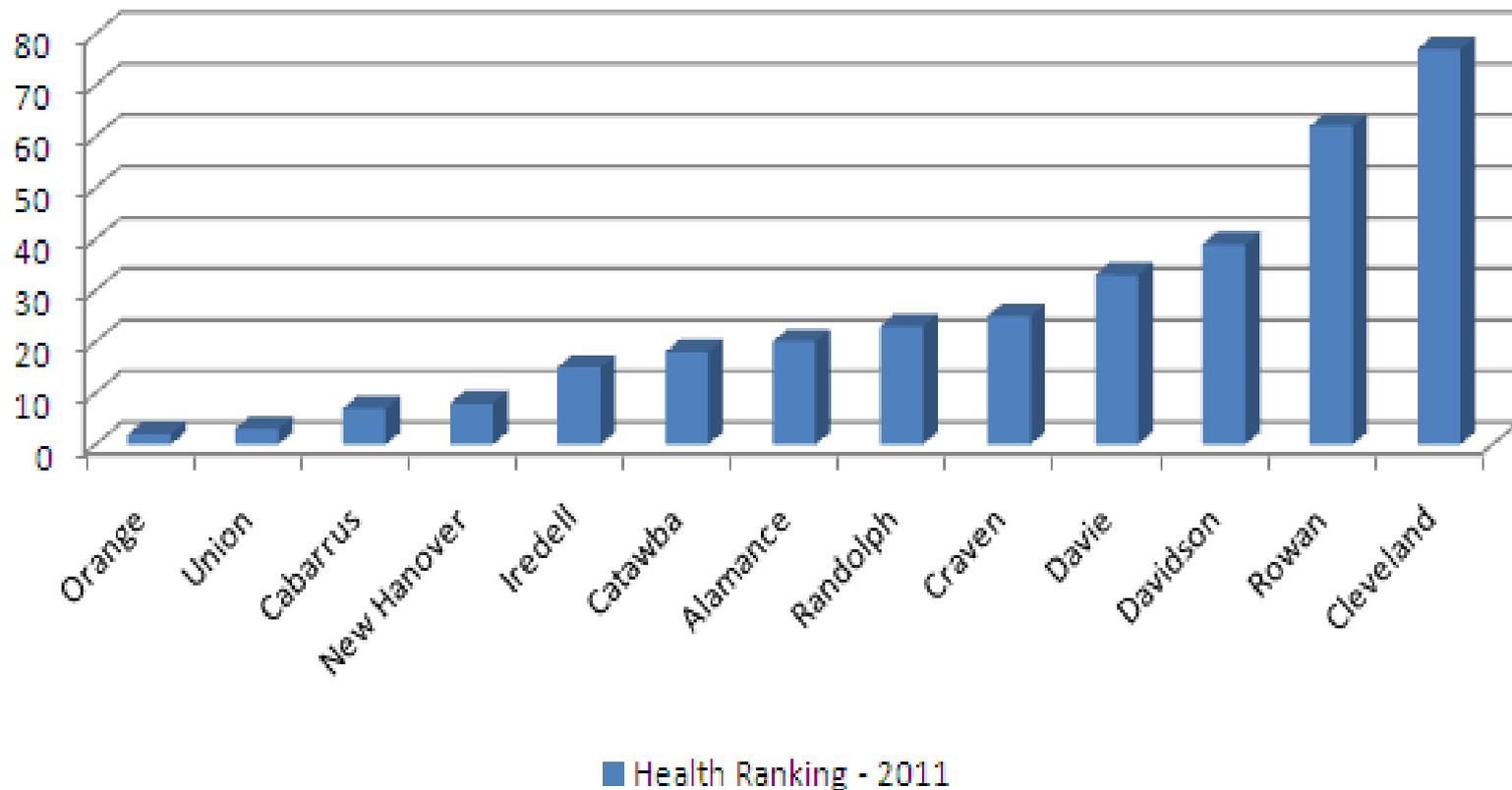
**Health Ranking Comparison Between Rowan
and
Selected Counties in North Carolina**

**Based on County Health Ranking Data
Provided by**

**University of Wisconsin's Population Health Institute
and
Robert Wood Johnson Foundation
2011**

Health Rankings for Selected Counties in NC

Health Ranking - 2011



Health Outcome Weights for the 2011 County Health Rankings

<u>Outcome</u>	<u>Focus Area</u>	<u>Measure</u>
Mortality (50%)	Premature death	Years of potential life lost before age 75 (50%)
Morbidity (50%)	Quality of life	Percent reporting poor or fair health(10%) Physically unhealthy days (10%) Mentally unhealthy days (10%)
	Poor birth outcomes	Low birthweight live births (20%)

Health Factor Weights for the 2011 County Health Rankings

<u>Health Factor</u>	<u>Focus Area</u>	<u>Measure</u>
Health behaviors (30%)	Smoking (10%)	Adult smoking rate (10%)
	Diet and exercise (10%)	Adult obesity rate (10%)
	Alcohol use (5%)	Excessive drinking (2.5%)
		Motor vehicle crash death rate (2.5%)
	Unsafe sex (5%)	Sexually transmitted infection rate (2.5%)
		Teen birth rate (2.5%)
Clinical care (20%)	Access to care (10%)	Adult uninsured rate (5%)
		Primary care providers (5%)
	Quality of care (10%)	Hospitalization rates for ambulatory-sensitive conditions (5%)
		Diabetic screening rate (2.5%)
		Mammography screening rate (2.5%)

Health Factor Weights for the 2011 County Health Rankings

(continued)

<u>Health Factor</u>	<u>Focus Area</u>	<u>Measure</u>
Social and economic factors (40%)	Education (10%)	High school graduation rate (5%) Adults with college degrees (5%)
	Employment (10%)	Unemployment rate (10%)
	Income (10%)	Children in poverty (10%)
	Family and social support (5%)	Social and emotional support (2.5%) Single-parent households (2.5%)
	Community safety (5%)	Violent crime or homicide rate (5%)
Physical environment (10%)	Environmental quality (5%)	Unhealthy air quality due to particulate matter (2.5%) Unhealthy air quality due to ozone (2.5%)
	Built environment (5%)	Access to healthy foods (2.5%) Access to recreational facilities (2.5%)

Definition of Health Behavior Factors

Tobacco Use (10%)

Percent of adults that report smoking at least 100 cigarettes and that they currently smoke – 10% **BRFSS 2003-2009**

Diet and Exercise (10%)

Percent of adults that report a BMI ≥ 30 – 10% **National Center for Chronic Disease Prevention and Health Promotion 2008**

Alcohol Use (5%)

Percent of adults that report excessive drinking in the past 30 days – 2.5%
BRFSS 2003-2009

MV deaths per 100K population (crude rate) – 2.5% **NCHS 2001–2007**

Sexual Behavior (5%)

Sexually transmitted infections – Chlamydia rate per 100K population – 2.5% **National Center for Hepatitis, HIV, STD, and TB Prevention 2008**

Teen birth rate per 1,000 female population, ages 15–19 2.5% NCHS 2001–2007

Definition of Health Clinical Factors

Access to Care (10%)

Percent of population < age 65 without health insurance – 5% Census/Current Population Survey (CPS)—*Small Area Health Insurance Estimates (SAHIE) 2007*

Primary care providers (5%)

Health Resources and Services Administration, Area Resource File (ARF) 2008 *ARF elements from AMA Master File and Census Population Estimates*

Quality of Care (10%)

Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees – 5% *Medicare claims/Dartmouth Atlas 2006–07*

Percent of diabetic Medicare enrollees that receive HbA1c screening – 2.5% Medicare claims/Dartmouth Atlas 2006-07

Percent of female Medicare enrollees that receive mammography screening – 2.5% Medicare claims/Dartmouth Atlas 2006–07

Definition of Health Social and Economic Factors

Education (10%)	<p>Averaged freshman graduation rate—Percent of ninth grade cohort that graduates in 4 years – 5% National Center for Education Statistics 2006–07 <i>State data sources for Kentucky, New Hampshire, North Carolina, Pennsylvania, South Carolina, Utah 2008–09</i></p> <p>Percent of adults aged 25-44 years with some post-secondary education – 5% American Community Survey (ACS) 2005–2009</p>
Employment (10%)	<p>Percent of population age 16+ unemployed but seeking work– 10% Local Area Unemployment Statistics, Bureau of Labor Statistics 2009</p>
Income (10%)	<p>Percent of children in poverty – 10% Census/CPS—Small Area Income and Poverty Estimates (SAIPE) 2008</p>
Family and Social Support (5%)	<p>Percent of adults without social/emotional support*– 2.5% BRFSS 2005–2009</p> <p>Percent of all households that are single-parent households – 2.5% American Community Survey (ACS) 2005–2009</p>
Community Safety (5%)	<p>Violent crime rate per 100K population Uniform Crime Reporting, Federal Bureau of Investigation 2006–2008 OR Homicide death rate per 100K population (age-adjusted) NCHS 2001–2007</p>

Definition of Environmental Factors

Environmental Quality (5%)

- (1) Annual number of unhealthy air quality days due to ozone – 2.5% **CDC-Environmental Protection Agency (EPA) Collaboration 2006**
- (2) Annual number of unhealthy air quality days due to fine particulate matter – 2.5%

Built Environment (5%)

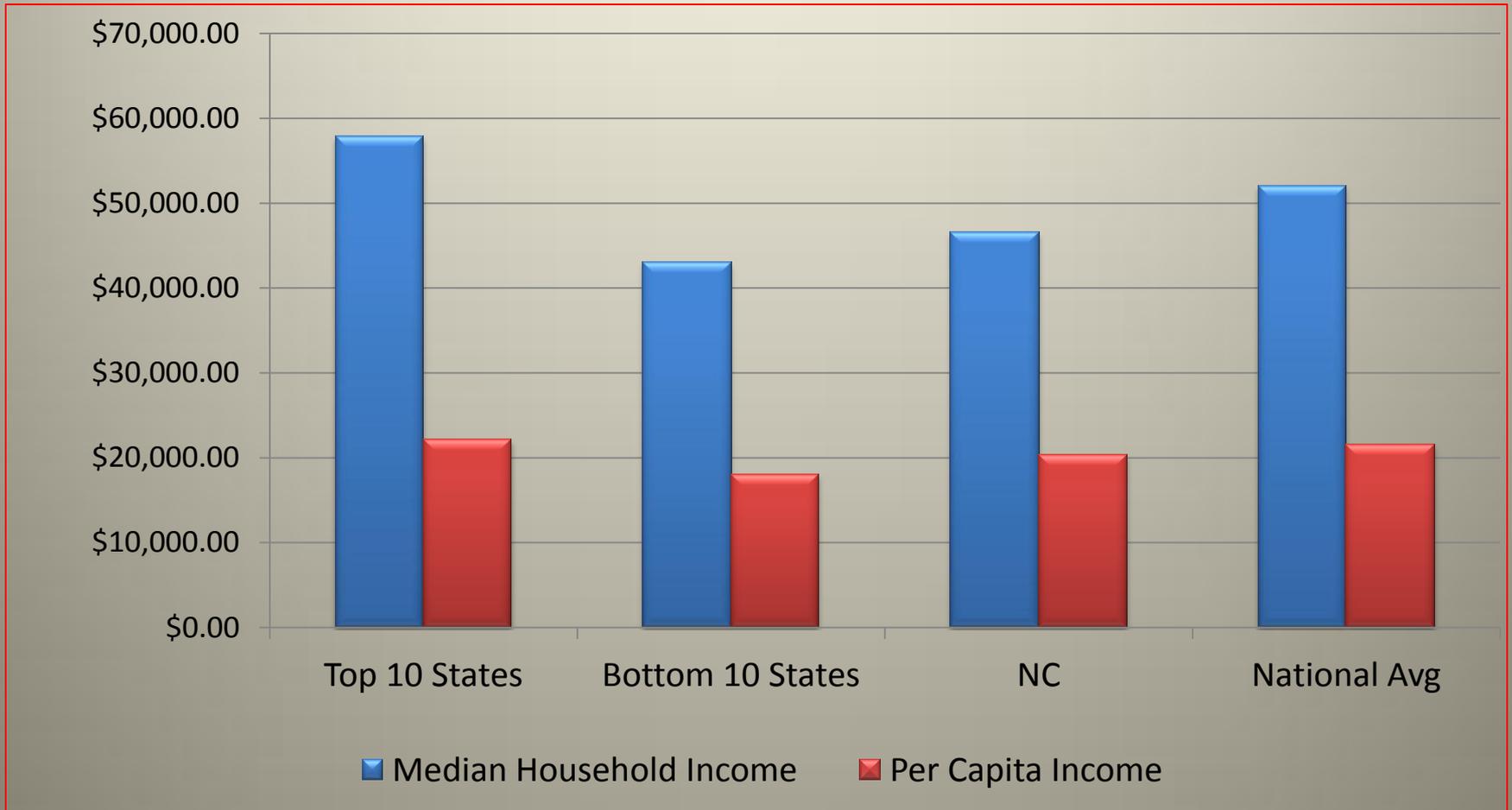
Percent of zip codes in county with healthy food outlets – 2.5% **Census Zip Code Business Patterns 2008**

Healthy food outlets include grocery stores (NAICS 445110) with > 4 employees and produce stands/farmers' markets (NAICS 445230)

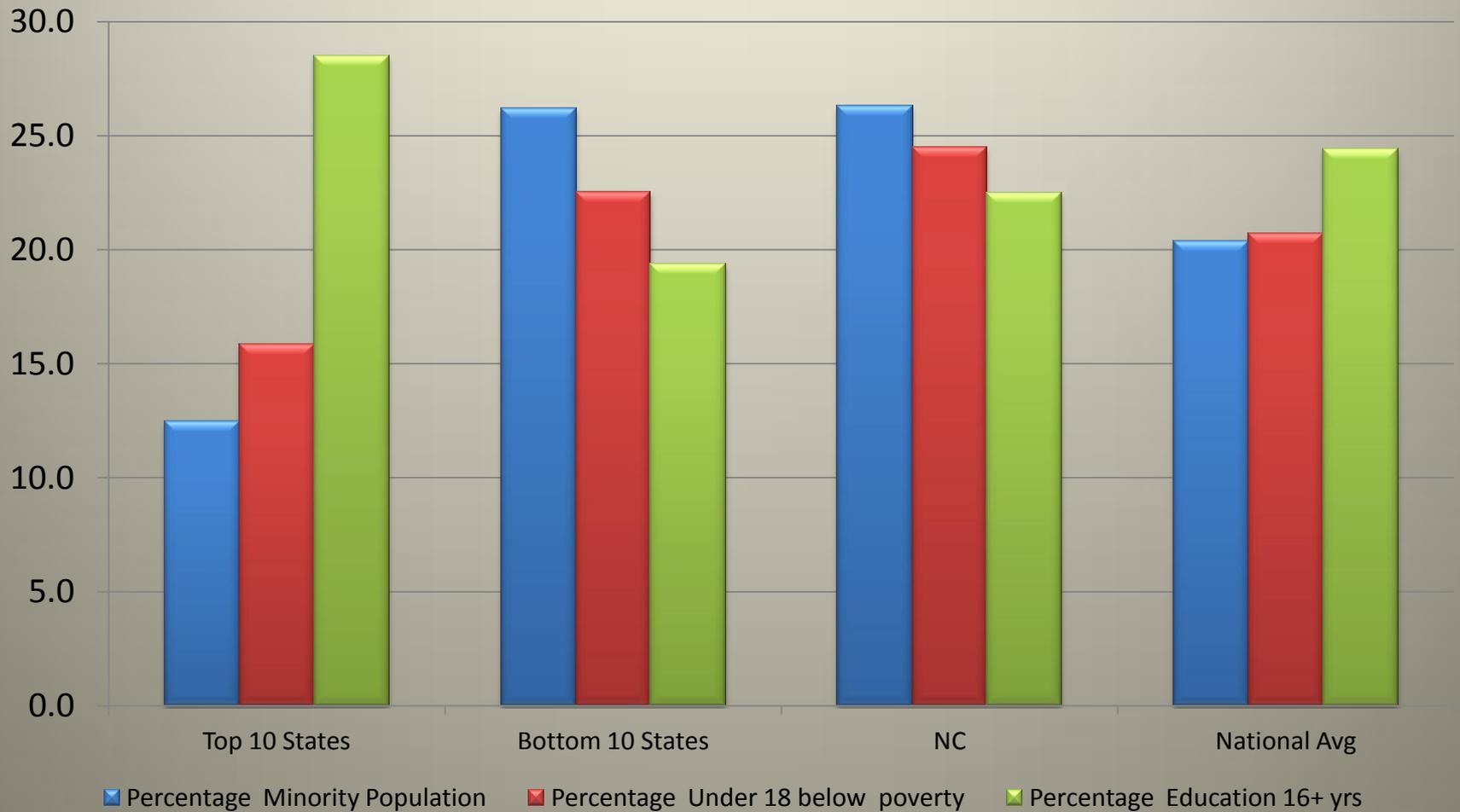
Access to recreational Facilities (2.5%)

Census County Business Patterns 2008

National Comparison of Median Household Income and Per Capita Income with Health Rankings of Top 10 vs Bottom 10 States

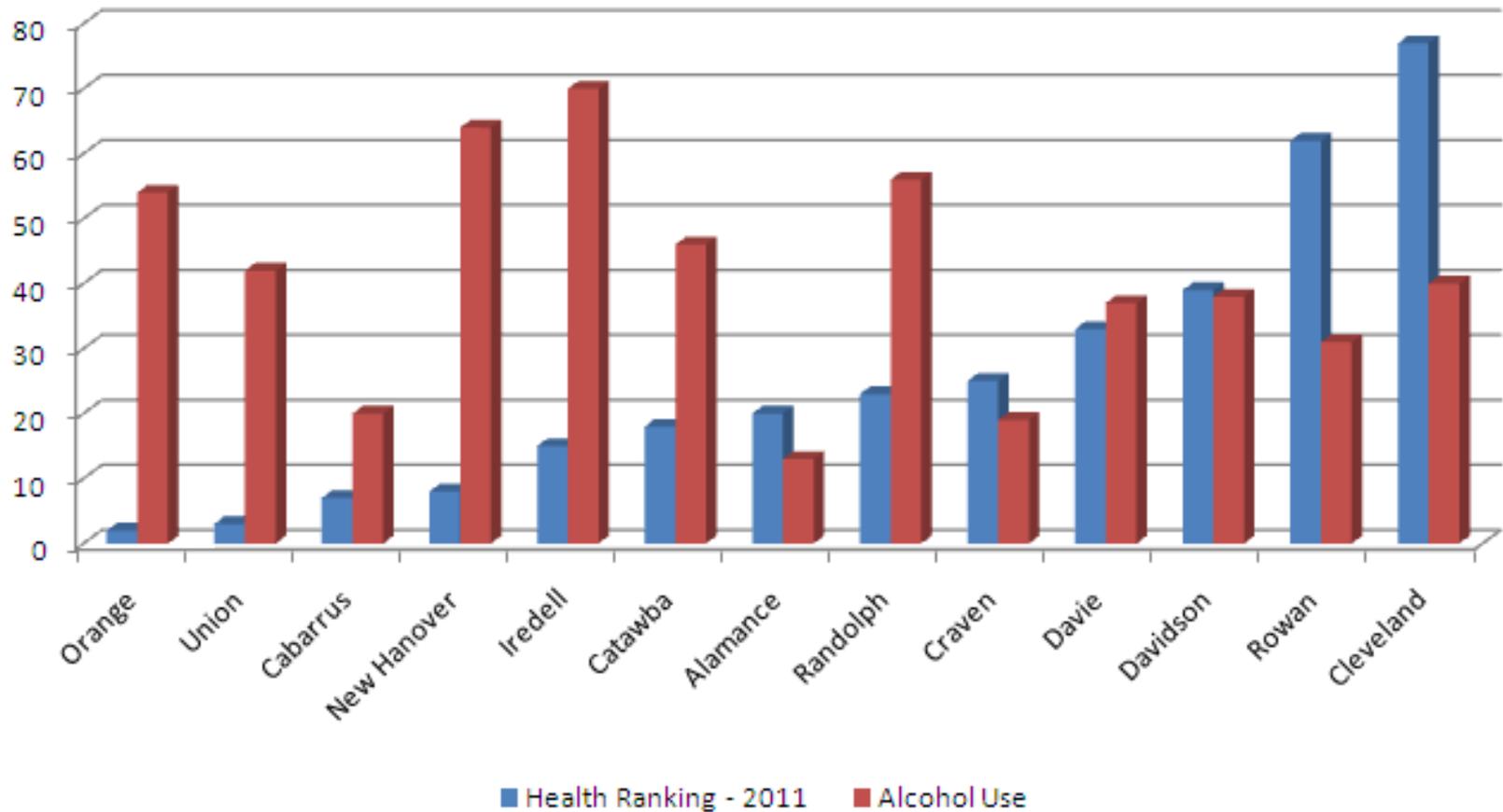


National Comparison of Minority Population, Children Under 18 in Poverty and the Percentage of Individuals with 16+ Years of Education with North Carolina Data

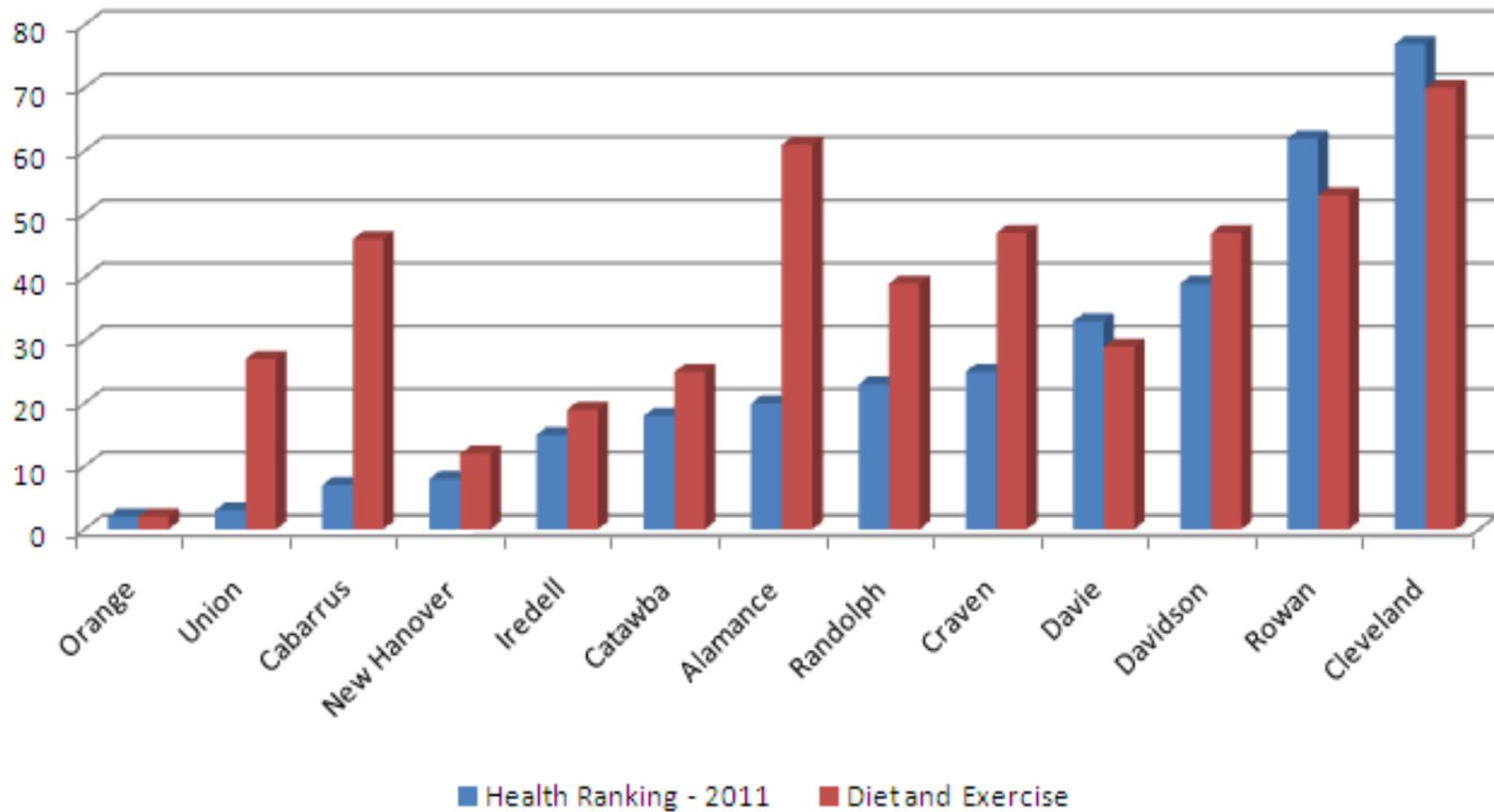


Comparisons of Population Health Behaviors

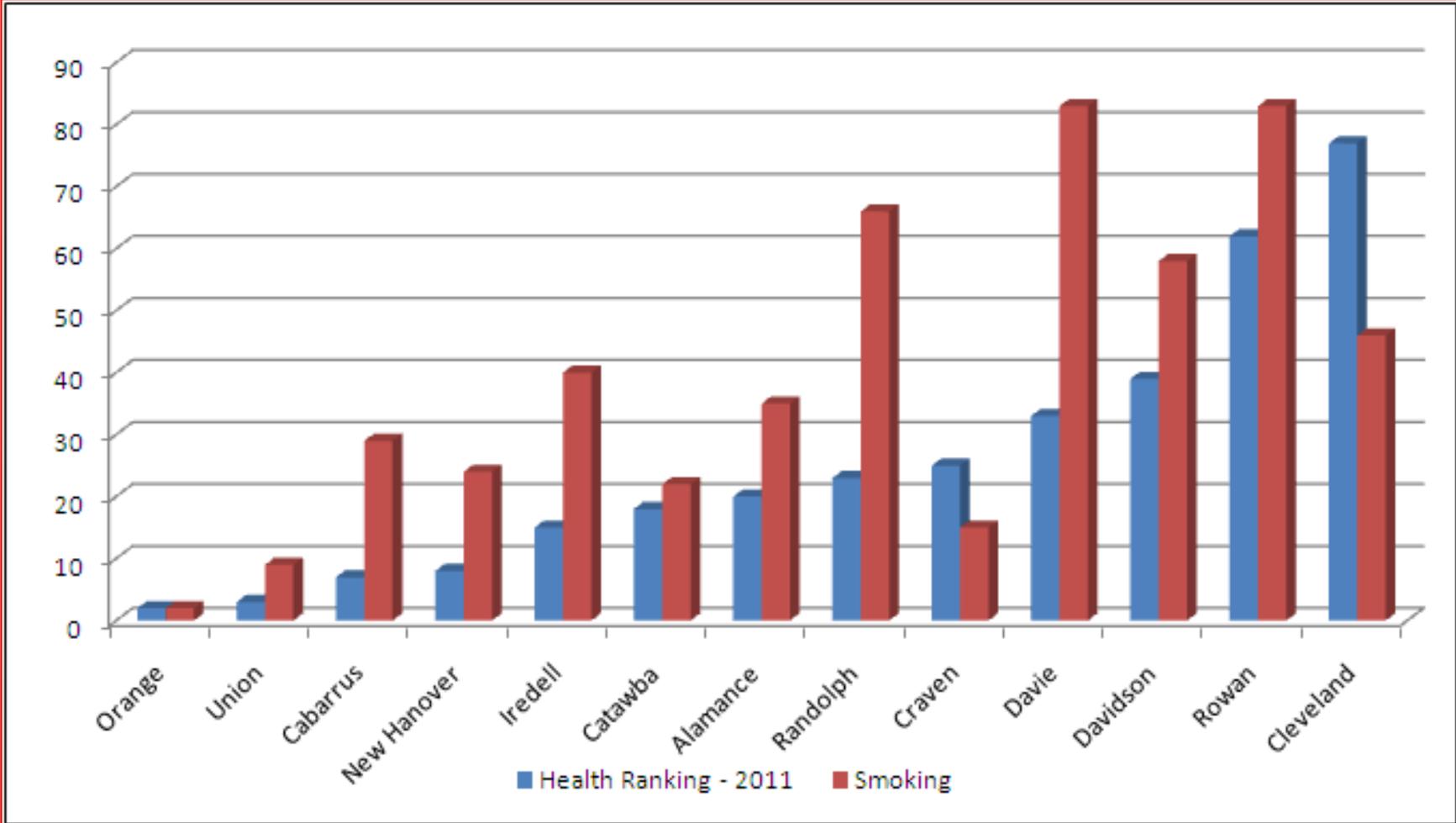
Health Rankings Compared to Alcohol Use Rankings for Selected NC Counties



Health Rankings Compared to Diet and Exercise Rankings for Selected NC Counties

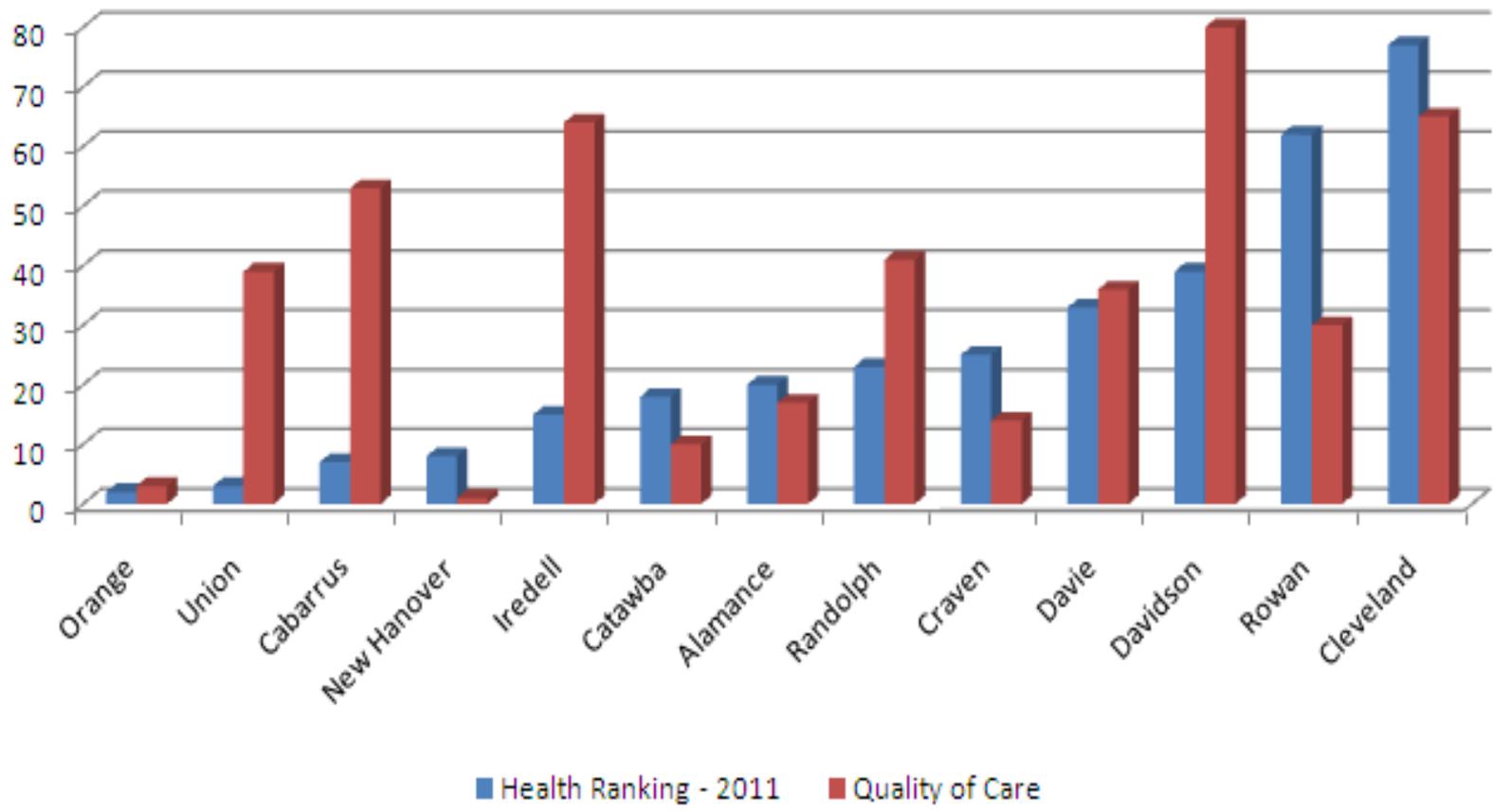


Health Rankings Compared to Smoking Rankings for Selected NC Counties

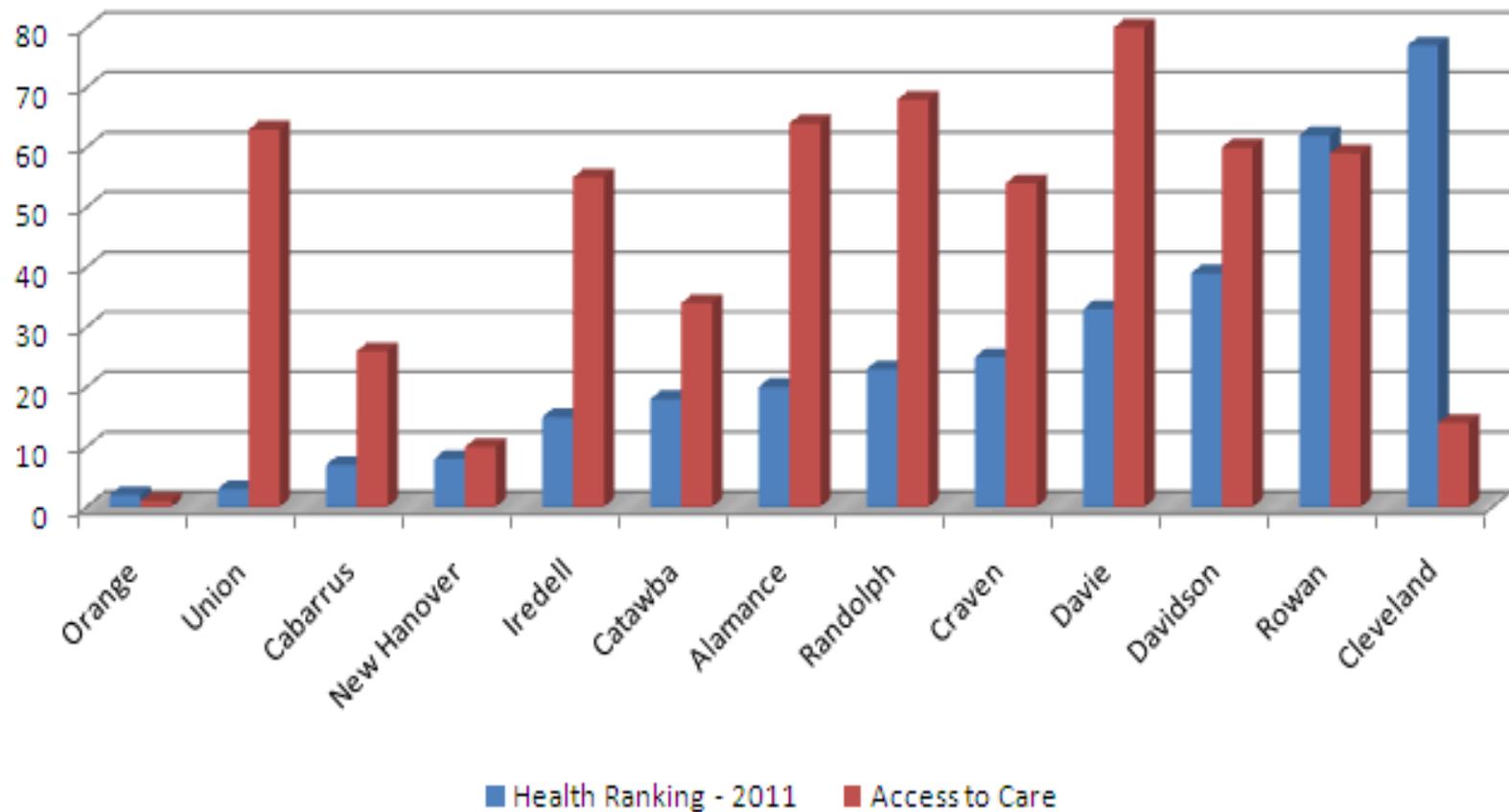


Comparison of Population Clinical Care Factors

Health Rankings Compared to Quality of Care Rankings for Selected NC Counties



Health Rankings Compared to Access to Care Rankings for Selected NC Counties



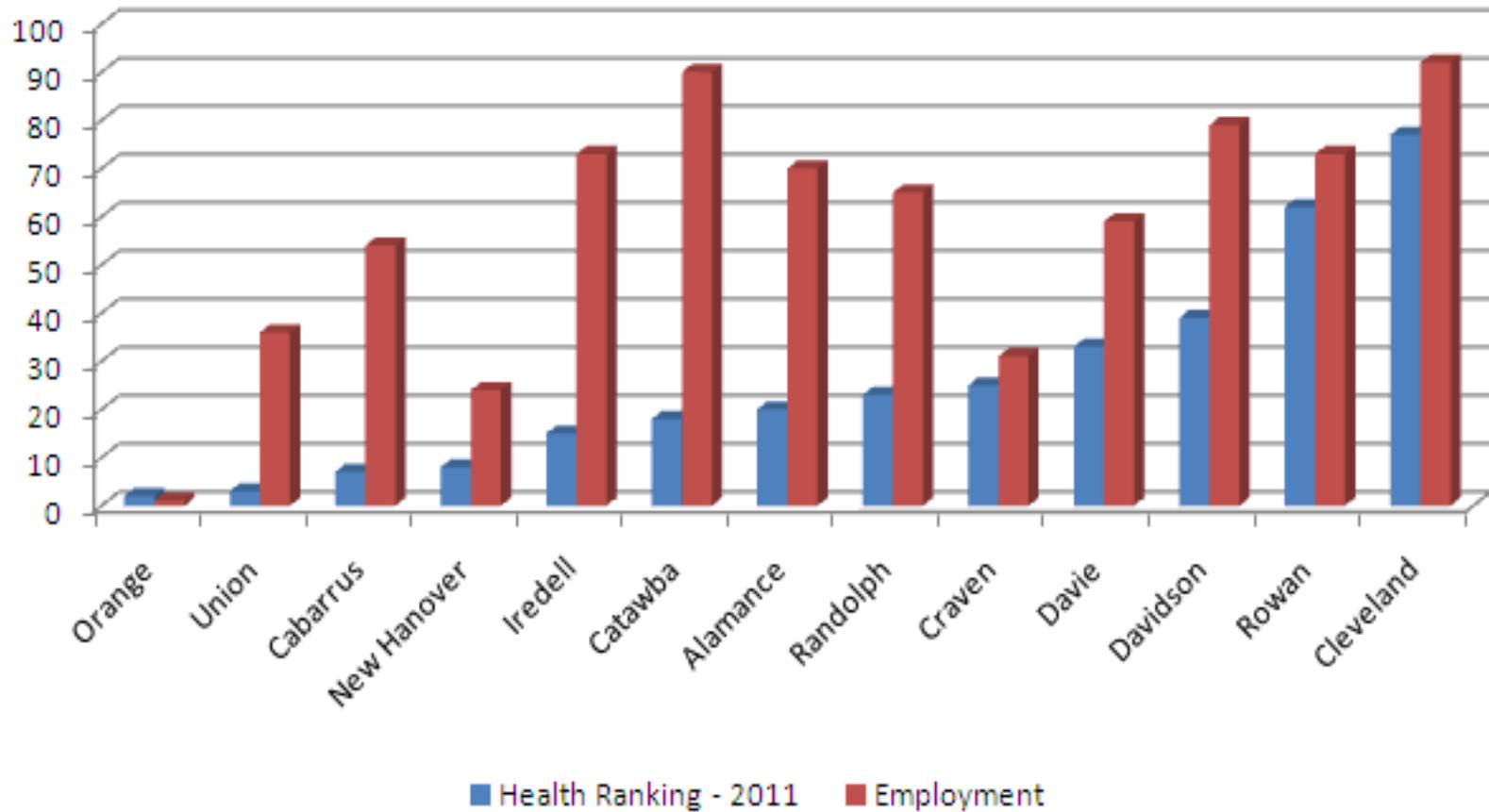
Comparison of Selected Counties and the State Access to Care

	Rowan	Catawba	Davidson	State
Physicians per 10,000 Population	10.9	23.5	8	20.8
Primary Care Physicians per 10,000 pop	5.1	9.1	4.8	9
% Adults needing to see doctor but could not get an appointment	28.9%	31.9%	29.5%	28.8%

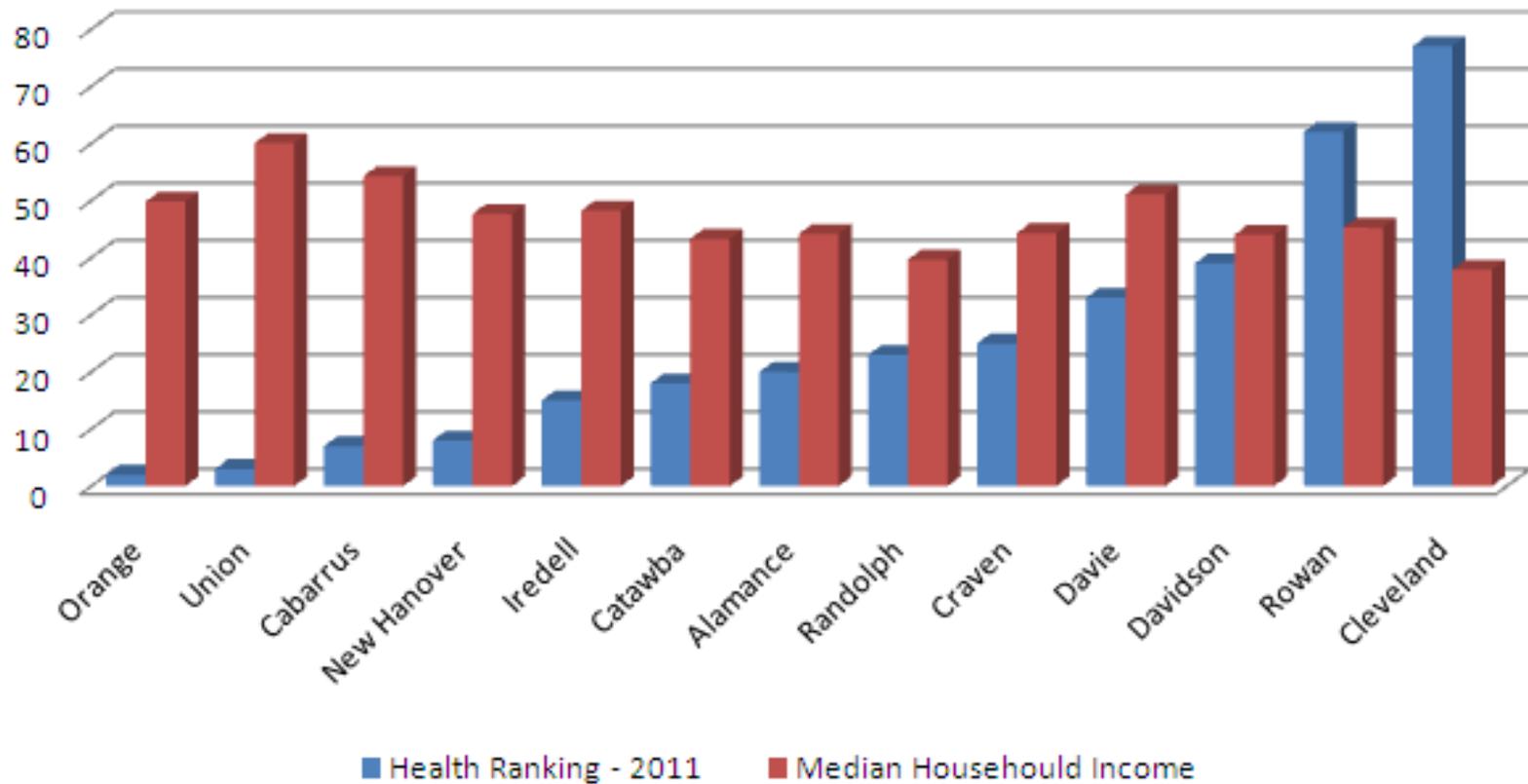
Source: NC CATCH Data from 2006-2008
North Carolina Institute of Medicine www.cniom.org

Comparison of Population Social and Economic Factors

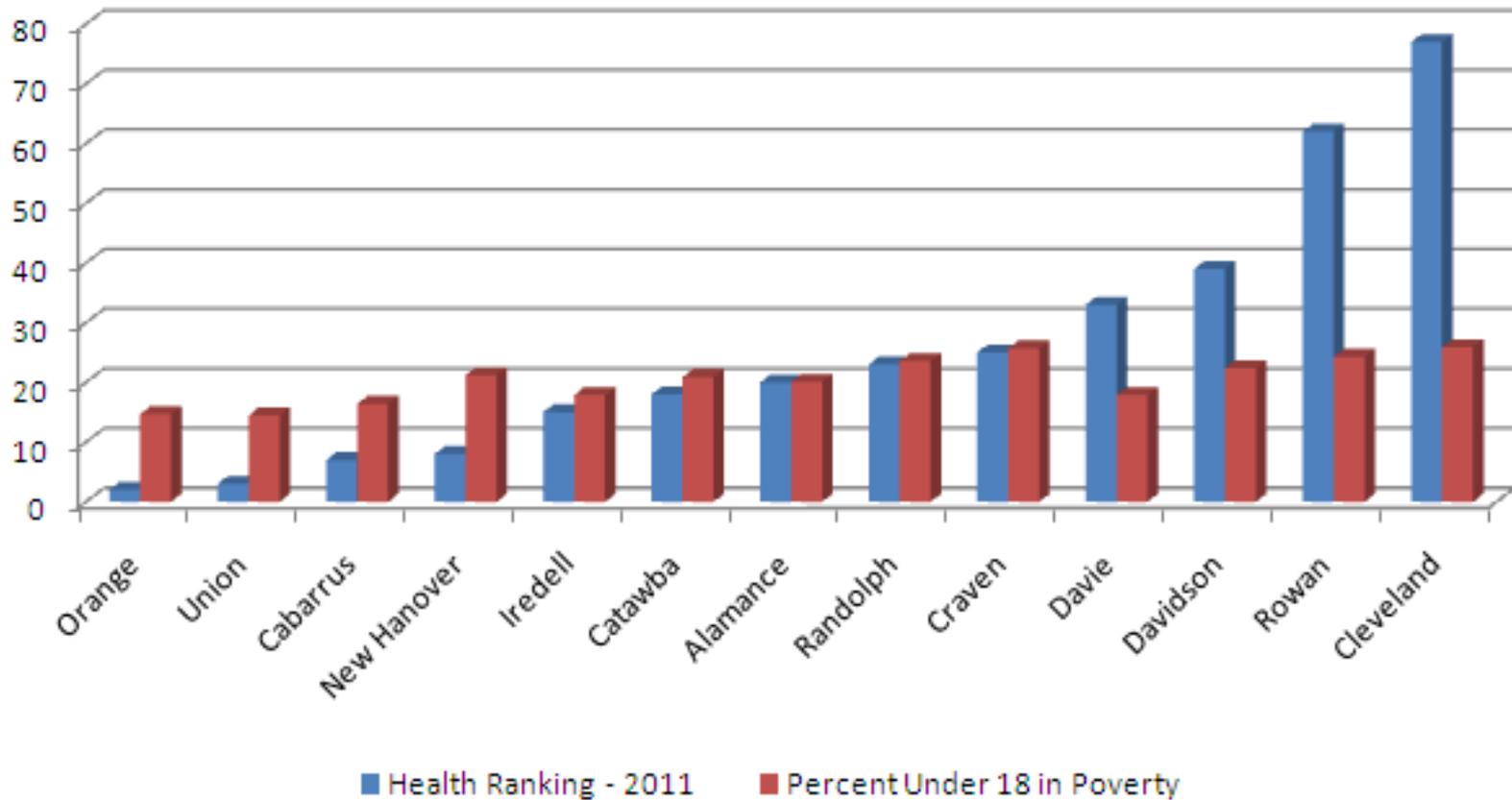
Health Rankings Compared to Employment Rankings for Selected NC Counties



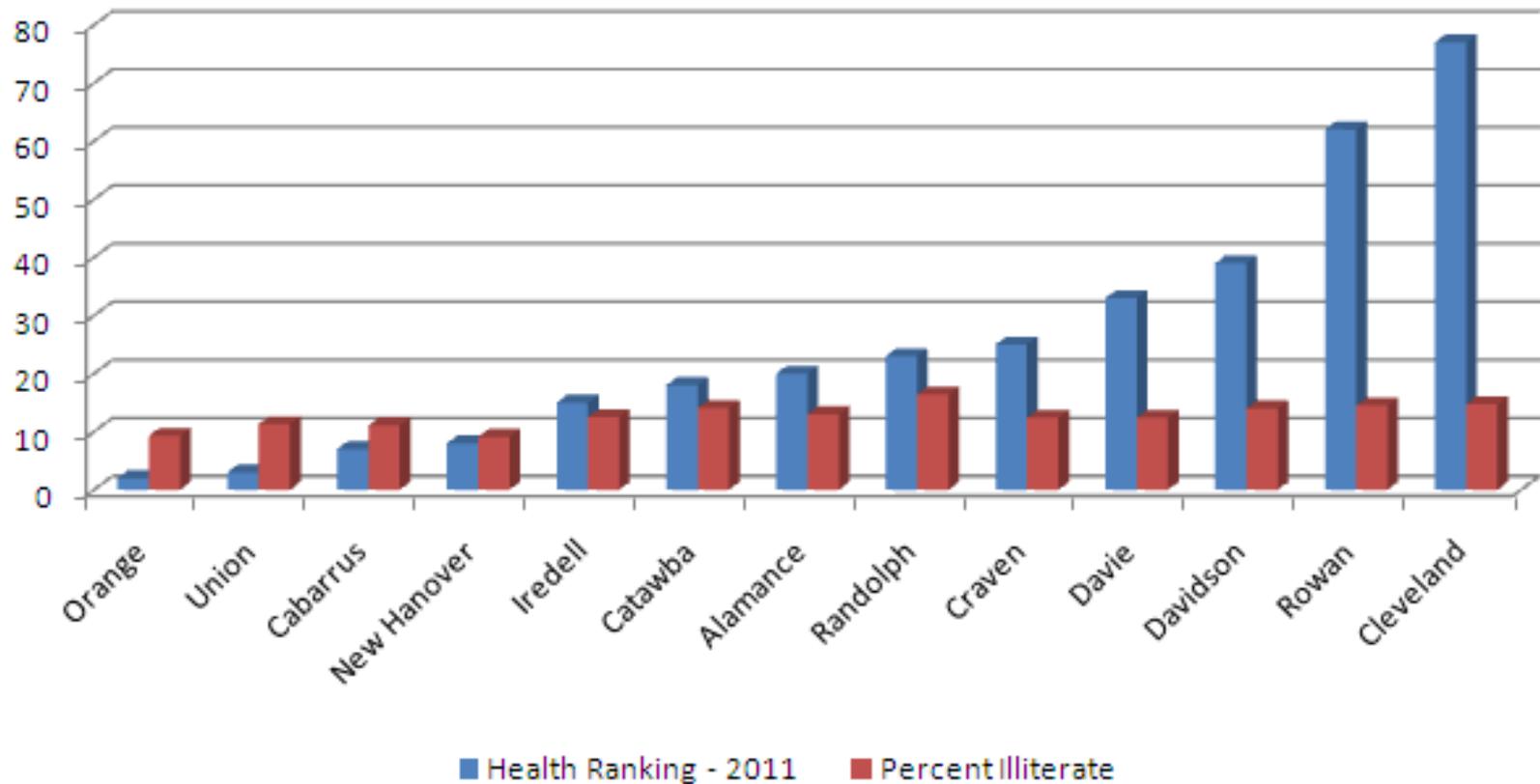
Health Rankings Compared to Median Household Income Rankings for Selected NC Counties



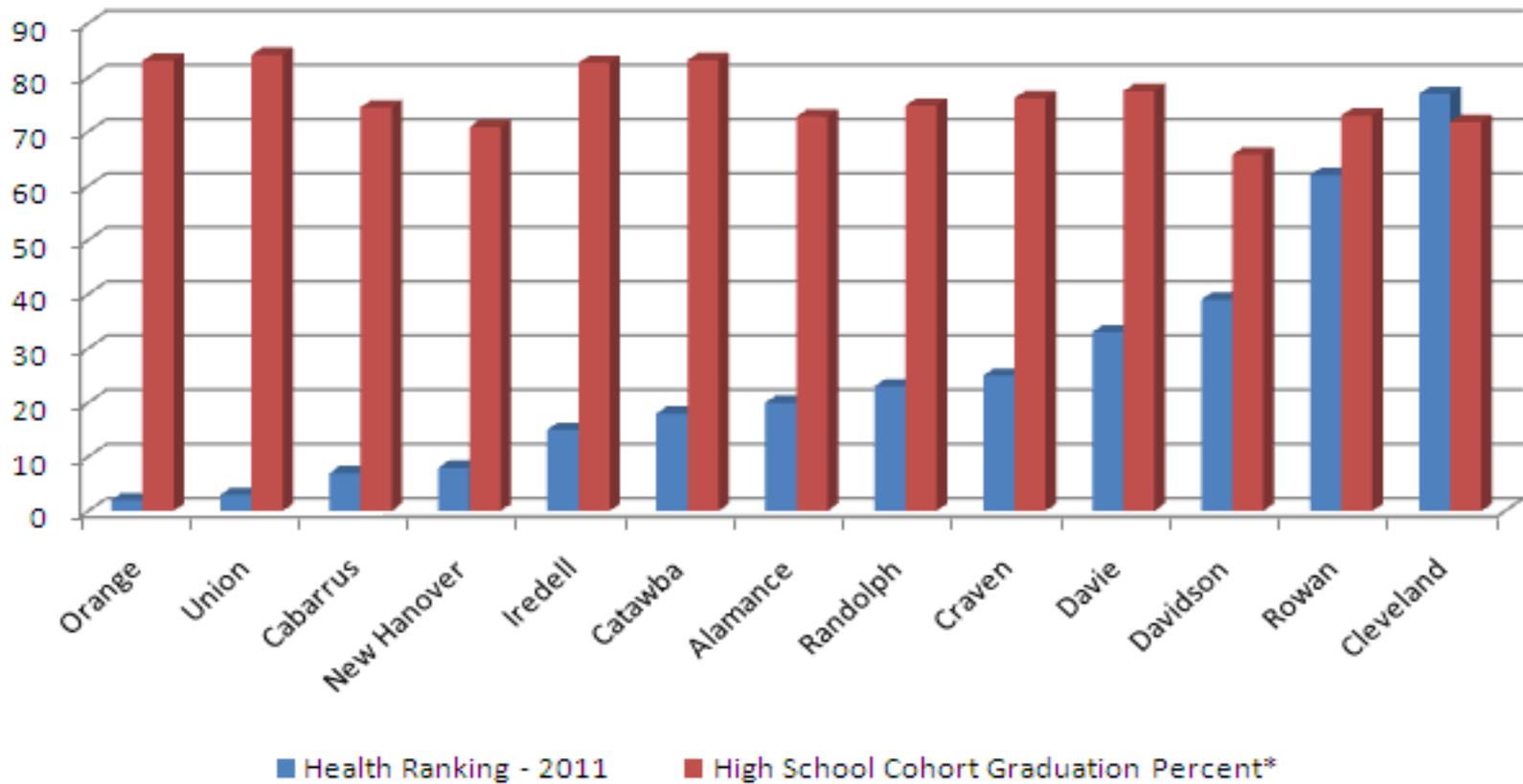
Health Rankings Compared to Percent Under 18 in Poverty Rankings for Selected NC Counties



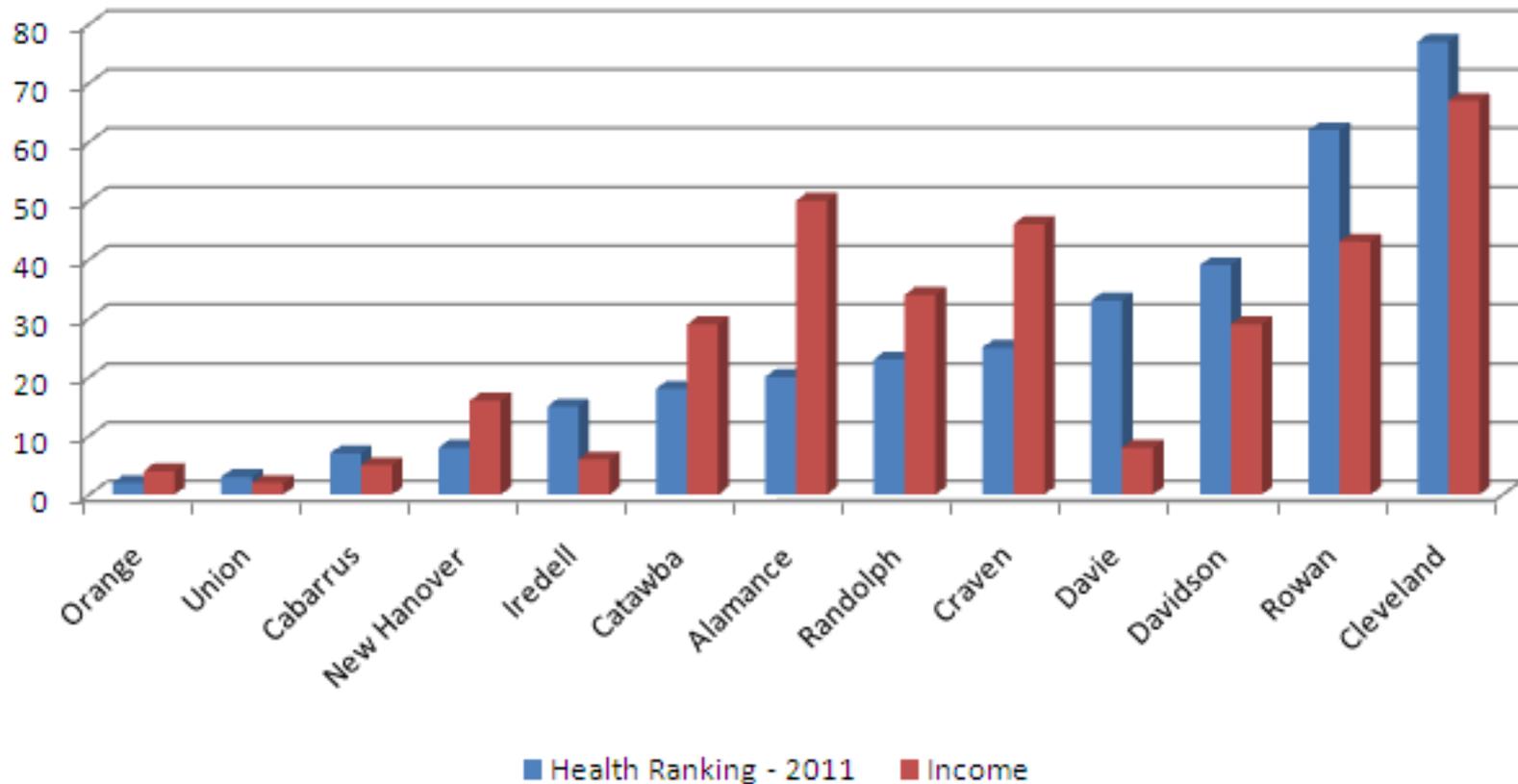
Health Rankings Compared to Percent Illiterate Rankings for Selected NC Counties



Health Rankings Compared to High School Graduation Percentages for 2006-2010 Cohort for Selected NC County School Systems

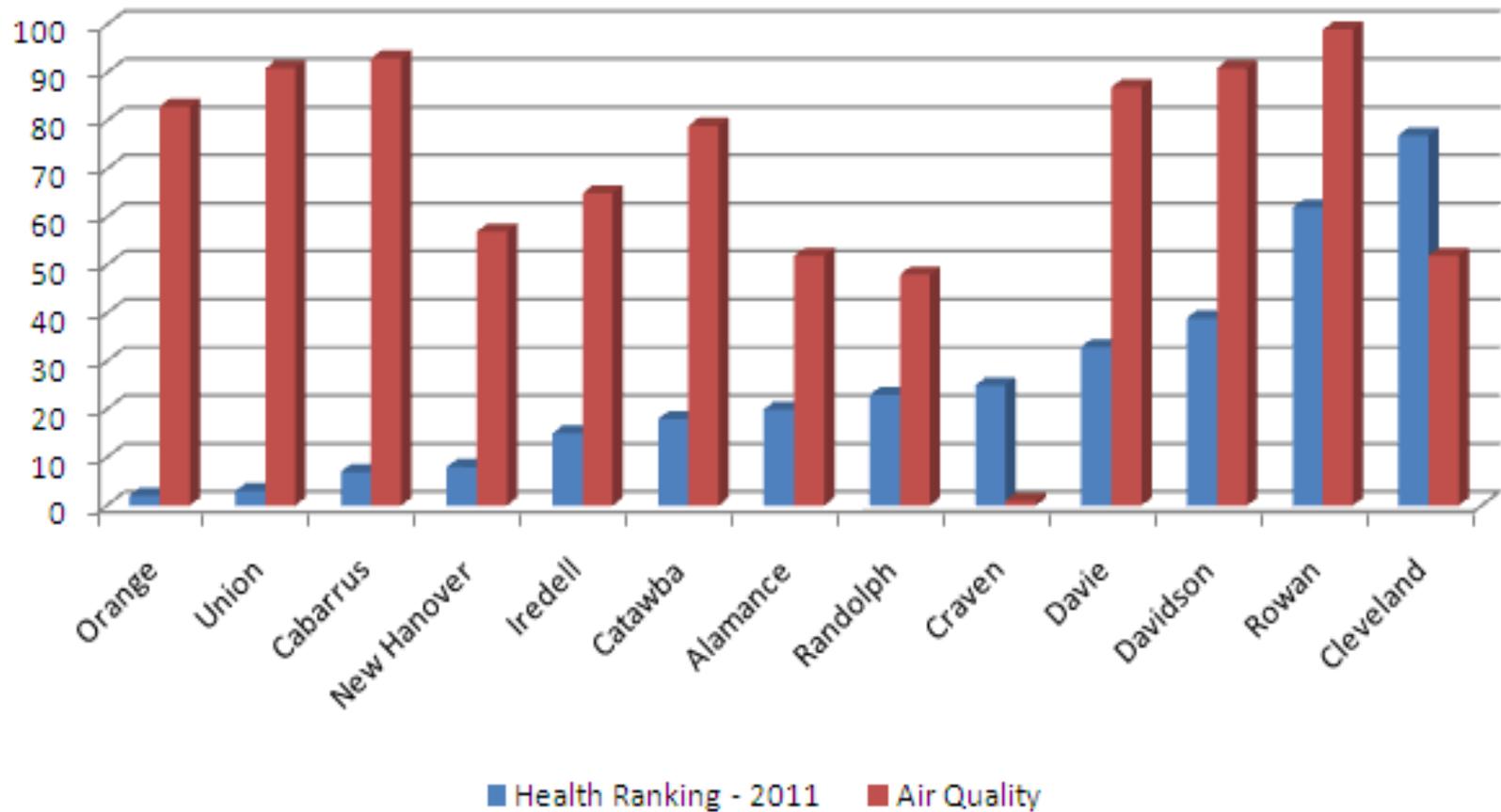


Health Rankings Compared to Per Capita Income Rankings for Selected NC Counties

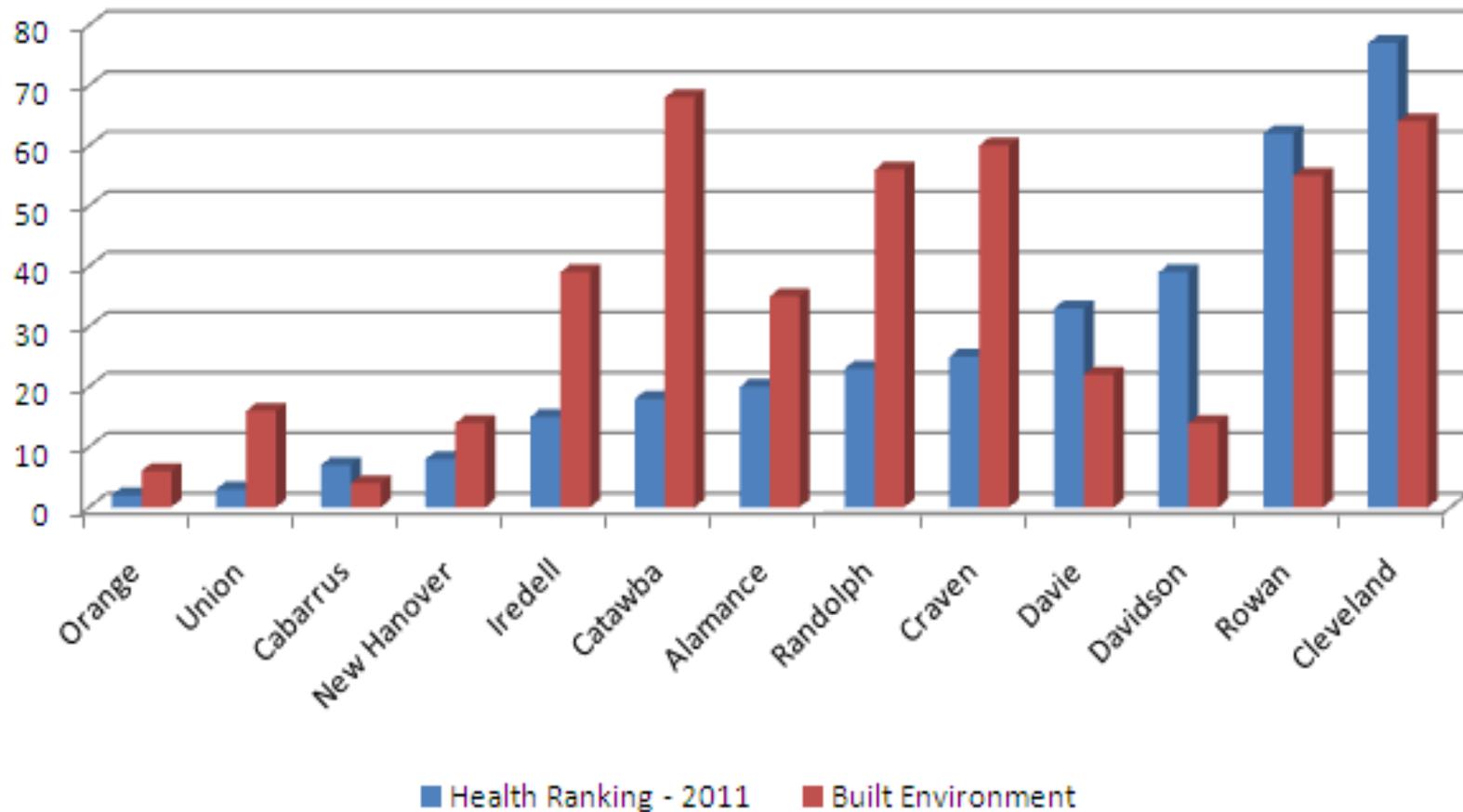


Comparison of Population Physical Environment Factors

Health Rankings Compared to Air Quality Rankings for Selected NC Counties



Health Rankings Compared to Built Environment Rankings for Selected NC Counties



Health Outcome Weights for the 2011 County Health Rankings

<u>Outcome</u>	<u>Focus Area</u>	<u>Measure</u>
Mortality (50%)	Premature death	Years of potential life lost before age 75 (50%)
Morbidity (50%)	Quality of life	Percent reporting poor or fair health(10%)
		Physically unhealthy days (10%)
		Mentally unhealthy days (10%)
	Poor birth outcomes	Low birthweight live births (20%)

Health Factor Weights for the 2011 County Health Rankings

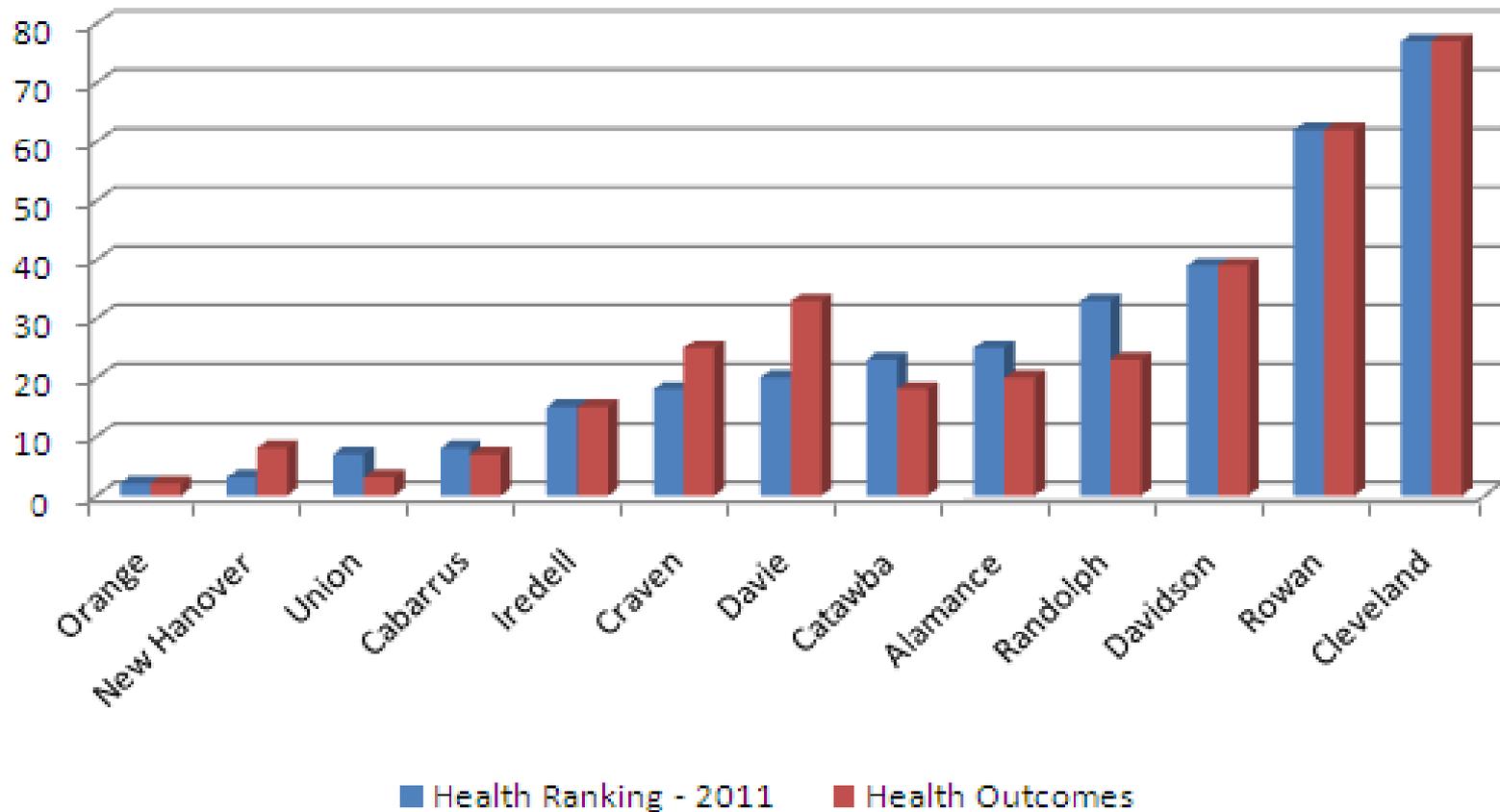
Health Factor	Focus Area	Measure
Health behaviors (30%)	Smoking (10%)	Adult smoking rate (10%)
	Diet and exercise (10%)	Adult obesity rate (10%)
	Alcohol use (5%)	Excessive drinking (2.5%)
		Motor vehicle crash death rate (2.5%)
		Unsafe sex (5%)
Sexually transmitted infection rate (2.5%)		
Teen birth rate (2.5%)		
Clinical care (20%)	Access to care (10%)	Adult uninsured rate (5%)
		Primary care providers (5%)
	Quality of care (10%)	Hospitalization rates for ambulatory-sensitive conditions (5%)
		Diabetic screening rate (2.5%)
Mammography screening rate (2.5%)		

Health Factor Weights for the 2011 County Health Rankings

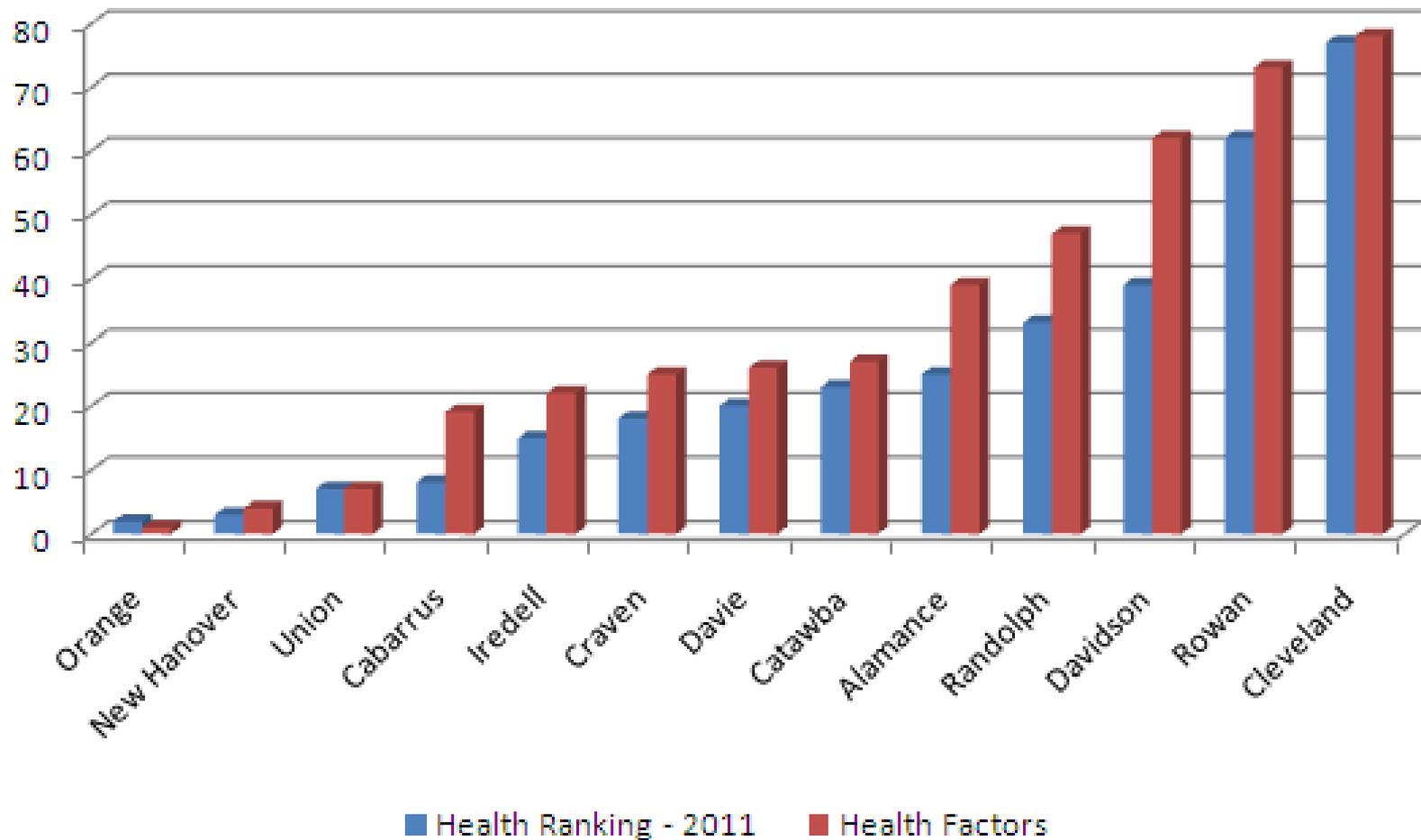
(continued)

<u>Health Factor</u>	<u>Focus Area</u>	<u>Measure</u>	
Social and economic factors (40%)	Education (10%)	High school graduation rate (5%) Adults with college degrees (5%)	
	Employment (10%)	Unemployment rate (10%)	
	Income (10%)	Children in poverty (10%)	
	Family and social support (5%)		Social and emotional support (2.5%)
			Single-parent households (2.5%)
	Community safety (5%)	Violent crime or homicide rate (5%)	
Physical environment (10%)	Environmental quality (5%)	Unhealthy air quality due to particulate matter (2.5%)	
		Unhealthy air quality due to ozone (2.5%)	
	Built environment (5%)	Access to healthy foods (2.5%) Access to recreational facilities (2.5%)	

County Health Rankings Compared to Health Outcome Rankings



County Health Rankings Compared to Health Factor Rankings

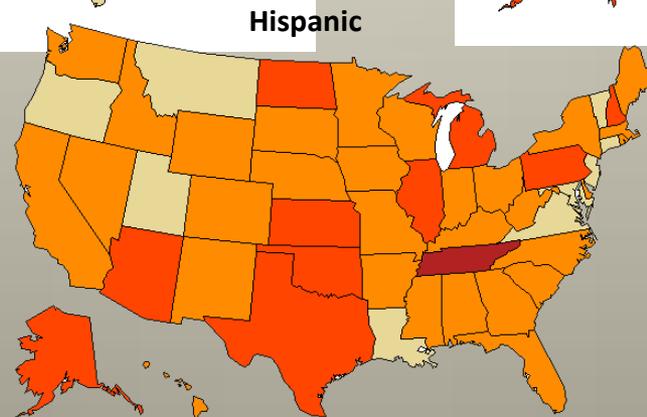
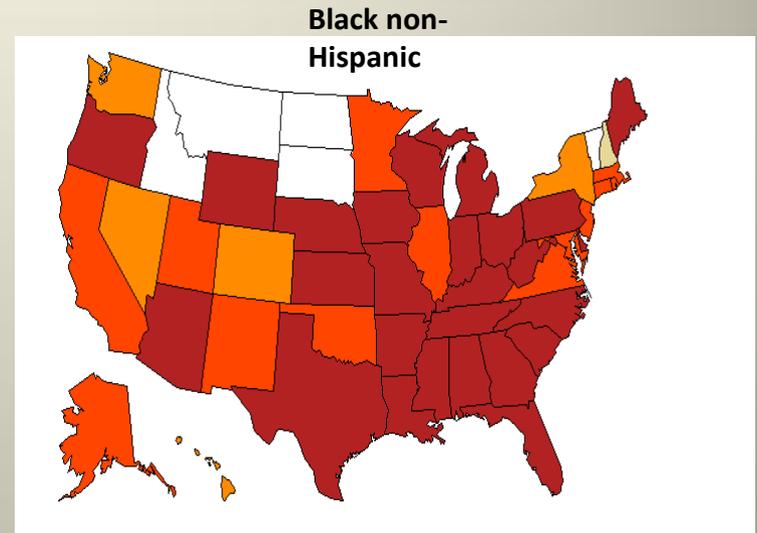
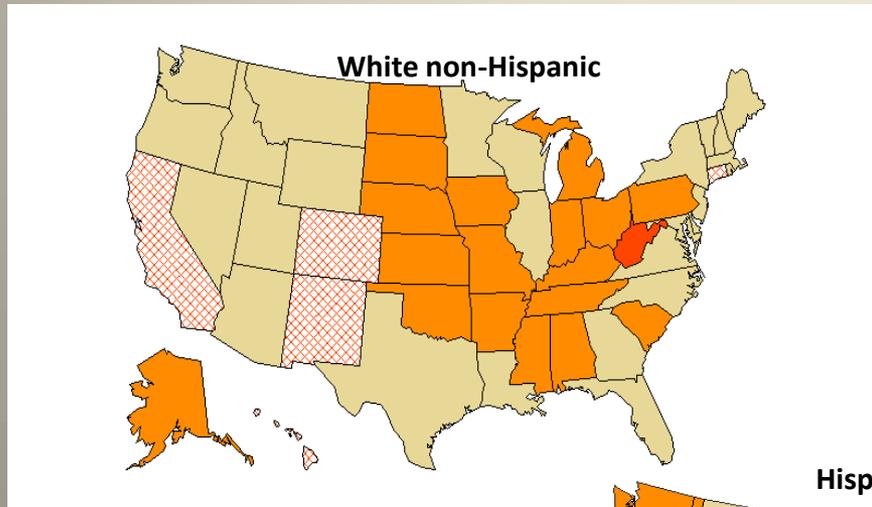


North Carolina Vital Health Facts: Population and Health Data by Race and Ethnicity, 2004-2008

	White	African American	Latino
Heart Disease	192.6	236.0	66.4
Stroke	49.2	73.5	20.5
Diabetes	19.5	51.0	11.2
% low Birth Weight	7.8%	14.4%	6.3%
Infant Deaths	6.2	15.1	6.3
Teen pg rate per 1000 15-19	43.9	86.9	172.7
HIV Disease	11.2	79.5	36.7
Chlamydia	121.1	944.0	378.3
Adults with Hypertension	28.2%	39.7%	12.7%
Adults who smoke	21.2%	22.4%	13.7%
Adults who are obese	27.2%	41.2%	28.2%
Adults-no physical activity	21.2%	28.7%	40.6%

NC State Center for Health Statistics Data from 2004-08

State-specific Prevalence of Obesity* Among U.S. Adults, by Race/Ethnicity, 2006-2008



(*BMI ≥ 30)

□ No sufficient sample**

■ 25-29

▨ < 20

■ 30-34

■ 20-24

■ 35+

What Can Be Done To Improve Rowan's Health Ranking:

Common Health Related Issues Identified by the Rowan County 2009 Community Health Needs Assessment and Concerns Included in the 2011 County Health Rankings

- **Educate the public about health** and social problems associated with obesity/high fat diets/lack of exercise (income, educational and cultural changes will be required)
- Need to improve **access to care** (Health and Dental) and affordability/availability of health Insurance
- **Minority health disparities** must be addressed and improved to change health ranking in NC and Rowan County
- The community and citizens must recognize the impact that **chronic disease** has on the health and economy of Rowan County
- Elected officials at all levels of government must provide **more resources** to change attitudes about health, social, economic and educational priorities that can lead the way to a healthier state/county ranking
- Communities and individuals **change their attitudes** about **lifestyle habits** and resources needed to impact changes in health