Social, Economic and Environmental Determinants of Health

Poverty, education level, and housing are three important social determinants of health. These three factors are strongly correlated with individual health. People with higher incomes, more years of education, and a healthy and safe environment to live in have better health outcomes and generally have longer life expectancies. Although these factors affect health independently, they also have interactive effects on each other and thus on health. For example, people in poverty are more likely to engage in risky health behaviors, and they are also less likely to have affordable housing. In turn, families with difficulties in paying rent and utilities are more likely to report barriers to accessing health care, higher use of the emergency department, and more hospitalizations.[1]

This chapter includes:

- Poverty, economic security and stress
- Housing, homelessness and food insecurity
- Education
- Access to healthcare, insurance and information
- Employment, income and worksite health
- Crime and safety
- Child care

Section 4.01 *Poverty, economic security and stress*

Overview

The term, "stress," as defined by the American Institute of Stress (AIS), is, "the non-specific response of the body to any demand for change."[2] The stress placed upon both individuals and families experiencing either poverty or economic security is profound and often results in prolonged exposure. These two issues are intertwined and compound one another. Both nationally and locally, there is bleak job growth, a rising unemployment rate and deteriorating economic security, which has led to a spike in the prevalence of stress-related issues. Also accompanying this is an increased prevalence of negative coping mechanisms, such as domestic violence.

Prolonged exposure to stress by an individual can have significant negative health consequences. Some of the most critical health impacts in both the United States and Durham are asthma, depression, heart disease, and obesity.[3] Many of these are either on the rise or have spiked significantly over the past 3-5 years. This section explores the impact of stress, poverty and economic security, focusing on their relationship to unemployment and health outcomes. The remainder of this chapter, entitled Social, Economic and Environmental Determinants of Health, goes into more depth about housing, hunger, education, access to healthcare, employment, crime and childcare.

Healthy NC 2020 Objective

Crosscutting; Social Determinants of Health; Mental Health

Healthy NC 2020 Objective[4]	Current Durham	Current NC[5]	2020 Target
1. Increase average life expectancy (years).	78.1 (2008)[xiii]	77.5 (2008)	79.5
2. Increase percentage of adults reporting good, very good, or excellent health	90.1% (2010)[6]	82.0% (2010)	90.1%
3. Decrease the percentage of individuals living in poverty.	16.6% (2008-10)[7]	16.2% (2008-10)[8]	12.5%
4. Decrease the percentage of people spending more than 30% of their income on rental housing.	53.3% (2010)[9]	52.3% (2010)[10]	36.1%
5. Decrease the average number of poor mental health days among adults in the past 30 days	3.6 (2009)[xiv]	3.7 (2009)	2.8

[xiii] State Center for Health Statistics, North Carolina Department of Health and Human Services. Written (email communication). July 7, 2011.
[xiv] State Center for Health Statistics, North Carolina Department of Health and Human Services. Written (email communication). July 7, 2011.

Secondary Data: Major Findings

This section will provide the latest and most significant data related to unemployment, poverty, domestic violence and related health issues (asthma, obesity and heart disease).

Unemployment

Despite presently maintaining a lower unemployment rate than the state of North Carolina, Durham has still experienced a significant increase over the past five years. As seen Figure 4.01(a) below,[11] in August 2007, the unemployment rate in Durham County was just 3.9%; by August 2011, the rate increased to 8.4%.[12]

Qualitatively, the impact is seen in the many stories of the once gainfully employed now struggling to make ends meet. For example, the Durham News recently highlighted the story of Andrea Fulright, who lost her job as an accountant at a Durham construction company. Fulbright has a degree in finance and accounting and eight years' worth of experience in accounting and hopes to either land a job in accounting or the nonprofit sector. She has sent out hundreds of job applications, but was called for only two interviews.[13] Fulbright is not alone - there are presently 11,892 people unemployed in Durham.

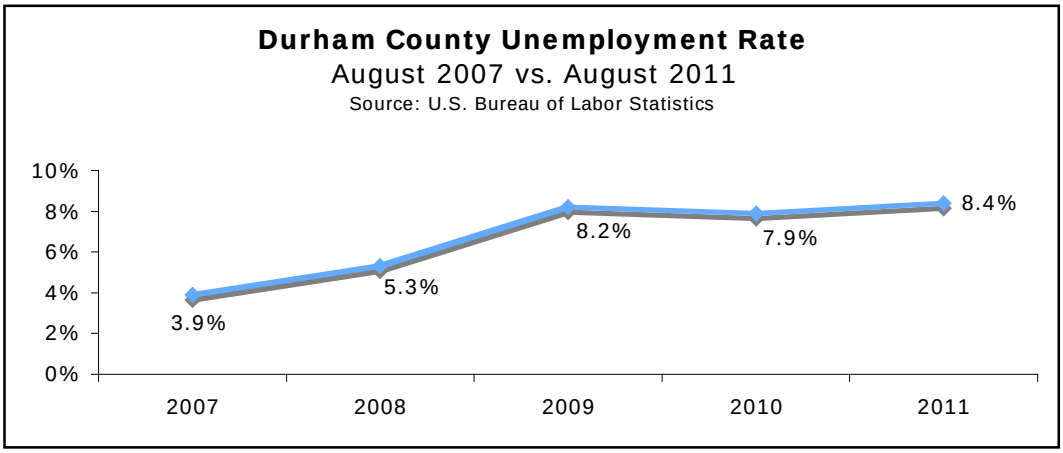

Figure 4.01(a) Durham County Unemployment Rate

Poverty

According to recent survey data provided by the American Psychological Association, children with single mothers are more than five times as likely to live in poverty as children living with married parents (43.9% vs. 8.5%). Single mother-headed households are also more prevalent among African American and Hispanic families contributing to racial and ethnic disparities in poverty.[14] The North Carolina Institute of Medicine has also found that those with fewer years of education, lower incomes, less accumulated wealth, living in poorer neighborhoods, or substandard housing conditions have worse health outcomes.[15]

As with unemployment, Durham's poverty rate has experienced a recent increase. In 2007, 14.8%[16] of the county's population was living below the poverty line; by 2010, it grew to 16.6%.[17] Further, Durham's poverty rate is slightly higher than North Carolina's rate, which currently stands at 16.2%.[18] The Federal Poverty Guidelines do not adequately reflect everyone who is impacted by poverty. For example, according to the Federal Poverty Guidelines, a single parent with one child is at 100% of poverty with an annual income of $14,710.[19] However, it has been shown that a single parent with one child actually needs an annual income of $39,417 just to make ends meet; this is 262% above the Federal Poverty Guideline.[20]

Table 4.01(a)

A Snapshot of Family Poverty in Durham[21]
Families whose income in the past 12 months is below the poverty level
By Percentage, 2010

All Families	11.1%
With related children under 18 years	16.9%
With related children under 5 years only	19.8%
Married couple families	4.2%
With related children under 18 years	6.5%
With related children under 5 years only	4.5%
Families with female householder, no husband present	25.8%
With related children under 18 years	32.5%
With related children under 5 years only	51.7%

Source: U.S. Census American Community Survey 3-Year estimates (2008-10)

In Durham, female single-parent families are disproportionately more at risk for poverty than married couple families (25.8% vs. 4.2%), as shown in Table 4.01(a) above. Further, those female single-parent families with the young children have even higher rates of poverty: 32.5% with related children under 18 years of age and 51.7% with related children under 5 years only.[22]

Over the past several years, the North Carolina Justice Center's Living Income Standard Budget (LIS) has released detailed data on just how much it actually costs for a family to make ends meet in each of North Carolina's 100 counties. Data released in 2010, which is based upon the Living Income Standard, not only shows Durham County as the fourth most expensive county to live in North Carolina, but also illustrates that it continues to get more expensive. The scenario for a single parent with one child is arguably the most at-risk family type for experiencing negative health consequences. In this scenario (as mentioned above), the parent would need to make an annual income of $39,417 to make ends meet which is 262% above the Federal Poverty Guideline.[23] LIS data is depicted in Table 4.01(b) below.

Table 4.01(b)[24]

Living Income Standard (LIS) Budget For Durham County
Two Person Family: One Adult, One Child, 2008 vs. 2010

	2008	2010
Monthly Income	$2,963	$3,963
Annual Income	$35,555	$39,417
LIS as % of Federal Poverty Level	248.8%	262%

Source: North Carolina Justice Center

The stress placed upon families in poverty is severe. Families, especially children, are at greater risk for experiencing abuse and neglect, behavioral and socio-emotional problems, physical health problems and developmental delays.[25] Further, these effects are compounded by the barriers children and families encounter when trying to access physical and mental health care.[26]

- Domestic Violence (Go to Section 9.02 for more information on intimate partner violence.)

Stress contributes to the development of alcoholism, drug addiction, cigarette addiction and other harmful behaviors, including domestic violence.[27] (See section 6.05 on Mental Health and Substance Abuse for more information.) Both unemployment and declining economic security are often cited as contributing to increased rates of domestic violence. For example, when a woman's male partner is employed, the rate of domestic violence is 4.7%. This rate jumps to 7.5% when her partner experiences one period of unemployment and 12.3% when he experiences two or more periods of unemployment.[28] Since 2008, the Durham Crisis Response Center has seen a large influx of women and children seeking services at their shelter. Reasons cited include unemployment, the increased cost of living, and financial pressures on all aspects of victims' lives.[29]

Health Issues

- Asthma (Go to Section 6.06 for more information on asthma.)

It is well documented that stress can induce asthma.[30] Nationally, one in 12 people (about 25 million, or 8% of the population) had asthma in 2009, compared with 1 in 14 (about 20 million, or 7%) in 2001.[31] Further, about 5 million children under the age of 18 have asthma with the greatest rise in asthma rates among black children (almost a 50% increase) from 2001 through 2009.[32] Hospital discharge records for Durham hospitals where the patient was given a primary diagnosis of asthma also indicate rising rates for both adults and children (ages 0-14).[33] In 2007, the rate per 100,000 for adults was 88.7, but jumped to 109.7 by 2009.[34] The rate for children increased much more sharply over the same period. In 2007, the rate per 100,000 was 106.0 and in 2009 it was 169.9.[35] This data is illustrated in Table 4.01(c) below.

Table 4.01(c)[36]

Hospital Discharges with Primary Diagnosis of Asthma
Rate Per 100,000 for Durham County Residents, 2004-2009

	2004	2005	2006	2007	2008	2009
All Ages	84.6	87.9	89.1	88.7	102.1	109.7
Ages 0-14	126.9	150.2	109.6	106	111.3	169.9

Source: North Carolina Center for Health Statistics

- Obesity (Go to Section 6.04 for more information on obesity.)

Obesity is a chronic problem in the United States. Overweight (BMI of 25-29.9) and obesity (BMI of 30 or more) are associated with multiple health risks, economic costs, and diminished quality of life for those affected. Conditions that go along with overweight and obesity include heart disease, type 2 diabetes, stroke, and some types of cancer, as well as hypertension, dyslipidemia, osteoarthritis, liver and gall bladder disease, sleep apnea and respiratory problems, and gynecological problems.[37] Some of these shorten lifespan while others make life more difficult; all result in societal costs.

Four of the ten leading causes of death in North Carolina are related to obesity: heart disease, type 2 diabetes, stroke, and some kinds of cancer.[38] Poor diet and physical inactivity, both of which are very closely associated with obesity, combined were the second leading cause of preventable death in North Carolina in 2007.[39] Obesity also exacerbates problems related to such conditions as arthritis and hypertension.

With 63.1% of the adult population and 27.8% of the youth population either overweight or obese, there is an increased focus on the causes and effects of weight gain, including the contributions of stress.[40] Recent studies indicate that everyday social stress, such as tests, public speaking, job and relationship pressures result in overeating and weight gain.[41] In Durham, between 63.3% and 66% of the adult population is either overweight or obese, which is slightly higher than the national trend.[42] This trend is on the increase when compared to the range of 62.1%-66% in 2007.[43]

- Heart Disease (Go to Section 6.03 for more information on heart disease and stroke.)

Coronary heart disease is much more common in individuals subjected to chronic stress.[44] Further, those who are lower on the socio-economic scale and have less help at home experience more stress and are at greater risk.[45] In Durham, Blacks have a much higher risk of dying from heart disease. From 2000-2006, the heart disease death rate for Blacks ages 35 or older was 445 per 100,000, placing them at significantly higher risk than any other race or ethnicity (see Table 4.01(d) below).

Table 4.01(d)[46]

Heart Disease Death Rates for Ages 35+
Rate Per 100,000, Durham County, 2000-2006

Race / Ethnicity	Rate
Total Population	368
American Indian and Alaska Natives	N/A
Asian and Pacific Islanders	125
Blacks	445
Hispanics	110
Whites	352

Source: U.S. Centers for Disease Control & Prevention

Primary Data

- Depression (Go to Section 6.05 for more information on mental health and substance abuse.)

Across the country, the negative impact of rising unemployment is acute. Unemployment can be a great stressor and the longer someone is unemployed, the number or intensity of negative health consequences may increase. One of the most prevalent is depression. Nationally, a Gallup-Healthway Well-Being Index Poll conducted in June 2010, found that 23% of unemployed adults were told that they were experiencing depression by either their doctor or nurse compared to only 11% of fully-employed adults.[47] Further, it found that the longer an individual was unemployed, the higher the likelihood of depression. The same poll found 17% of adults unemployed for one month or less were diagnosed with depression, 23% unemployed between one and six months, and 28% unemployed over six months. This is shown in Table 4.01(e) below.

Table 4.01(e)[48]

Have you ever been told by a doctor or nurse that you have any of the following, or not? How about depression?

Unemployed overall	23%
Fully employed	11%
Unemployed one month or less	17%
Unemployed between one and six months	23%
Unemployed more than six months	28%

Source: Gallup-Healthways Well Being Index Poll, April 19-June 3, 2010

2010 Durham County Community Health Opinion Survey[49]

There were several stress-related questions on the 2010 Durham County Community Health Opinion Survey, which was administered to 207 randomly selected households.
Selected and depicted below are three survey questions and responses that are stress-related. For the first survey question, respondents were asked, *Keeping in mind yourself and the people in your neighborhood, pick the community issues that have the greatest effect on quality of life in Durham County. Please choose up to 3."* The results of this question are indicated in the graph below. Many of the most cited answers reflect issues of poverty, economic insecurity, and life stressors. For example, the selected response categories included gang violence, homelessness, unemployment, poverty, affordability of health services and lack of quality child care.

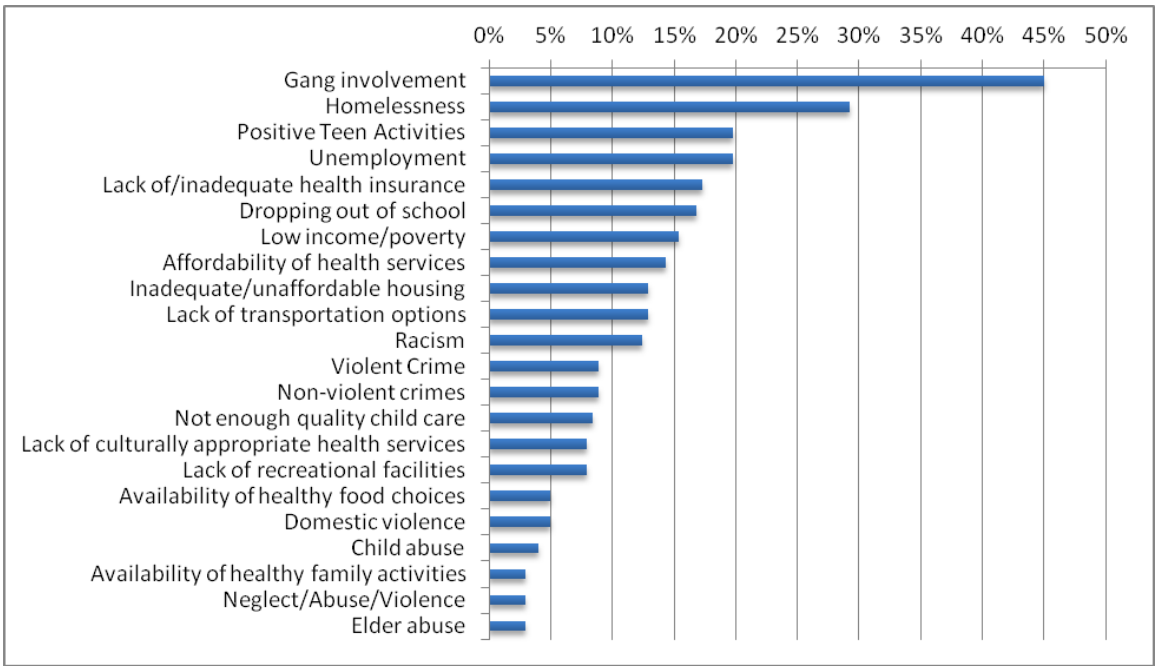

Figure 4.01(b) "Pick the community issues that have the greatest effect on quality of life in Durham County."

Another question asked respondents, "*In the past 30 days, have there been any days when feeling sad or worried kept you from going about your normal business?"* The results in Figure 4.01(c) below show that almost 1/5 of Durham residents had worried or sad days that prevented them from going about their normal routine within a one month period.

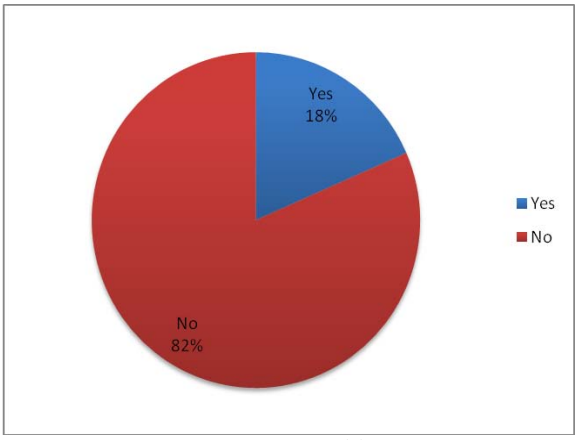

Figure 4.01(c)
"Have there been any days when feeling sad or worried kept you from going about your normal business?"

Another question asked respondents, *"Have you ever been told by a doctor, nurse, or other health professional that you have any of the conditions I am about to read?"* The results of this question are indicated in the graph below; many of these conditions are related to stress and were discussed earlier, including heart disease (high blood pressure/cholesterol), overweight/obesity, depression and asthma.

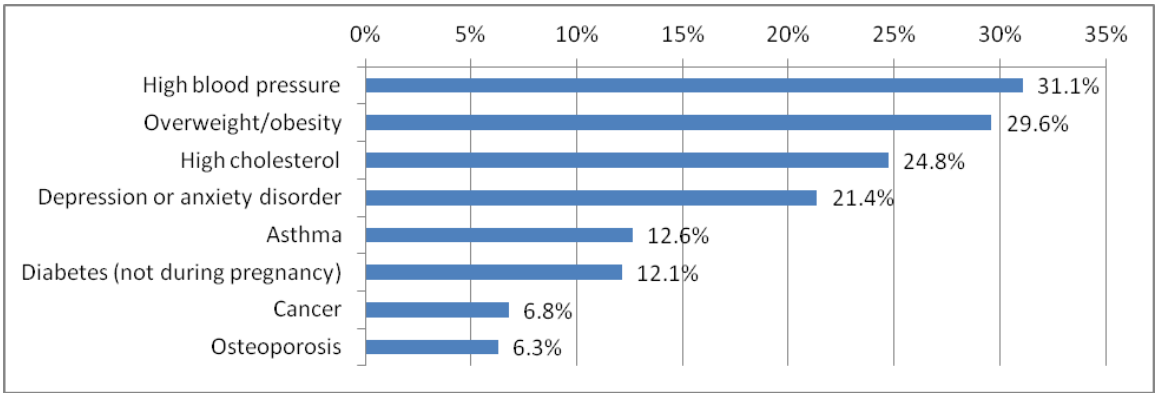

Figure 4.01(d) "Have you ever been told by a doctor, nurse, or other health professional that you have any of the conditions I am about to read?"

Finally, 42% of respondents indicated that they were caring for a family member with a chronic condition. There is a body of research that suggests caretakers often experience high levels of stress.

Interpretations: Disparities, Gaps, Emerging Issues

Employment Does Not Mean Economic Security

As data from the North Carolina Justice Center's Living Income Standard suggests, it is getting increasingly more expensive to live in Durham. The ability to make ends meet is not limited to those who are defined by Federal Government Guidelines as living in poverty. Health care is the second most expensive cost for a family in Durham behind housing.[50] For many Durham families, economic insecurity forces families to choose between purchasing health care and other

basic necessities and the constant prioritization and struggle to make ends meet can produce chronic stress.[51] Further compounding this problem is that differences in income generally make the greatest differences for health at the lower end of the income scale.[52]

Barriers Preventing Access to Healthcare

As the cost of health care and unemployment continue to rise, those dealing with economic insecurity face an even larger barrier when it comes to accessing the medical treatment they need. The North Carolina Institute of Medicine Health Access Study Group found that our state has experienced the largest percent growth of uninsured due to the recent economic downturn, 22.5% between 2007 and 2009.[53] However, those who remain employed are also at-risk for limited health care access, especially Latinos. A recent report by Action for Children North Carolina found that low-income status and other barriers to health care access mean that a great percentage of Latino children lack health insurance coverage, a medical home and a regular dental clinic, and fewer Latina mothers receive adequate prenatal care than in the general population - this despite that at least one parent is working.[54]

Recommendations

Promote and Increase the Earned Income Tax Credit (EITC)

The Earned Income Tax Credit (EITC) is one of the most effective anti-poverty measures for low- and moderate-income working families in the United States.[55] The most recent data for Durham County show that 33,435 persons are eligible for the Earned Income Tax Credit (EITC).[56] Promotion, especially amongst minorities in Durham, could serve as a boon for increasing the numbers who successfully file and receive the EITC. Further, for those groups and organizations working to promote the EITC, continuing to advocate for an increase will only serve to lift a greater number out of poverty permanently.

Strengthen the Safety Net

In its 2009 report, "Expanding Health Care Access to Health Care in North Carolina," the North Carolina Institute of Medicine Health Access Study Group called for increased funding from the state to help with the influx of patients utilizing free and reduced cost health clinics across the state. Although many different organizations exist that provide everything from general to specialized medical treatment, many just do not have the funding or the capacity to keep up with the growing number of uninsured.[57] Even as funding is further cut for a multitude of health programs and lean times continue to prevail for organizations serving those in need, the ability for organizations to share information with one another and the populations they serve can make a difference. Promoting the availability of both the assistance programs and how to navigate the requirements in order to successfully gain the benefits could be a shared goal by Durham's nonprofit community.

Current Initiatives & Activities

- ***American Institute of Stress***

Provides information on stress and its link with health issues, as well as stress in the workplace; in addition to providing stress management resources at a small cost.
Website: http://www.stress.org/
Phone Number: (914) 963-1200

- ***Centers for Disease Control and Prevention- Coping with Stress***

Provides information sign and symptoms of stress and how to manage stress appropriately.

Website: http://www.cdc.gov/features/handlingstress/
Phone Number: (800) 232-4636

Section 4.02 *Housing, homelessness and food insecurity*

Overview

"The generally accepted definition of [housing] affordability is for a household to pay no more than 30 percent of its annual income on housing. Families who pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care."[58]

Affordable housing is a major social issue in Durham County. When low-income households spend a large portion of their income on housing, they have less to spend on food, transportation, health care and other necessities. Subsequently, limited income families may be forced to live in substandard housing in an unsafe environment. Substandard housing may have negative impacts on a family's health and overall well-being. Substandard housing issues associated with health in the lived environment include: overcrowding; older homes in need of multiple repairs to ensure physical safety; homes located in poorer neighborhoods with higher crime rates and limited access to suitable shopping, sufficient employment and satisfactory school districts; and exposure to indoor contaminants, such as mold or lead paint.

People who are burdened by the cost of housing are also at increased risk of homelessness. The federal government defines a person as homeless if he or she resides in a place not meant for human habitation such as a car, street, or abandoned building, or if he or she resides in an emergency shelter or transitional housing for homeless persons. Homeless people typically lack sufficient income to maintain permanent housing and the means necessary to access needed services, including medical care. The National Health Care for the Homeless Council reports that, "Without homes, people experience illnesses and injuries at three to six times the rates of housed individuals, and they die an average of 30 years earlier."[59]

The causes of homelessness are many and complex. Changing social, economic, political, and cultural conditions impact people's lives. Insufficient supplies of affordable housing, low income, and inadequate services are primary factors contributing to homelessness. Under-employment and unemployment may lead to evictions and foreclosures. Domestic violence, substance abuse, and mental illness also contribute to homelessness. Natural disasters (e.g. fires, tornadoes, hurricanes) also can suddenly thrust people into homelessness.

Food insecurity also contributes to negative health outcomes in many people's lives. Several terms describe similar but distinct physical conditions:

- *Hunger* is a condition in which people do not get enough food to provide the nutrients (carbohydrates, fat, protein, vitamins, minerals and water) for fully productive, active and healthy lives.
- *Malnutrition* is a condition resulting from inadequate consumption or excessive consumption of a nutrient. Malnutrition can impair physical and mental health and contribute to or result from infectious diseases.
- *Vulnerability to hunger* is a condition of individuals, households, communities or nations who have enough to eat most of the time, but whose poverty makes them especially

susceptible to hunger due to changes in the economy, climate, political conditions or personal circumstances.[60]

- The terms *food security* and *food insecurity* also have become widely used in conversations about hunger. Food security for a household means access by all members at all times to enough food for an active, healthy life. Food security includes at a minimum:
  - The ready availability of nutritionally adequate and safe foods
  - Assured ability to acquire acceptable foods in socially acceptable ways (that is, without resorting to emergency food supplies, scavenging, stealing, or other coping strategies)

  Food insecurity is limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.[61]

The lack of nutritionally adequate foods is a significant risk factor for poor health outcomes, particularly for children and the elderly. Poor nutrition and hunger contribute to learning disabilities, fatigue and difficulty with social interaction. (Go to Section 5.02 for more information on nutrition and food insecurity.)

Healthy NC 2020 Objectives

Social Determinants of Health

Healthy NC 2020 Objective[62]	Current Durham	Current NC[63]	2020 Target
1. Decrease the percentage of individuals living in poverty.	16.6% (2008-10)[64]	16.2% (2008-10)[65]	12.5%
2. Decrease the percentage of people spending more than 30% of their income on rental housing.	53.3% (2010)[66]	52.3% (2010)[67]	36.1%

Secondary Data: *Major findings*

a. Housing

The median income in 2010 for Durham County families was $62,543 and $34,284 for non-family households.[68] As shown in Figure 4.02(a) below, Durham median household income has been consistently below the US average, but above the North Carolina average. All average median incomes fell from 2008 – 2009. The percentage of Durham County residents living in poverty according to the 2008 – 2010 Census Bureau's American Community Survey was 16.6%.[69]

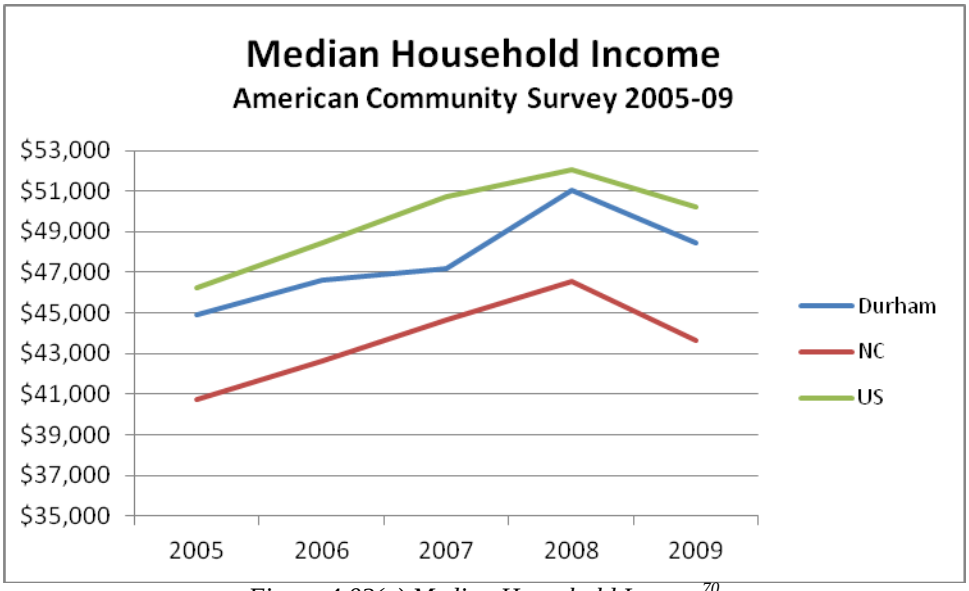

Figure 4.02(a) Median Household Income[70]

The number of occupied housing units in Durham County from the 2009 data total 103,268.[71] Of the occupied housing units, 55.9% are owner occupied while 44.1% are renter occupied.

Affordable housing is a major social issue in Durham County. In Durham County, the Fair Market Rent (FMR) for a two-bedroom apartment has increased steadily between 2006 and 2009; this is illustrated below in Table 4.02(a). The 2009 FMR for a two-bedroom apartment was $842.[72] In order to afford this level of rent and utilities, without paying more than 30% of income on housing, a household must earn $2,803 monthly or $33,640 annually. Assuming a 40-hour work week, 52 weeks per year, this level of income translates into a Housing Wage of $16.17 per hour.

Table 4.02(a)[73]

Average cost to rent a two-bedroom apartment in Durham

Year	Median Rent
2006	809
2007	815
2008	818
2009	842

While home ownership rates rose during the 2006-2010 period, tens of thousands of low income tenants and home owners were cost burdened. The Census Bureau estimates that almost half of all renters or over 21,000 low-income tenant households and over 13,000 home owners in Durham paid more than 30% of their income on housing in 2009.[74] The number of renters who are paying more than 30% on their income on housing has increased since 2005, is consistently above the state average, and even rose above the national average in 2008.[75]

As those in poverty are forced to spend a high percentage of income on housing, it can be assumed that much of the homes they occupy are substandard or create a cost burden. In fact, in the City of Durham's 2010-2015 Consolidated Plan, over 36,000 households in Durham County were cited as having "housing problems" relating to substandard housing.[76] Housing problems are defined as substandard housing units, living without adequate facilities, overcrowding, and cost burdened with more than 30% of family income applied to housing.

b. Homelessness

More than one percent of Durham County's population, approximately 3,500 people, had an episode of homelessness in 2010.[77] On any given night, 600-700 people are likely to be homeless in Durham County.[78] The health of people who experience homelessness for extended periods of time declines rapidly.

c. Hunger and Food Insecurity

Food insecurity and vulnerability to hunger are realities for thousands of low income people in Durham County.[79] It is estimated that 42,840 people are food insecure in Durham County,[80] which equates to 16% of the population.[81] The county's unemployment rate, while lower than most counties in the state, essentially doubled during the economic crisis and remains slightly below eight percent. In 2010, Durham County churches, nonprofits and community organizations distributed 13,254,495 pounds of food. Nearly 40,000 residents participate in the Supplemental Nutrition Assistance Program (SNAP, formerly Food Stamps). Most children enrolled in the Durham Public Schools qualify for free and reduced lunch in school cafeterias, which supports evidence of widespread vulnerability to hunger and food insecurity in the county.

The number of people participating in the North Carolina Department of Social Services' Food & Nutrition Services Program[82] (food stamps) in Durham County dramatically increased from 2005 to 2011. Table 4.02(b) below compares food stamp distribution in Durham County to the percentage of the population receiving food stamps:

Table 4.02(b)

Year	Number of People Receiving Food Stamps in Durham County	Percentage of Population Receiving Food Stamps in Durham County
2005	20,943	8%
2006	22,177	8%
2007	23,075	9%
2008	24,115	9%
2009	28,802	11%
2010	34,178	13%
2011	39,487	15%

Food insecurity among public school children is documented by the percentage of students who receive free or reduced lunches in Durham Public Schools.[83] According to the USDA, children from families with incomes at or below 130% of the poverty level are eligible for free meals.

Those with incomes between 130 -185% of the poverty level are eligible for reduced-price meals. The increases in the percentage of students receiving free and reduced lunches during the last four years are yet one more indicator that more people are struggling to make ends meet and therefore struggling to maintain good health. In 2010, 60.8% or 19,636 children in Durham Public Schools received free or reduced lunch, as shown in Table 4.02(c) below.[84]

Table 4.02(c)

Year	Percentage of Students Receiving Free or Reduced Lunch
2007	47.2%
2008	50.9%
2009	57.1%
2010	60.8%

Primary Data

While most poverty stricken residents do manage to maintain housing, a small percentage of the population in Durham County struggles with homelessness. Figure 4.02(b) compares the percentage of the population experiencing homelessness on one night in Durham with the percentage in similar urban counties in North Carolina.[85]

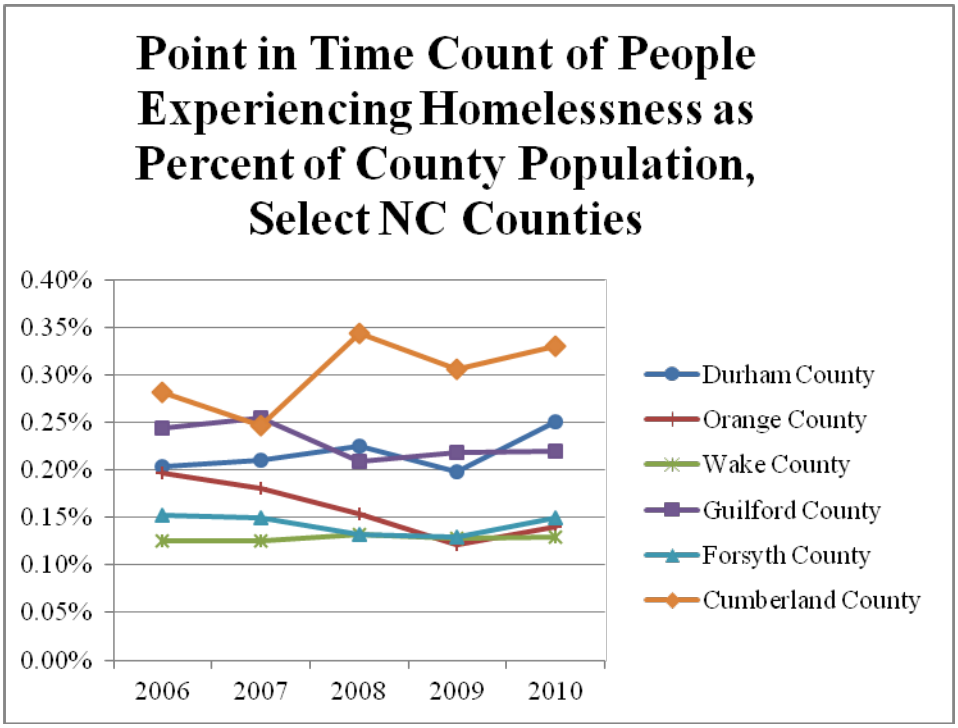

Figure 4.02(b) Point in Time Count of Homeless[86]

As illustrated in Figure 4.02(b) above, in 2010 the percentage of the population experiencing homelessness in Durham County was one-fourth of one percent. Of the urban counties surveyed, Cumberland County and Durham County had the first and second highest rates, respectively.

The 2010 Durham County Community Health Survey randomly selected Durham County households. One question asked, *How do you feel about this statement, "There is plenty of economic opportunity in Durham County"? Consider the number and quality of jobs, job training/higher education opportunities, and availability of affordable housing in Durham County.* The majority of respondents strongly agreed or agreed (68%) with that statement while 34% strongly disagreed or disagreed.[87]

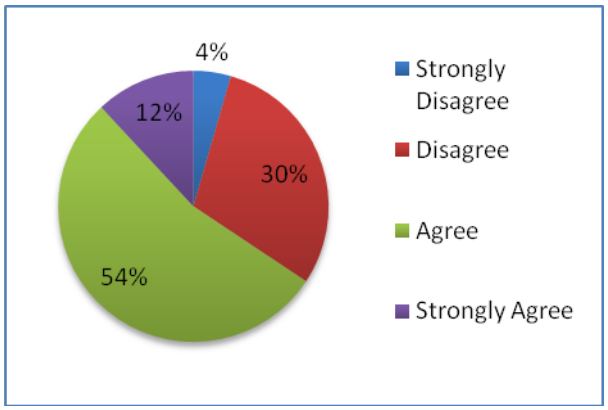

Figure 4.02(c) "There is plenty of economic opportunity in Durham County"[88]

One section of the survey asked respondents to look at several lists and rank their top three neighborhood concerns. For example, one question had a list of 23 community issues. Respondents were told, *"Keeping in mind yourself and the people in your neighborhood, pick the community issues that have the greatest effect on quality of life in Durham County. Please choose up to 3."* Homelessness was the second most popular response (29%).

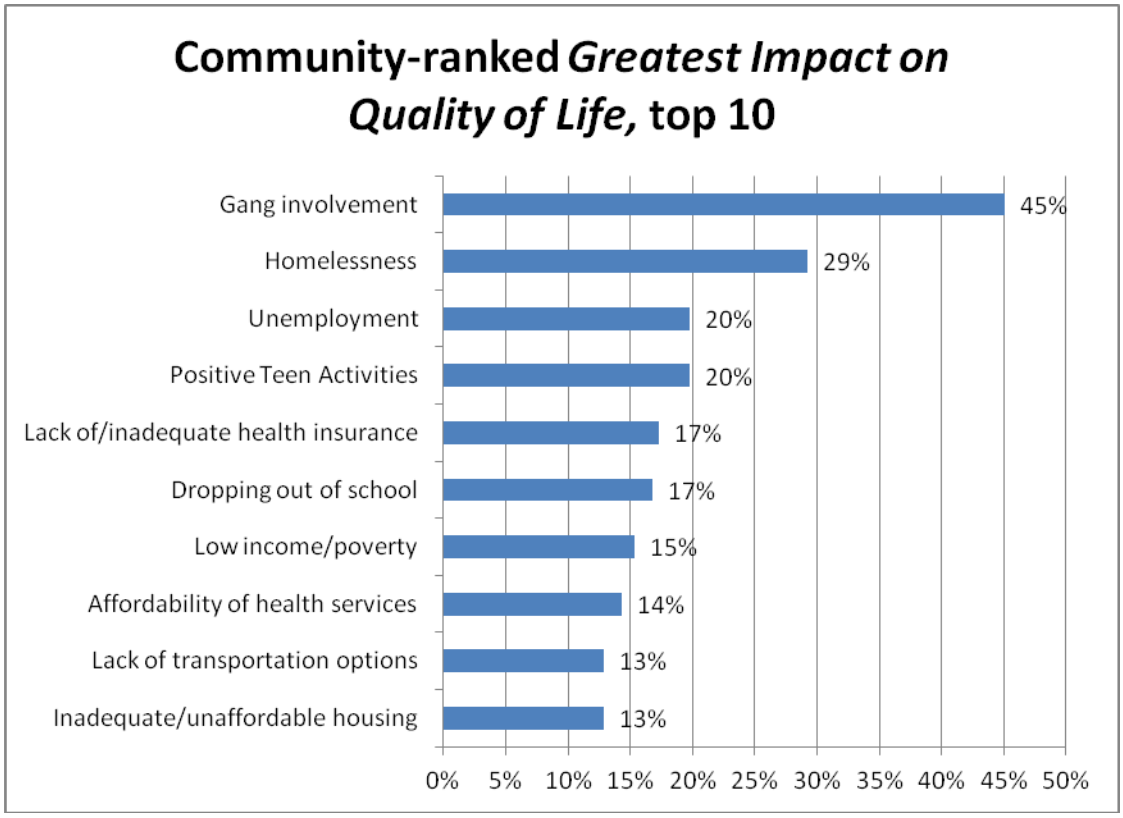

Figure 4.02(d) "Pick the community issues that have the greatest effect on quality of life in Durham County."[89]

Interpretations: *Disparities, gaps, emerging issues*

Emerging issues that will need attention by the Durham community in order to eradicate the effects of high housing costs on low-income residents and on homeless people involve increasing the current housing stock to provide affordable housing for all residents and developing programs that promote and create jobs that will offer livable wages for all. Durham has significantly less permanent supportive housing (PSH) dedicated to the needs of homeless people than the nation as a whole. PSH is permanent housing in which the occupant also receives essential support services. In 2010, less than 19% of Durham's Continuum of Care inventory of housing for homeless people was PSH, compared to 36%, nationally. A shortage of PSH for homeless people with disabilities makes it difficult to address the complex service needs of many longer-term homeless people.

Durham has a lower percentage of homeless people with children than the United States. However, the number of homeless families identified in the annual one-day Point in Time Count of homeless people increased 50% between 2009 and 2010, from 34 families to 51! The growing number of homeless families is a cause of concern.

The effects of the housing crisis and widespread foreclosures continue to ripple through the community. Durham County had 10,619 foreclosure starts between January 2005 and May 2011, indicating that more than one out of every five owner-occupied housing units in 2000 has been foreclosed.[90]

Poverty, hunger, and homelessness are concentrated in minority communities in Durham and across the nation. Sixty-seven percent of Durham's homeless people are minorities, primarily African-American; however, African-Americans comprise less than 40% of Durham's total population. Nearly 80% of the children in the Durham Public Schools are non-white and there are high rates of eligibility for free and reduced lunch in DPS, which reflect the high poverty rates present among Durham's African-American, Hispanic, and Native American communities.

Recommended Strategies

A combination of strategies will be needed to maintain and expand affordable housing, to reduce and end homelessness, and to reduce hunger in Durham.

Affordable Housing: In a 2008 study, Jesse Mintz-Roth, a fellow at the Harvard Joint Center for Housing Studies, offered dozens of recommended strategies. Some that may be most relevant to Durham include:

> ***Recommendations for Nonprofits***
> *Monitor To Ensure Long-Term Affordability and Accountability*
> In order to maintain quality affordable housing through long tenures, nonprofits should advocate and work with municipalities to oversee that deed restrictions are met and that local housing trust funds are used to maintain or finance gaps. . . .
> ***Recommendations for Municipalities and Local Governments***
> Critical responsibilities for the local public sector include educating constituents about affordable housing and how to apply for it (and about concepts such as expiring affordability and use), determining the municipality's percentage of affordability, and setting new citywide goals. Addressing these concerns will make the municipality more attractive to existing and potential residents, and more competitive with neighboring cities. . . . [91]

Homelessness: In 2010, the federal government published *Opening Doors: the Federal Strategic Plan to Prevent and End Homelessness*. [23] The ten objectives of the plan, associated with five "themes," may serve as strategic objectives on the local level as well:

Increase Leadership, Collaboration, and Civic Engagement
Objective 1: Provide and promote collaborative leadership at all levels of government and across all sectors to inspire and energize Americans to commit to preventing and ending homelessness
Objective 2: Strengthen the capacity of public and private organizations by increasing knowledge about collaboration, homelessness, and successful interventions to prevent and end homelessness

Increase Access to Stable and Affordable Housing
Objective 3: Provide affordable housing to people experiencing or most at risk of homelessness
Objective 4: Provide permanent supportive housing to prevent and end chronic homelessness

Increase Economic Security
Objective 5: Increase meaningful and sustainable employment for people experiencing or most at risk of homelessness

Objective 6: Improve access to mainstream programs and services to reduce people's financial vulnerability to homelessness

Improve Health and Stability
Objective 7: Integrate primary and behavioral health care services with homeless assistance programs and housing to reduce people's vulnerability to and the impacts of homelessness
Objective 8: Advance health and housing stability for youth aging out of systems such as foster care and juvenile justice
Objective 9: Advance health and housing stability for people experiencing homelessness who have frequent contact with hospitals and criminal justice

Retool the Homeless Crisis Response System
Objective 10: Transform homeless services to crisis response systems that prevent homelessness and rapidly return people who experience homelessness.[92]

Hunger: The Food Research and Action Center, a nonprofit organization working to improve public policies and public-private partnerships to eradicate hunger and under-nutrition in the United States, proposed seven strategies for ending childhood hunger in America by 2015, a goal that President Obama announced during the 2008 campaign. If implemented, the strategies would likely significantly reduce hunger in people of all groups:

1. Restore economic growth and create jobs with better wages for lower-income workers.
2. Raise the incomes of the lowest-income families.
3. Strengthen the SNAP/Food Stamp Program.
4. Strengthen Child Nutrition Programs.
5. Engage the entire federal government in ending childhood hunger.
6. Work with states, localities, and nonprofits to expand and improve participation in federal nutrition programs.
7. Make sure all families have convenient access to reasonably priced, healthy food.[93]

Current Initiatives & Activities

Affordable Housing: The City of Durham's 2010-2015 Consolidated Plan describes how the City plans to address affordable housing and other community development needs in the City in the current five year period. The plan identifies two priorities: Neighborhood Revitalization and Housing for Persons with Special Needs. The City continues to work to target the limited public funds available to it to redevelop the Rolling Hills and Southside neighborhoods, Northeast Central Durham, and Southwest Central Durham. Specific strategies identified include demolishing or reusing vacant properties, encouraging business investment in targeted neighborhoods and working to reduce or eliminate regulatory barriers to the development of affordable housing in the City.

Homelessness: Durham's *Ten Year Plan to End Homelessness* was adopted in 2006 by the Durham City Council and the Durham County Board of Commissioners. Staffing of the organized effort to implement some 75 specific strategies was contracted with the Durham Affordable Housing Coalition from 2007 to 2011. Recently, the City of Durham accepted

responsibility to continue implementation of the initiative, now renamed *Opening Doors Homeless Prevention and Services.* Current specific activities to prevent and reduce homelessness in Durham include:

- Implementation of the federally funded Homeless Prevention & Rapid Re-housing Program (HPRP), which began in early 2010 and will continue through early 2012. Approximately 200 hou seholds will receive assistance to prevent homelessness and another 200+ households that are already homeless will receive support to quickly get them back into permanent housing.
- Durham's SOAR (SSI/SSDI Outreach, Access, and Recovery) initiative is a l eader among the North Carolina counties; it assists homeless and those at-risk for homelessness who have a diagnosis of a physical, mental illness, and/or co-occurring substance abuse disorder to apply for disability benefits. Durham is the only county in NC that currently has four full-time case workers dedicated to using SOAR methodologies to help low-income people apply for SSI/SSDI and is the first to achieve gold-level certified SOAR community designation by the NC Coalition to End Homelessness
- The City of Durham's Consolidated Plan for 2010-2015 has a goal of developing 50 units of permanent supportive housing in the next five years with public funding. Through a grant from the Department of Labor, Step Up Ministry is assisting homeless veterans in Durham to prepare for and maintain employment.
- The Durham Center is working closely with State hospitals and community partners to reduce discharges into homelessness and help people move into independent living.
- Durham's annual Project Homeless Connect event, a "community fair" for homeless and low-income people, served nearly 500 consumers in 2010.
- Durham's homeless veterans are being placed into housing through the HUD-VASH program. HUD-VASH is a long-term case management program for homeless veterans in need of permanent housing. Veterans receive a Section 8 voucher that reduces their housing costs and participate in case management and support services designed to prevent future episodes of homelessness.
- Discussions are underway to improve the coordination of intake services for newly homeless persons, to more accurately assess and then respond to their housing and service needs. The development of a co mmunity day services center also is being explored.

<u>Hunger:</u> A variety of public and private initiatives are underway to reduce hunger and malnutrition:

- More in My Basket (MIMB) is a North Carolina State University (NSCU) Cooperative Extension program that, in Durham, is targeted to senior citizens at 200% or less of the federal poverty level. The program promotes food security through outreach education about the North Carolina Food and Nutrition Services (FNS) Program. MIMB dispels myths, demonstrates the benefit of applying for the FNS Program, and assists with the application process.
- Participation in public food assistance programs (e.g. the FNS Program [or "food stamps"], the Women, Infants, & Children Supplemental Food Assistance Program (WIC), free and reduced school lunch programs) continue to increase.
- Community-based organizations (e.g. SEEDS, the InterFaith Food Shuttle) are encouraging the development of community gardens that enable people of all income

levels to grow vegetables for their own use, reducing grocery bills in the process. Durham has at least one half dozen community gardens.

- The InterFaith Food Shuttle's BackPack Buddies program distributes free non-perishable food to several hundred low income children every Friday during the school year in backpacks that the children take home and return empty on Monday for refilling.
- Federally funded summer feeding programs serve a fraction of the children receiving free or reduced fee lunch during the school year.
- The Durham Community Café, operated by Urban Ministries of Durham, provides over 200,000 prepared meals annually to homeless and other low-income people.
- Efforts to improve access to grocery stores in low income neighborhoods resulted in Triangle Residential Options for Substance Abusers (TROSA), a Durham-based non-profit to open a grocery store in Northeast Central Durham in 2010 t hat sells fresh produce to residents.

Section 4.03 *Education*

Overview

Young children benefit from high quality, early childhood care and education. A successful kindergarten experience has particularly been shown to predict a child's future success.[94] Moreover, the academic success of young adults is strongly linked with their health throughout their lifetime.

According to the CDC, "Health-related factors such as hunger, physical and emotional abuse, and chronic illness can lead to poor school performance. Health-risk behaviors such as substance use, violence, and physical inactivity are consistently linked to academic failure and often affect students' school attendance, grades, test scores, and ability to pay attention in class. In turn, academic success is an excellent indicator for the overall well-being of youth and a primary predictor and determinant of adult health outcomes."[95]

The importance of a high school diploma and higher education cannot be overstated. According to the US Department of Labor, college graduates age 25 and over earn nearly twice as much as workers who only have a high school diploma. W hile college graduates have experienced growth in real (inflation-adjusted) earnings since 1979, high school dropouts have seen their real earnings decline. The unemployment rate for workers who dropped out of high school is nearly four times the rate for college graduates.[96] Finally, the United States has an employer-based healthcare system; jobs that require a particular level of education typically provide better access to health insurance and quality healthcare.

Healthy NC 2020 Objective

Social Determinants of Health

Healthy NC 2020 Objective[97]	Current Durham	Current NC[98]	2020 Target
1. Increase the four-year high school graduation rate	69.8% (2009-10)[99]	74.2% (2009-10)	94.6%

Secondary Data: *Major findings*

Durham Public Schools is the only public school system in Durham County, but there are numerous charter and private primary and secondary education institutions as well.

Durham Public Schools

Durham Public Schools (DPS) is the only public school system in the county. In Durham, there are 54 public schools, 7 charter schools, and 28 private schools. Nearly 77% or almost 33,000 of Durham's children attend public schools. The percentages of children in charter, private and home-schools are 7%, 13%, and 3% respectively.[100] The demographics of DPS are 52% African

American, 21% White, 21% Hispanic, and 6% other. Sixty-five percent of the children in DPS qualify for free or reduced price lunch, which is a proxy for poverty in the system. Additionally, 19% of DPS students are identified as Academically and Intellectually Gifted (AIG),[101] 12.5% as Exceptional Children (EC),[xv] and 14% as Limited English Proficient (LEP)[102,103]. The percentage of DPS students in each of these categories is higher than the average in the state.[104,xvi] DPS offers a wide array of choices for families in Durham. There are magnet schools, year round schools, and small themed high schools of choice for families, in addition to more traditional school options.

Durham places a high priority on education, as is evidenced by the generous level of local funding for the schools. As state funding for public education has continued to decline over the past decade, Durham County has compensated by increasing its local contribution. Including capital outlay and debt service funding, Durham County supports public education at $3,766 per pupil.[105]

Standardized test scores for Durham Public School students continue to improve. However, the achievement gap between minorities and whites still exists, and the overall levels of proficiency and graduation rates are still too low. Figure 4.03(a) below shows that the third grade reading achievement gap between economically disadvantaged and non-disadvantaged students was 36 percentage points on average between 2007-2010, and this same gap was 40.5 percentage points on average between White and Black students and 47.2 percentage points between White and Hispanic students.[106]

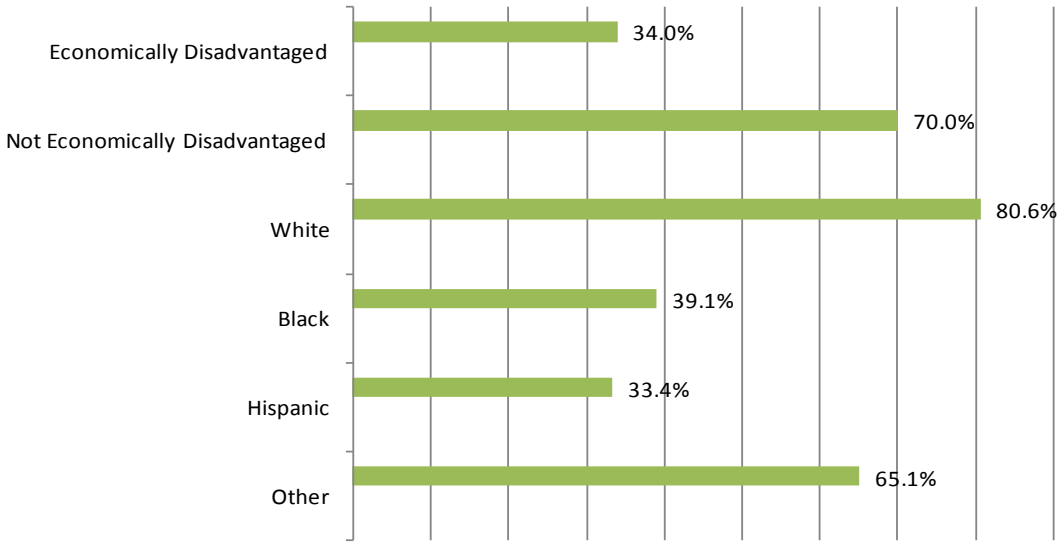

Figure 4.03(a).
Third Grade Reading Average End of Grade (EOG) Scores 2007-10: Percent of proficient students[107]

[xv] North Carolina Department of Public Instruction. Personal communication (telephone). Kelly Steen, Exceptional Children's Division. Part B Exception Children's Data Manager. February 8. 2012.
[xvi] Ibid.

Table 4.03(a) below shows that 8th grade Reading EOG scores have improved for White, Black and Hispanic students and the rate of improvement is greater for Blacks and Hispanics. Nonetheless, the achievement gap between Whites and Blacks or Hispanics is wide and differs by 37 and 44 percentage points. The overall 4-year cohort graduation rate has increased by nearly 4% since 2005-06, as depicted in Figure 4.03(b), but there is still a disparity in the percentages of White and minority students who are graduating from high school. For example, 87% of Whites graduated in 2009-2010 compared to 63% of Blacks and 58% of Hispanic students. This disparity can be seen in Table 4.03(b) below.

Table 4.03(a) **8th grade End of Grade (EOG) Reading Scores by race, 2005 - 2010**[108]

	2005-06	2006-07	2007-08	2008-09	2009-10	%Change (+/-)
White	**	**	76.7%	84.4%	82.2%	+5.5%
Black	**	**	29.8%	40.7%	46.8%	+17%
Hispanic	**	**	23.0%	34.7%	37.7%	+14.7%

**Due to changes in state assessments, EOG scores from years previous to 07-08 are not comparable to current scores

Table 4.03(b) **4-year Cohort Graduation Rates by race, 2005 - 2010**[109]

	2005-06	2006-07	2007-08	2008-09	2009-10	%Change (+/-)
White	82.1%	83.1%	81.4%	85.4%	87.4%	+5.3%
Black	63.7%	59.3%	57.7%	56.6%	63.0%	-0.7%
Hispanic	40.1%	35.2%	37.4%	38.4%	58.3%	+18.2%
Overall		66%	63%	64%	69.8%	+3.8%

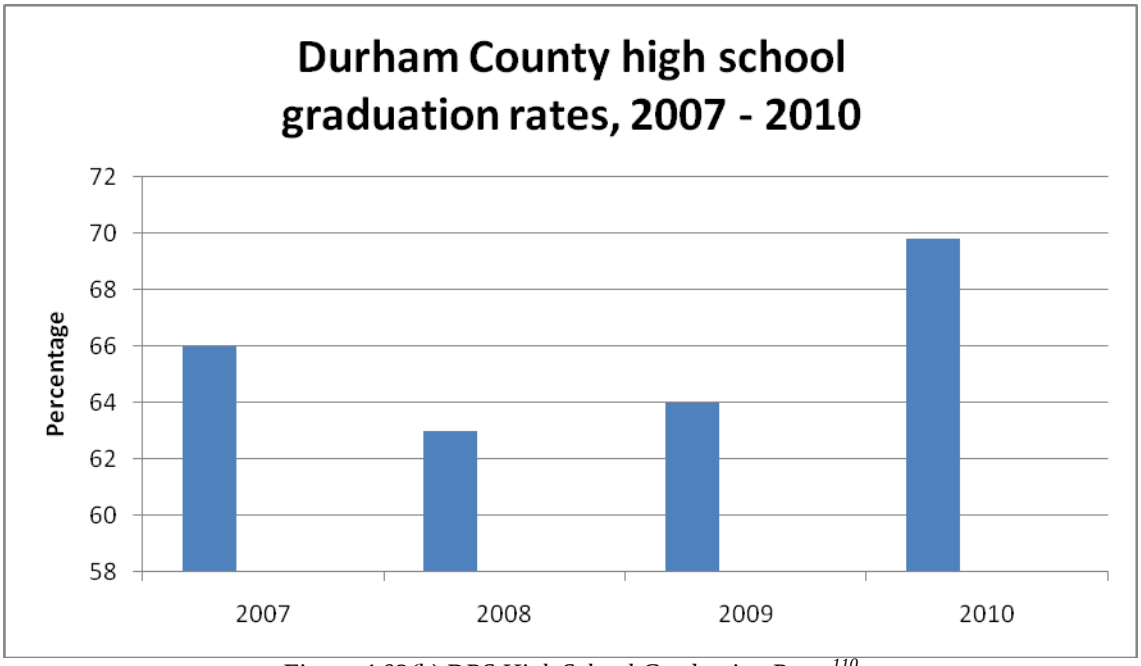

Figure 4.03(b) DPS High School Graduation Rates[110]

Table 4.03(c) shows Durham students still perform at lower levels on both reading and Math EOG tests than the average student in the state. The gap in achievement between Whites and Blacks and Hispanics is also greater in Durham than the average gap in the state.

Table 4.03(c) **Performance of Each Student Group on the ABCs End-of-Grade Tests**[111]
Percentage of Students, Grouped by Gender, Race/Ethnicity, and Other Factors, Who Passed BOTH the Reading and Math Tests for 2009-10

	Male	Female	White	Black	Hispanic	E.D.	N.E.D.	LEP	EC
District	47%	53%	81%	42%	40%	38%	72%	28%	22%
State	64%	68.5%	79%	47%	51.5%	52%	82%	34%	34%

E.D. = Economically Disadvantaged N.E.D. = Not Economically Disadvantaged L.E.P. = Limited English Proficiency EC = Exceptional Children

Colleges and Universities

Durham County is home to Duke University, North Carolina Central University and Durham Technical College.

Table 4.03(d) **Annual Enrollment (from Common Data Set)**

	2010-2011
Durham Tech*	**25,368**
Curriculum Programs	7,987
Continuing Education	18,408
Basic Skills	4,891
NCCU[112]	**8,645**
Undergraduate	6,520
Graduate / Professional	2,125
Duke University[xvii]	**14,982**
Undergraduate	6,663
Graduate / Professional	8,319

*Durham Tech data is from 2009-2010.

Durham Technical College[113]

Durham Technical Community College is a charter member of the North Carolina Community College System. The institution began its evolution with adult education through the Vocational and Adult Education Department of the Durham City Schools. A Practical Nursing program had been established in 1948; other programs included training in mechanical drafting, architectural drafting, and electronics technology. In addition, literacy skills training was offered for adults. Courses to upgrade the skills of workers were also offered in a variety of trades.

[xvii] Duke University. Phone communication (2011, June 24) with Kendrick Tatum, Asst. Director, Institutional Research.

For nearly 50 years, Durham Technical Community College has provided high-quality, affordable, and convenient technical and career education, served as the springboard to a bachelor's degree, enabled tens of thousands of Triangle residents to enjoy continuing education offerings, and given a second chance at success through adult literacy programs.

North Carolina Central University (NCCU)[114]

Originally named the National Religious Training School and Chautauqua for the Colored Race, NCCU was founded by Dr. James E. Shepard, a pharmacist and religious educator. The institution was chartered in 1909 and opened its doors to students in 1910. In 1925 it became the nation's first state-supported liberal arts college for African-American students. NCCU has been a constituent institution of the University of North Carolina System since 1972.

- NCCU ranks fourth among UNC System schools in sponsored research.
- With two biotechnology research institutes, NCCU is emerging as a leader in the study of health disparities — significant differences in the quality of health and health care across racial, ethnic and socioeconomic groups.
- NCCU was the first of North Carolina's state-supported universities to require community service for graduation. Last year, NCCU students performed service to the community valued at more than $2 million.
- NCCU produces leaders. Alumna Eva M. Clayton (M.S., 1962) was the first African-American woman elected to Congress from North Carolina. Dan Blue (B.A., 1970) was the first African-American to serve as speaker of the N.C. House of Representatives and is now a state senator.

Duke University[115]

Duke University was created in 1924 by James Buchanan Duke as a memorial to his father, Washington Duke. The Dukes, a Durham family that built a worldwide financial empire in the manufacture of tobacco products and developed electricity production in the Carolinas, long had been interested in Trinity College. Trinity traced its roots to 1838 in nearby Randolph County when local Methodist and Quaker communities opened Union Institute. The school, then named Trinity College, moved to Durham in 1892, where Benjamin Newton Duke served as a primary benefactor and link with the Duke family until his death in 1929. In December 1924, the provisions of indenture by Benjamin's brother, James B. Duke, created the family philanthropic foundation, **The Duke Endowment**, which provided for the expansion of Trinity College into Duke University.

As a result of the Duke gift, Trinity underwent both physical and academic expansion. The original Durham campus became known as East Campus when it was rebuilt in stately Georgian architecture. West Campus, Gothic in style and dominated by the soaring 210-foot tower of Duke Chapel, opened in 1930. East Campus served as home of the Woman's College of Duke University until 1972, when the men's and women's undergraduate colleges merged. Both men and women undergraduates now enroll in either the Trinity College of Arts & Sciences or the Pratt School of Engineering. In 1995, East Campus became the home for all first-year students.

Home of the Blue Devils, Duke University has about 13,000 unde rgraduate and graduate students and a world-class faculty helping to expand the frontiers of knowledge. The university has a strong commitment to applying knowledge in service to society, both near its North Carolina campus and around the world.

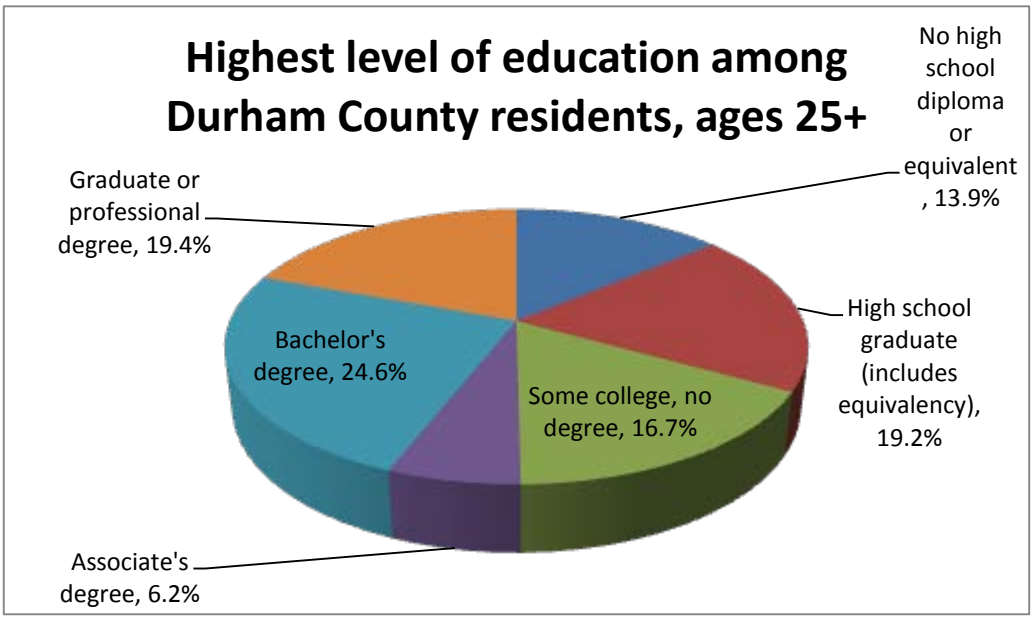

Figure 4.03(c) Highest Level of Education Among Durham County Residents, ages 25+[116]

The vast majority of Durham County residents have at least a high school diploma or its equivalent, as shown in Figure 4.03(c) above. However, 13.9% of those ages 25 or older do not have the equivalent of a high school diploma. This is the group that has the highest levels of unemployment.

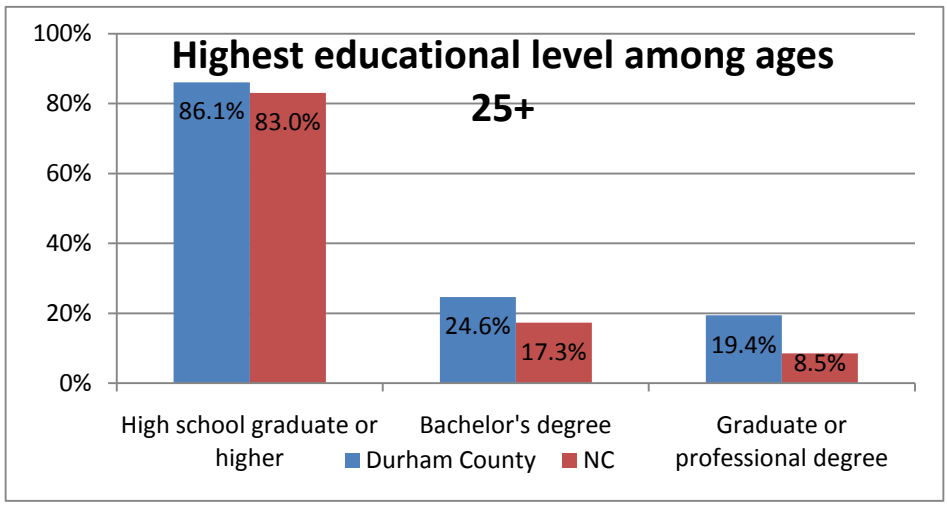

Figure 4.03(d) Highest Level of Education for ages 25+ Durham vs NC[117]

Durham County residents are highly educated when compared to overall North Carolina residents, as depicted in Figure 4.03(d). W hile the rate of high school graduates is similar, Durham County has more than twice the percentage of residents who have received a graduate or professional degree compared to North Carolina.

Primary Data

YRBS Data[118]

The 2009 Youth Risk Behavior Survey (YRBS) was administered to randomly selected classrooms of middle and high school students in Durham Public Schools. This survey asks students questions about risk behaviors related to tobacco use, unhealthy diet, inadequate physical activity, alcohol and other drug use, unintended pregnancy and sexually transmitted diseases, and unintentional injuries and violence. Students are also asked whether their grades in schools are "mostly As, Bs, Cs, or Ds/Fs." Additional data analysis was done to see statistically significant correlations between report student grades and risky behaviors. S ome of these relationships are reported in the three figures below.[119]

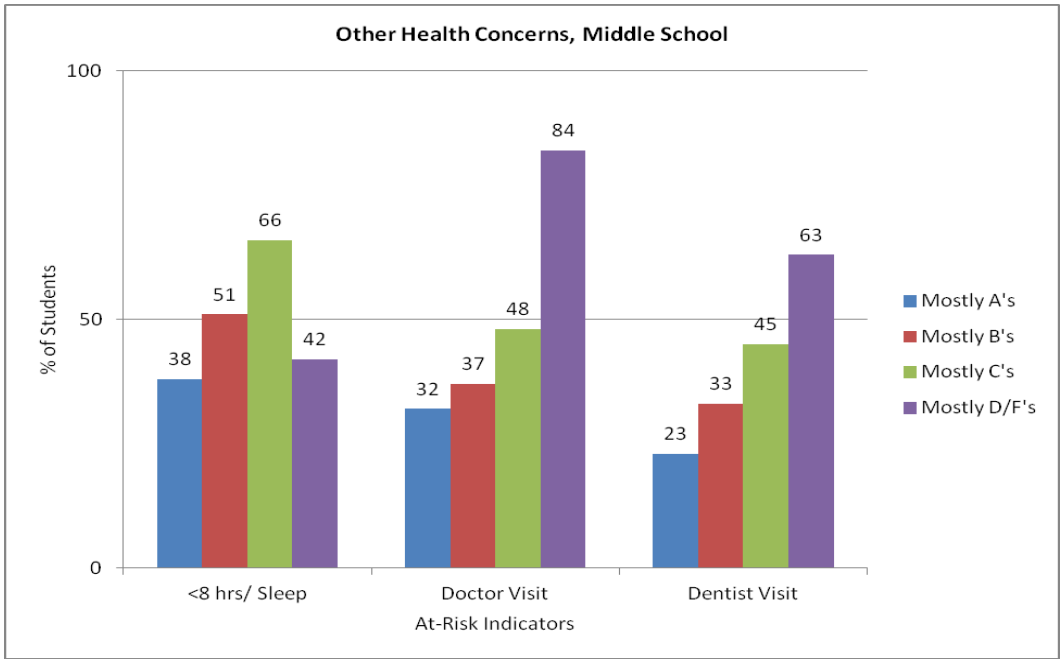

Figure 4.03(e) Received less than 8 hrs of sleep; had not been to see the doctor or dentist in past year

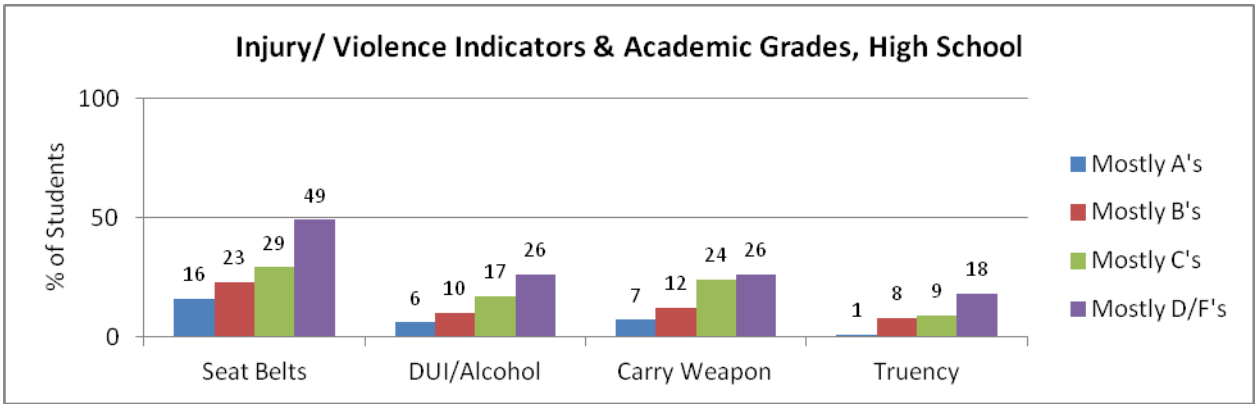

Figure 4.03(f) Rarely use seat belts; ever driven under the influence of alcohol; ever carried a weapon; did not go to school at least once in last month because student felt unsafe

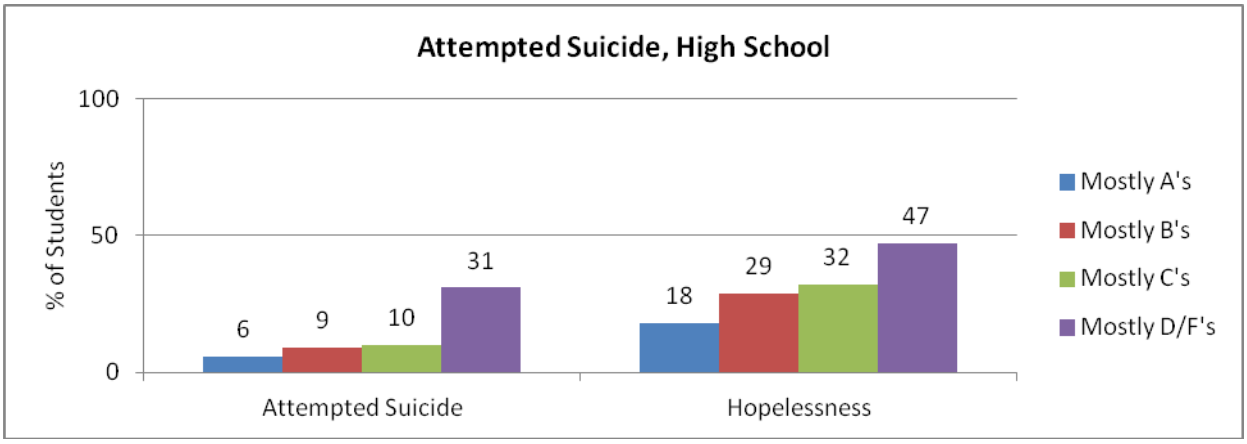

Figure 4.03(g) Actually attempted suicide one or more times in last year; ever felt so sad or hopeless almost every day for two weeks or more that they stopped doing usual activities

In general, the figures show that the proportion of reported risky behaviors increases with poorer grades. However, the data also demonstrates that students at all levels of academic success are reporting risky behaviors.

Interpretations: *Disparities, gaps, emerging issues*

Education leaders across the nation, state and in Durham are working to improve school outcomes for all children. In Durham, academic performance on End of Grade tests and graduation rates are improving, but there is still a wide gap between White students and minority students, as well as between students in different socio-economic groups. Durham Public Schools has experienced a steady but sustainable growth in student enrollment over the past 5 years of about 1%. The percentage of White students has decreased slowly over the years to 21%, while the percentage of Hispanic students has climbed to 21%. The percentage of students who are enrolled in the federal free and reduced price lunch program has also increased since 2005.[120]

State funding for education in North Carolina has fallen to 49th in the nation with the 2011-13 biennial budget calling for reductions or eliminations in funding for staff development, school supplies, textbooks, technology, at-risk student funding and more.[121] This has necessitated increased support from the county, with local property taxes being the primary source of local funding for public schools. The Durham County Board of Commissioners is considering placing a ¼ cent sales tax on the ballot for the November referendum with plans to allocate the increased revenue for education.[122]

The North Carolina General Assembly has also introduced new legislation to lift the 100 school cap on charter schools and to extend the school year by five days. Lifting of the charter cap may affect education in Durham, since Durham currently has one of the highest numbers of charter schools per capita among counties in the state.[123]

Recommended Strategies

Setting	Name	Description / Website	Matching 2020 Objective
School	Communities in Schools and the Model of Integrated Student Services	Communities in Schools has evolved into what is now called community-based, integrated student services, which are interventions that improve student achievement by connecting community resources with both the academic and social service needs of students. http://www.ciswa.org/newsandmedia/studiesandreports/studies-reports-docs/CIS_Policy.pdf	Social Determinants of Health Objective 2
School	Check and Connect	Check and Connect is a dropout prevention program for high school students with learning, emotional, and/or behavioral disabilities. Students typically enter the program in 9th grade, and are assigned a "monitor" who works with them year-round as a mentor, advisor, and service coordinator. http://evidencebasedprograms.org/wordpress/?page_id=92	Social Determinants of Health Objective 2

Current Initiatives & Activities

- ***Durham Public Schools***

Website: http://www.dpsnc.net
Phone Number: (919) 560-2000

- ***Durham Performance Learning Center (PLC)***
  The Performance Learning Center is an initiative of national Communities In Schools with support from the Bill and Melinda Gates Foundation and Durham Public Schools. PLC is one of Durham's small high schools and offers students the opportunity for online learning with internships and job shadowing in a unique setting with non-traditional and flexible school hours. The Durham Performance Learning Center features small classes where students work online at their own pace. Many of these students have returned to school after dropping out and find the self-paced learning and the flexible schedule, along with community support, to help them succeed in the classroom and graduate. This program is one initiative to help increase high school completion rates in Durham.

Website: http://dplc.dpsnc.net/index.php?option=com_frontpage&Itemid=1
Phone Number: (919) 560-9190

- ***Student U***

The mission of Student U is to empower students in the Durham Public Schools to take ownership of their education by developing the academic and personal skills they need to realize their full potential in school and beyond. There are currently about 150 middle school students and 25 high school students participating in Student U for 6 weeks of enrichment and academic opportunities in the summer with ongoing support during the school year.

Website: http://www.studentudurham.org/
Phone Number: (919) 267-3958

- ***Durham Tech Gateway to College***

Gateway to College at Durham Tech Community College is an educational option for Durham Public Schools (DPS) students between the ages of 16-21 who have dropped out of high school but have a desire to get back on track and earn a diploma. Gateway to College offers an educational alternative for students who have not had success in other learning environments, by providing an array of support services to assist students in meeting their academic and life goals. Gateway to College is for students who are motivated to achieve, willing to work extremely hard, and driven to earn a high school diploma and a college degree.

Website: http://www.durhamtech.edu/gateway/index.html
Phone Number: (919) 536-7200

- ***East Durham Children's Initiative***

The East Durham Children's Initiative (EDCI) at the Center for Child & Family Health (CCFH) represents a partnership of schools, neighborhood residents, nonprofit providers, universities, and government to create a pipeline of services for children in East Durham from birth to college or career. EDCI operates in partnership with residents and other stakeholders in the area to help children succeed – with the goal that every child finishes high school and is ready for college or career.

Website: http://edci.org/
Phone Number: (919) 419-3474

Section 4.04 *Access to health care, insurance and information*

Overview

Access to health care in a community refers to the ability of residents to find a consistent medical provider for their primary care needs, to find a specialty provider when needed and to be able to receive that care without encountering significant barriers. Although affordability is often considered to be the primary barrier, other challenges include transportation, hours of operation, wait times for appointments, language and cultural issues, and length of appointments. Some age groups, such as adolescents and young adults, express a concern that there is no "place" for them; pediatricians' offices are friendlier to young children and adult primary care providers may be focused on the chronic illness and conditions of older adults. Other special populations who experience unique barriers include those who are homeless, mentally ill, and refugees. Health insurance is a major determinant of access to health care, and most individuals have private health insurance through one's own employer or a family member's employer. Government provided health insurance includes Medicaid, SCHIP, Medicare, and veteran's benefits.

Health literacy is the ability to comprehend and make use of basic health information in order to make decisions about one's health, such as following instructions given by a doctor or pharmacist or understanding test results. The American Medical Association reports that poor health literacy is "a stronger predictor of a person's health than age, income, employment status, education level, and race."[124]

Impact

When community residents lack access to primary and specialty health care, all aspects of their well-being are affected. Primary care physicians are often an individual's first source of individualized health information on the prevention and treatment of chronic or recurring conditions. Without convenient access to primary care, residents will often unknowingly engage in unhealthy behaviors, delay seeking care for conditions that might become more serious, or self-treat conditions that need professional attention. People whom, for whatever reason, cannot find care that is accessible to them often resort to obtaining medical care in the one place that cannot refuse them—the Emergency Department. This results in fragmented, more costly care. The ultimate impact of inadequate access to medical care is seen in a long list of health disparities—higher rates of infant mortality, premature death, chronic illness, and disability in community areas with the highest poverty.

Community assets

Durham has strengths that offset some of these barriers. As the home of Duke Medicine, there are many medical experts in all fields and a high number of physicians per resident. Lincoln Community Health Center is one of the oldest Federally Qualified Health Centers in the country. In addition to its main clinical site which houses adult medicine, pediatric, and dental clinics, Lincoln also has seven satellite clinics. Three of these are clinics run in partnership with Duke Medicine providing primary care across the life span (Walltown, Lyon Park, and Holton clinics). Four additional clinics provide primary care services to specific populations including the

Healthcare for the Homeless Clinic, the Early Intervention Clinic (HIV), the John Lucas Wellness Center at Hillside High School, and a medical clinic located at Durham Center Access (the county's mental health and substance abuse crisis facility). Lincoln Community Health Center also has WIC nutrition services which include breastfeeding support at the main site and satellite locations. Durham Regional Hospital operates a pharmacy and radiology services at Lincoln's main clinical site, which provides inexpensive medications to patients. Durham County Health Department provides free or low-cost clinic services for prenatal care, family planning, sexually transmitted infections, tuberculosis services, dental care, immunizations, and also sponsors a number of health promotion, case management, and outreach services. There are also several free health clinics in Durham County, such as CAARE Inc. and the Samaritan Health Center, that are able to operate with the support of volunteer medical professionals.

Project Access of Durham County (PADC), a non-profit organization, links eligible low-income, uninsured, Durham County residents with access to specialty medical care fully donated to the patients by the physicians, hospitals, labs, clinics and other providers participating in the network. Duke's Division of Community Health, in addition to partnering with Lincoln to provide primary care, offers a number of clinical and care management programs. These programs include four school-based health centers, the Durham Community Health Network (DCHN), which provides care management for Medicaid enrollees, and Local Access to Coordinated Healthcare (LATCH), which provides care management for uninsured patients.

In spite of these efforts, barriers still remain, such as fragmented care. Communication and coordination among providers is sometimes less than optimal, leaving patients confused about the advice and treatment they have been given. Access to mental health care has unique issues, perpetuated by a state system that has undergone frequent changes over the past ten years.

Federal Affordable Care Act[125]

In 2010, President Barak Obama signed the Affordable Care Act (ACA) into law. Although there are currently legal and fiscal challenges, if fully implemented, the law will greatly improve health insurance coverage. The full extent of the ACA is complicated, but some of the most relevant features include:

Beginning in 2010	• Provision of access to insurance for uninsured Americans with pre-existing conditions • Young adults under 26 can remain on their parent's health insurance • Expansion of coverage for early retirees • Various methods of monitoring and improving quality • Increased emphasis on preventive health activities
Beginning in 2011	• Various methods of improving efficiency
Beginning in 2014	• Increased access to Medicaid subsequent years • Government subsidies to assist lower income individuals to purchase health insurance • Requirement that most individuals will be required to obtain medical insurance in some way

Healthy NC 2020 Objective

Crosscutting

Healthy NC 2020 Objective[126]	Current Durham	Current NC	2020 Target
1. Reduce the percentage of non-elderly uninsured individuals (aged less than 65 years)	22.6% (2010)[127]	23.6% (2010)[128]	8.0%

Secondary Data: *Major findings*

The Robert Wood Johnson Foundation collaborated with the University of Wisconsin Population Health Institute to develop rankings for each state's counties. North Carolina is ranked 35 out of 50 states in terms of measures of health.[129] These measures assess both determinants of future health as well as current health outcomes. Concerning determinants of future health are a statewide obesity prevalence of 30.1% and smoking prevalence of 20.3%. D urham County ranked ninth overall in the state for health outcomes, with differences among the subcategories. The highest rank Durham County received (2nd overall in the state) was in the subcategory of Clinical Care, the area which best addresses issues of healthcare access. Table 4.04(a) depicts a summary of these results:

Table 4.04(a) **Summary of Results[130]**

Measure	Durham County	National Benchmark	North Carolina
Uninsured adults (Percent of population under age 65 without health insurance)	21%	13%	21%
Primary Care Providers (Ratio of population to PCPs)	352:1	631:1	859:1
Preventable hospitals stays (Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees)	57	52	68
Diabetic screening (Percent of diabetic Medicare enrollees that receive HbA1c screening)	84%	89%	86%
Mammography screening (Percent of female Medicare enrollees that receive screening)	69%	74%	67%

The red and green shading provides a snapshot of how Durham County compares to the National Benchmark and to North Carolina. F or example, while Durham County has not yet met the national benchmark for mammography screening (indicated by red shading), Durham County does have a higher mammography screening rate when compared to North Carolina, which is indicated by green shading. D urham County has a much lower ratio of population to primary care providers than nationally or in the state, which indicates the high number of physicians in this community.

Primary Data

The North Carolina State Center for Health Statistics ranks counties among the best, average or worst in comparison to other counties in the state on measures of healthcare access. Much of this information is collected from Behavioral Risk Factor Surveillance System (BRFSS), which is a phone survey of residents throughout North Carolina. How did Durham rank on these measures in 2008?

Table 4.04(b) **Durham Rankings**[131]

Measure	Rank
Number of medical practitioners (including certified nurse midwives, dentists, nurse practitioners, pharmacists, physicians, physician assistants, primary care physicians, psychologists, and registered nurses)	Among the best
Preventive health practices (including tests for diabetes, sigmoidoscopies or colonoscopies, mammograms, and tests for prostate cancer)	Average
Adults who needed to see a doctor in the past year, but could not	Average
Adults who do not have any kind of health coverage or insurance	Among the worst

How have these areas changed? The majority of these indicators have varied slightly from year to year, but overall there have not been many notable declines or improvements. In 2010, the percentage of adults, ages 18-64 years, who reported that they were uninsured dropped significantly both in locally and statewide.[132] The Durham data, however, must be interpreted with caution since the confidence intervals for the BRFSS survey are so wide. Additional years of data are needed to truly assess whether this is a decline in the percentage of uninsured adults in Durham County. For example, if the 2010 data is omitted from the chart below, the trendline is actually constant; when the 2010 data point is added there is an overall decline in the percentage of uninsured. This is shown in Figure 4.04(a) below. Another data source, the 2010 American Community Survey, which surveyed randomly selected households in Durham County, revealed that 22.6% of adults ages 18-64 had been uninsured at some point that year.[133]

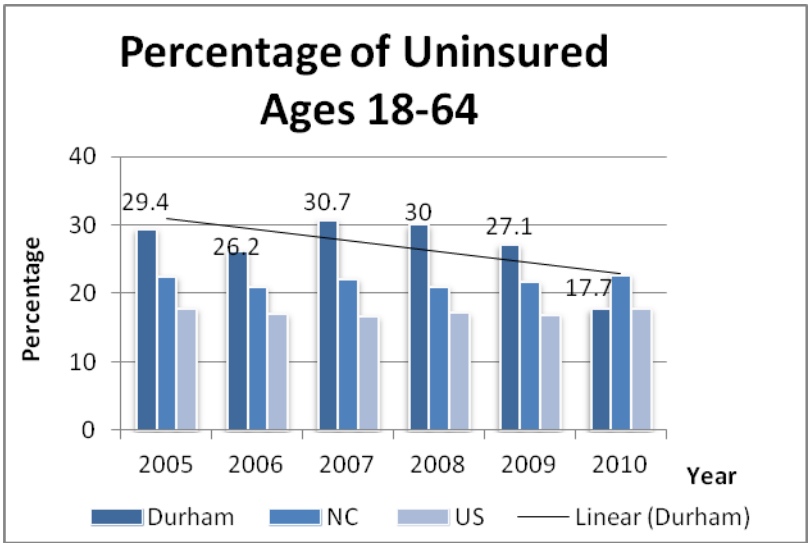

Figure 4.04(a) Percentage of Uninsured: Durham, NC & US

Figure 4.04(b) below also illustrates the importance of using trend data. From 2004 to 2010, there does appear to be a slight trend and improvement in the percentage of Durham adults ages 50+ who reported ever having a sigmoidoscopy or colonoscopy and among men ages 40+ who have ever gotten a Prostate-specific Antigen test. The percentage of adult women who reported receiving a Pap smear in the last three years, however, has remained unchanged or slightly decreased.[134]

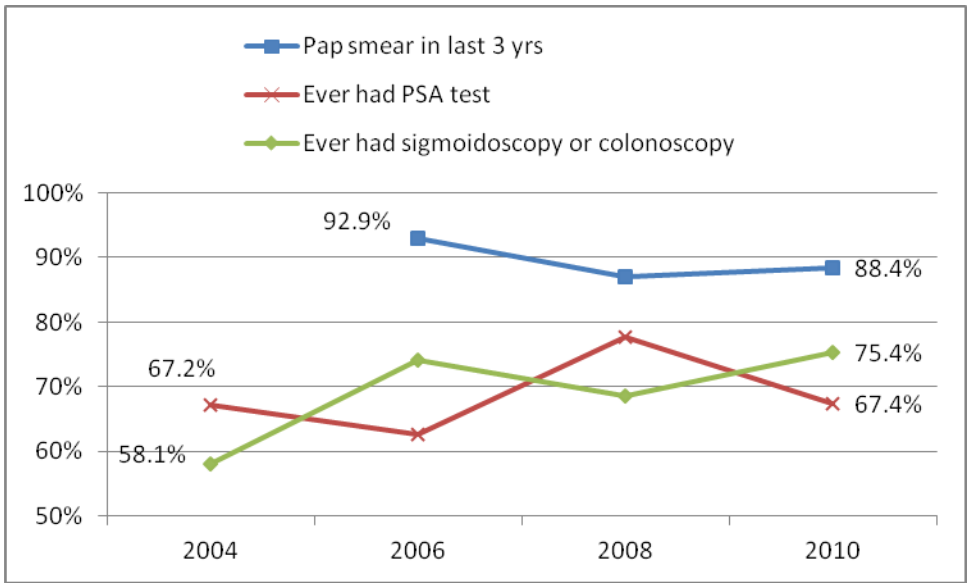

Figure 4.04(b)

2010 Durham County Community Health Opinion Survey[135]

The 2010 Durham County Community Health Opinion Survey randomly selected Durham County households and asked residents questions regarding their health status and that of their community. The survey included these questions on health insurance and access to health care:

- *During the past 12 months, was there any time that you did not have any health insurance or coverage*? 19.4% of respondents answered "yes"; responses varied by age group with approximately half of respondents aged 18-24 years old answering "yes". Men were slightly more likely, and minorities were more likely, to have been without health insurance or coverage in the past 12 months.

- *In the past 12 months, did you ever have a problem getting the health care you needed from any type of health care provider or facility?* 13.1% of respondents answered "yes," and minorities were more likely to answer "yes." Of the respondents who responded affirmatively, the most common reasons for difficulty getting health care included: did not have health insurance (44%), insurance did not cover what was needed (29.6%) and/or deductible/co-pay too high (44%).

- *About how long has it been since you last visited a doctor or health care provider for a routine physical exam or wellness checkup?* 80.5% had a routine physical exam or wellness checkup within last 12 months (95.1% had a routine physical exam or wellness checkup within last 2 years), including the majority of 18-24 year olds.

- *In the past 12 months, did you have a problem filling a medically necessary prescription?* 12.2% of respondents answered yes. Of the respondents who answered yes, the most common reasons for difficulty included: did not have health insurance (34.6%), insurance did not cover what was needed (38.5%) and/or deductible/copay too high (50%).

- *Was there a time during the past 12 months when you needed to get dental care, but could not?* 24.8% of respondents answered "yes." Minorities were more likely to answer "yes." Of the respondents who answered "yes," the most common reasons for difficulty included: did not have health insurance (56.9%), insurance did not cover what was needed (17.6%) and/or deductible/co-pay too high (58.8%).

- Finally residents were asked, "*What one thing would make Durham County or your neighborhood a healthier place to live*?" and interviewers coded open-ended responses. Among the responses, healthcare access was ranked among the top five.

Interpretations: *Disparities, gaps, emerging issues*

Durham is a community rich in medical resources. The data consistently identifies the *availability* of medical providers, with an exceptionally good ratio of providers to the number of residents. This number is misleading, however, because these providers are not just serving Durham residents. Duke Medicine, as a regional hub for medical care, attracts people from across North Carolina and adjoining states who come seeking care for complex conditions.

Although the convenience of having so many providers is a strong asset, it does not always translate from *availability* to *accessibility*. The county is particularly hampered by a lack of health insurance coverage (whether private or public, such as Medicaid) for many of its residents. From the community health opinion survey results, men, young adults, and minorities were less likely to have health insurance and cited more barriers to accessing healthcare.

It is encouraging to see that health screenings have increased in areas such as sigmoidoscopy/ colonoscopy and prostate cancer screening (PSA). This improvement is unfortunately accompanied by reversals in adult women who have received a Pap smear in the last three years.

If the majority of the Affordable Care Act (ACA) is implemented as intended, the majority of Durham County residents should have access to health insurance by 2014. The North Carolina Institute of Medicine (NCIOM) estimated the number of non-elderly uninsured North Carolinians in 2014 depending on whether health care reform was or was not implemented.

Table 4.04(c) **NCIOM Estimates**

	2011	**2014**
Percent non-elderly uninsured *(without health reform)*	18.8%	19.2%
Percent non-elderly uninsured *(with health reform)*	15.7%	11.4%

According to the NCIOM, "After the bulk of the coverage programs are enacted in 2014, 11.4% of nonelderly North Carolinians are projected to be uninsured, compared with the projected 19.2% if the health reform coverage initiatives were not implemented. Thus, the number of uninsured will be cut roughly in half. We would expect more of the uninsured to be covered in later years, as the financial penalty for those who are not exempt and do not have insurance increases from $95/person or 1% of taxable income in 2014, to $695/person or 2.5% of taxable income by 2016.

Who remains uninsured in 2014? The projected uninsured are roughly 21% undocumented immigrants (CBO estimates about one-third nationally), and about 50% are above 200% of the federal poverty level."[136]

Recommended Strategies

- Develop mechanisms for clinics providing care to the uninsured on a sliding scale or free basis to work together to improve communication and coordination. Coordination could result in improved patient safety and better stewardship of limited resources through reduction in duplication. Given the shared goal of improving access to care, increased collaboration and communication could result in better patient outcomes as well as success with funding sources.

- Improve access to Social Security disability benefits for individuals with physical and mental or cognitive difficulties; along with disability income, individuals receive health

insurance coverage through Medicaid and/or Medicare. The illnesses and deficits which make these adults unable to hold a full-time job for twelve months or longer also make it difficult for them to complete the disability application without assistance. A national program funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) called SOAR has resulted in improved success rates for applicants. Durham was recently designated by the North Carolina Coalition to End Homelessness as the first Gold Level Certified SOAR Community in North Carolina and grant funding allowed several agencies to hire SOAR workers. As grant funds end, institutional support will be necessary to continue these efforts.

- Collaborate with hospitals to meet community needs. Under the Affordable Care Act (ACA), nonprofit hospitals will be required to conduct community assessments to identify community needs and implement strategies to address the findings. This is an opportunity for close collaboration between Durham's health providers and advocacy groups, particularly the safety net providers, and the hospitals.[137]

- Raise awareness of high-risk insurance pools. The ACA requires the establishment of high-risk insurance pools to provide coverage for people who have been denied traditional insurance. While the number of individuals impacted is small it is an important resource that our community should be informed about this option (http://www.inclusivehealth.org/).

- Prepare for health care reform by developing outreach plans that target people who will become newly eligible for Medicaid or a government subsidy to purchase health insurance through an exchange and provide education and counseling. Expand current outreach efforts to low income children and their families who are currently eligible for Medicaid, ideally at safety net clinics and social service agencies. A method such as a one-stop application process created by The Benefit Bank is one such option. (http://www.thebenefitbank.com/). Support any statewide efforts to adopt an early expansion of Medicaid.

- Prepare for health care reform by estimating how many newly insured patients will be seeking primary care homes, the current primary care capacity in Durham, and how to meet the anticipated demand. Estimate the demands for specialty medical care and work collaboratively with primary care providers, specialists and hospitals to plan for how to meet anticipated needs. Start now to identify and address current primary and specialty care needs so that uninsured patients are already engaged in the health system prior to health care reform and have had longstanding needs addressed.

- Efforts should be made to integrate medical and behavioral health services in our community. Too often, the health delivery model artificially separates medical from mental health services, requiring patients to make multiple trips and co-pays to receive services.[138] Innovations are taking place to integrate medical and behavioral health services to meet patient needs. This seems promising given that many patients may have either a physical ailment that is affected by stress, problems maintaining health lifestyles, or a psychological disorder. Current activities in Durham include a collocation program at a local primary care office initiated by the Durham Community Health Network and

the location of a half-day primary care clinic at the county mental health crisis center (Durham Center Access).

- Create a school-based clinic in a Durham middle school. Early adolescence is a risky time when youth frequently initiate behaviors such as alcohol use, tobacco use and other drug use as well as sexual exploration. Adolescents tend to have less healthcare visits than any other age group. Creating the opportunity for health and wellness visits within the school setting is an ideal way to offer prevention information.

- Access to healthcare includes the ability to get to the healthcare location. Many of Durham's citizens have limited access to transportation due to financial or physical barriers. In order to improve access to healthcare transportation should be considered. Options for affordable transportation for people seeking access to health care, education, employment and other services include increased free bus routes or bus "access cards" which can be provided to clients by health and human service agencies.

- Develop medical respite care (acute care in temporary housing with case management) for homeless persons being discharged from hospitals with health issues temporarily requiring more supportive, stable housing than provided by shelters. This could assist these individuals in stabilizing their social situation while improving access to healthcare through access to primary care. In addition, it would decrease hospital costs through a reduction in readmissions.[139,140]

- Develop initiatives to improve health literacy, including partnering with schools, libraries, adult basic education and ESL programs, and community based organizations to develop and disseminate appropriate materials.

Current Initiatives & Activities

- ***Medical Options for the Uninsured and Underinsured brochure &Applying for Disability Benefits brochure***
  Medical Options, available in English and Spanish, provides information about the health care services available to uninsured and under-insured residents in Durham County. It lists several resources (including community health center, health department, and free clinics). *Applying for disability benefits* provides information about SSI and SSDI and answers common questions about applying for disability.

Website: http://www.healthydurham.org/index.php?page=resources_pubs
Phone Number: (919) 560-7833

- ***Durham County Access to Care Committee***
  Advocates for legislative changes that will affect health care coverage for residents and develops community and agency-based strategies to make measurable improvements in access to care for the uninsured and underinsured residents in Durham

Website: http://www.healthydurham.org
Phone Number: (919) 560-7833

- ***Project Access of Durham County***
  Links people without health insurance into a local network of clinics, laboratories, pharmacies, and hospitals that donate their efforts to those in need. It serves eligible low-income, uninsured Durham residents who have specialty medical care needs.

Website: http://projectaccessdurham.org
Phone Number: (919) 470-7262

- ***Lincoln Community Health Center***
  Provides accessible, affordable, high quality outpatient health care services to the medically underserved.

Website: http://www.lincolnchc.org
Phone Number: (919) 956-4000

- ***Durham County Health Department***
  Provides clinic services for targeted public health issues, offers outreach and case management particularly to reduce risk in children, pregnant women, and people with specific communicable diseases, and provides community education to promote health.

Website: http://www.durhamcountync.gov/departments/phth
Phone Number: (919) 560-7600

- ***Durham Health Innovations***
  Partnership between Duke Medicine and Durham County, with 10 teams funded to work collaboratively to develop ways to reduce death or disability from specific diseases or disorders prevalent in the community. The team projects have focused on improved measurable health status, incorporated multidisciplinary partnerships among representatives from Durham and Duke, and used information technology to facilitate the coordination of care.

Website: https://www.dtmi.duke.edu/about-us/organization/duke-center-for-community-research/durham-health-innovations
Phone Number:: (919) 681-8598

- ***CAARE, Inc.***
  Operates as a free clinic focused on the reduction of HIV and Sexually Transmitted Illnesses, as well as prevention of other significant health conditions. Services include case management, emergency financial support services, and assistance with housing as well as direct clinical services.

Website: http://www.caare-inc.org
Phone Number: (919) 683-5300

- ***The Samaritan Health Center***
  Provides free healthcare services to low income (<200% of poverty) men, women, and children. The clinic is open on Monday, Wednesday, and alternate Saturdays.

Website: http://www.durhamrescuemission.org/Display.asp?Page=samaritanhealthcenter
Phone Number: (919) 688-9641

- ***Durham Center Access***
  Provides a 24-hour call line for people needing an immediate response to issues of mental health, developmental disability, or substance abuse. Callers get either information or a referral to an appropriate service provider. Walk-in crisis help is available at the Access Center at 309 Crutchfield St., Durham.

Website: http://www.durhamcenter.org/index.php/citizen/dca
Phone Number: (800) 510-9132 or (919) 510-7100 (Call-in lines)
(919) 560-7200 (Main Durham Center Number)

- ***Duke Division of Community Health Center***

  Administers the Durham Community Health Network (DCHN) and Local Access to Coordinated Healthcare (LATCH), which are community-based care management programs that aim to improve health, access to healthcare, and healthcare utilization outcomes among Durham's Medicaid and uninsured population. Services include: health services coordination and navigation; post-hospital follow-up; patient education; chronic disease management; education and advocacy applying for Medicaid, Food Stamps, and other social services, and referrals to other community agencies.

Website: http://communityhealth.mc.duke.edu
Phone Number: (919) 613-6530

Section 4.05 *Employment, income and worksite health*

Overview

Poverty, education level, and housing are three important social determinants of health; people with higher incomes, more years of education, and a healthy and safe environment to live in have better health outcomes and generally have longer life expectancies.[141] People living in poverty are more likely to be unemployed, which is problematic as employment is the predominant means of obtaining health insurance in our country.

Employment, or the lack thereof, can impact health in four significant ways. First, employment is the primary source by which health insurance is obtained by individuals and their families. Second, the nature of one's employment status (hourly, part time, etc.) determines to an extent one's income and ability to afford health insurance or healthcare. Third, employment allows for individuals to create a level of present and future financial security to address core living and health needs. Lastly, lack of employment, underemployment, unhealthy working conditions or loss of income may contribute to health conditions such as high blood pressure, obesity, depression or a tendency toward obsessive compulsive behavior that leads to addictions. As of April 2011, 10,365 residents or 7.3% of the labor force was unemployed in Durham County.[142]

Healthy NC 2020 Objective

There is no Healthy NC 2020 Objective on labor.

Secondary Data: *Major findings*

As depicted by Figure 4.05(a), from 2006-2010, annual unemployment rates in Durham County were lower compared to North Carolina. This indicates that Durham has had a healthier employment outlook for this time period than the state.[143] Durham, however, has not been immune to the global recession. In fact, Durham has experienced an estimated 130 closures which have affected approximately 5,582 entry and professional level positions and has significantly impacted the unemployment rates within the county during 2008-2010. [144]

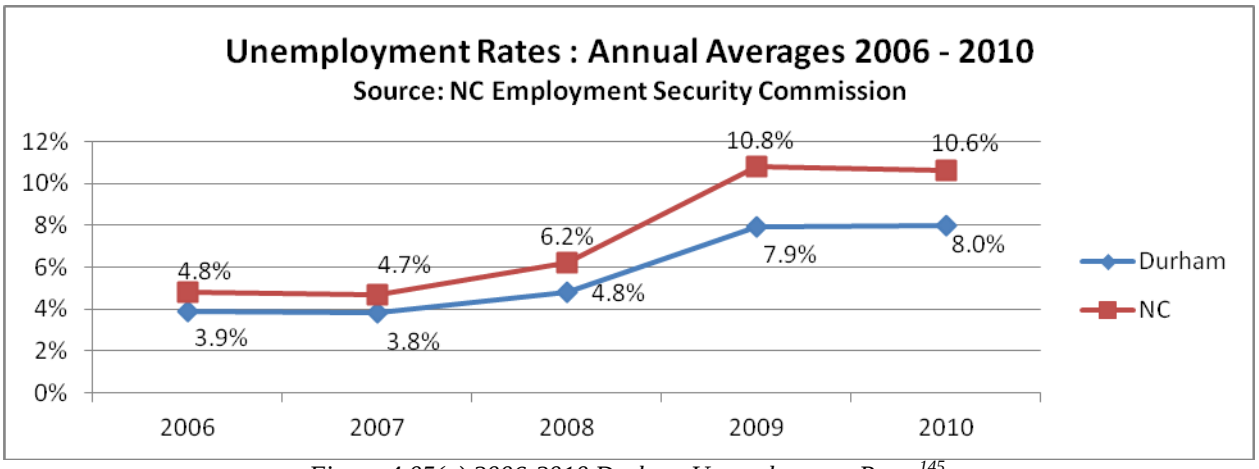

Figure 4.05(a) 2006-2010 Durham Unemployment Rates[145]

From 2006 to 2010, the available civilian labor force within the county grew from 135,276 to 141,849, while the number of residents employed grew on a smaller scale from 130,002 to 130,544 as indicated in Figure 4.05(b).[146]

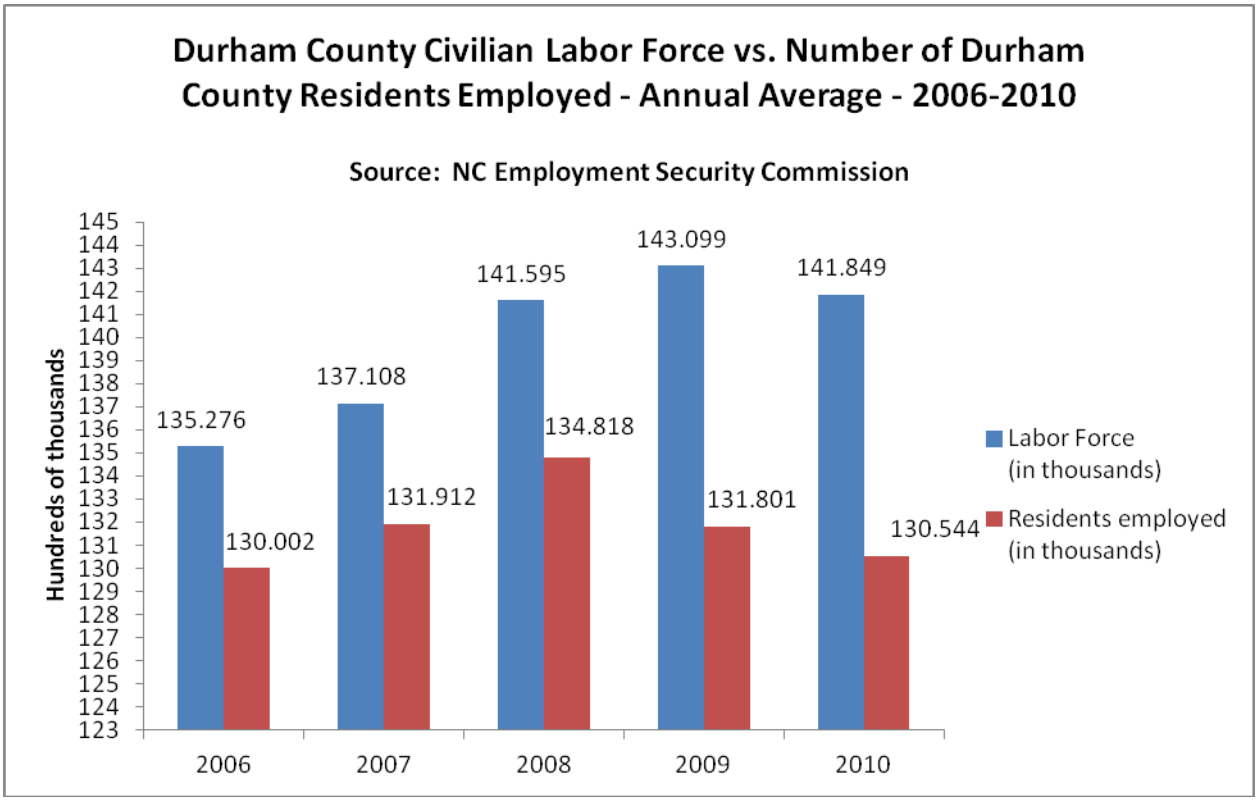

Figure 4.05(b) Durham County Civilian Labor Force vs Residents Employed

While unemployment has risen over the last five years, the average weekly wage in Durham County for those employed within the private sector has increased by $139, from $1,046 to $1,185 representing an 11.7% increase since 2006 as shown in Figure 4.05(c) below.[147]

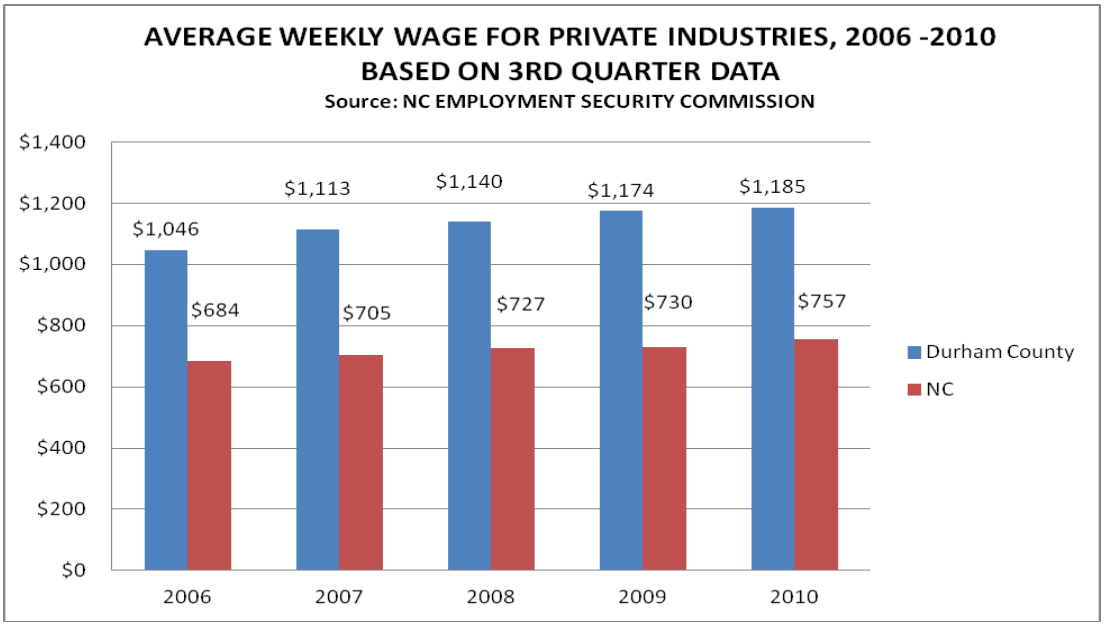

Figure 4.05(c) Durham County Average Weekly Wage for Private Industries

Accordingly, per capita personal income increased within Durham County by $2,134 from 2006 to 2008.[148] Data for the State was not available.

2010 data provided by the Quarterly Census of Employment and Wages (QCEW) Unit of the North Carolina Employment Security Commission show the top twelve largest employers within the County, which represent a rich industry bed and diversified portfolio of private and public entities, as well as provide a strong economic foundation. T hese employers, in order, are highlighted in Table 4.05(a) below.[149]

Table 4.05(a) **Largest Employers in Durham County as of September 2010**

12 Largest Employers in Durham County – Quarter Ending September 2010 Source: Quarterly Census of Employment and Wages (QCEW) Unit, ESC/LMI Division	
Company Name	**Industry**
Duke University	Education & Health Services
International Business Machines	Manufacturing
Durham Public Schools	Education & Health Services
Glaxosmithkline	Education & Health Services
Cisco Systems Inc	Manufacturing
Blue Cross & Blue Shield Of NC Inc	Financial Activities
Veterans Administration	Public Administration
City Of Durham	Public Administration
RTI International	Professional & Business Services
Durham County	Public Administration
Cree Research Inc	Manufacturing
Fidelity Employer Services LLC	Professional & Business Services

Worksite Health

Worksite health can range from offering opportunities for employees to practice healthful voluntary behavior changes, such as physical activity during the day and structured programs, to creating a space and providing equipment for employees to utilize for exercise. Additionally, worksite wellness can entail activities offered and/or contracted through the insurance company to help improve overall health results of employees.

A 2007 study that used the Duke Health and Safety Surveillance System found that the effect of excess body mass on health care negatively impacts the workplace, contributing to work illness and injury. This is reflected in rates of workers' compensation claims - the number of lost work days and costs associated with each claim were found to increase rapidly with body mass index, or BMI.[150]

Many Durham residents receive health insurance through their workplaces; therefore, the healthcare costs associated with obesity are of significant concern for employers. Having a healthier workforce will lower direct costs such as insurance premiums and worker's compensation claims. A healthier workforce will also positively impact many indirect costs such as absenteeism and low worker productivity. To sufficiently improve the health of employees, businesses must change the environment and culture in which employees work by implementing comprehensive worksite health promotion programs.[151]

Primary Data: Labor and Worksite Health

According to 2009 Behavioral Risk Factor Surveillance System (BRFSS) data, 77% of Durham residents have health care coverage;[152] the majority of residents are likely covered through their employers. Over 60% of the largest employers in Durham County offer worksite health programs.[153] For employers that do not, resources are available to initiate such activities, many of which are offered at low or no cost.

2010 Durham County Community Health Opinion Survey Results[154]
Many worksite health programs strive to address the major risk factors of chronic disease which typically include: physical inactivity, nutrition, obesity and tobacco use. These risk factors align well with results from the 2010 Durham County Community Health Opinion Survey. When survey respondents were asked, "*Keeping in mind yourself and the people in your neighborhood, I would like for you to pick the most important health problems. You can choose up to 3,"* obesity, cardiovascular disease, diabetes and cancer were some of the most frequently cited responses, as shown in Figure 4.05(d).[155]

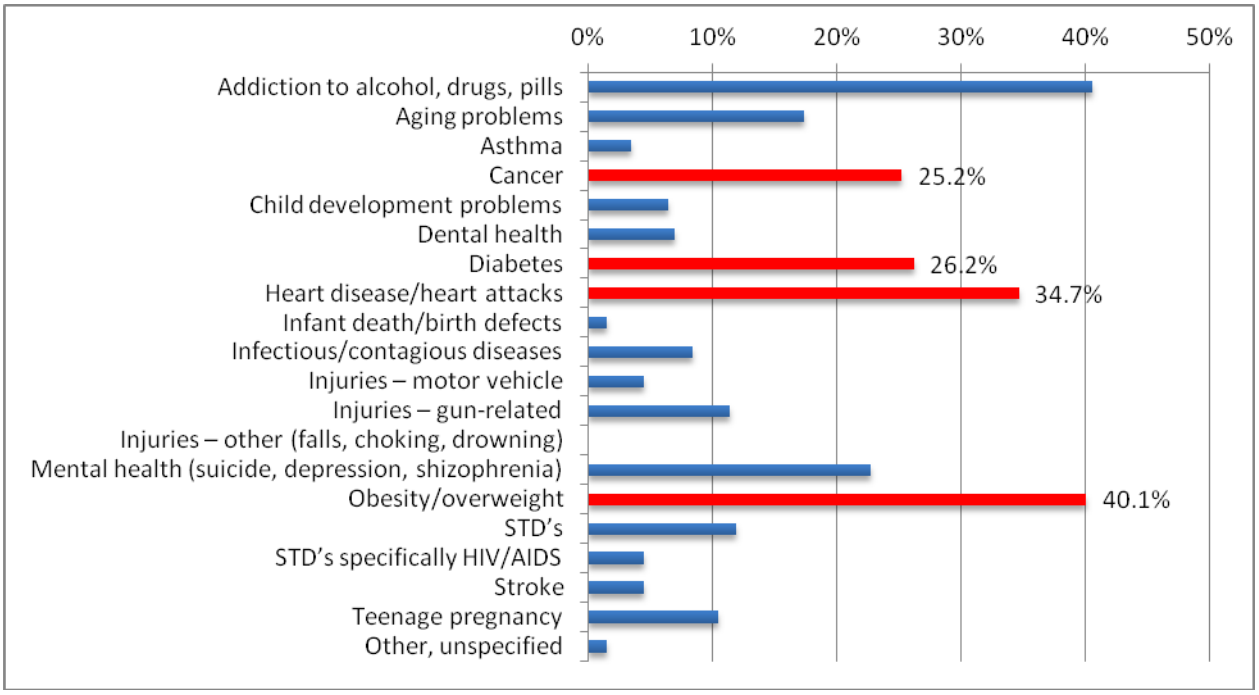

Figure 4.05(d) "Choose the 3 most important health problems in Durham County"

As seen in figure 4.05(e), survey respondents were divided when asked whether "There is plenty of economic opportunity (including number and quality of jobs, and job training/higher education opportunities) in Durham County."

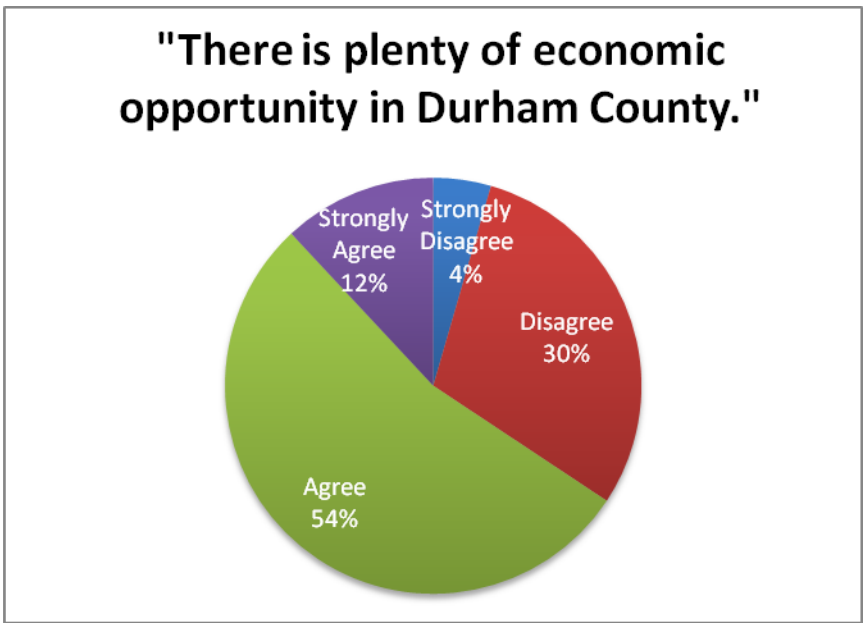

Figure 4.05(e) "There is plenty of economic opportunity in Durham County"

In addition, survey respondents were provided a list of community issues and asked to select the three which they felt had the greatest impact on quality of life within the county. The top two responses were "Gang involvement," cited by 45% of survey respondents, and "Homelessness" at 29%. "Unemployment" was selected in a tie with "Positive teen activities" as the third most frequent response, with 20% of respondents citing it as a top concern.[156] The results of this question are depicted in Figure 4.05(f) below.

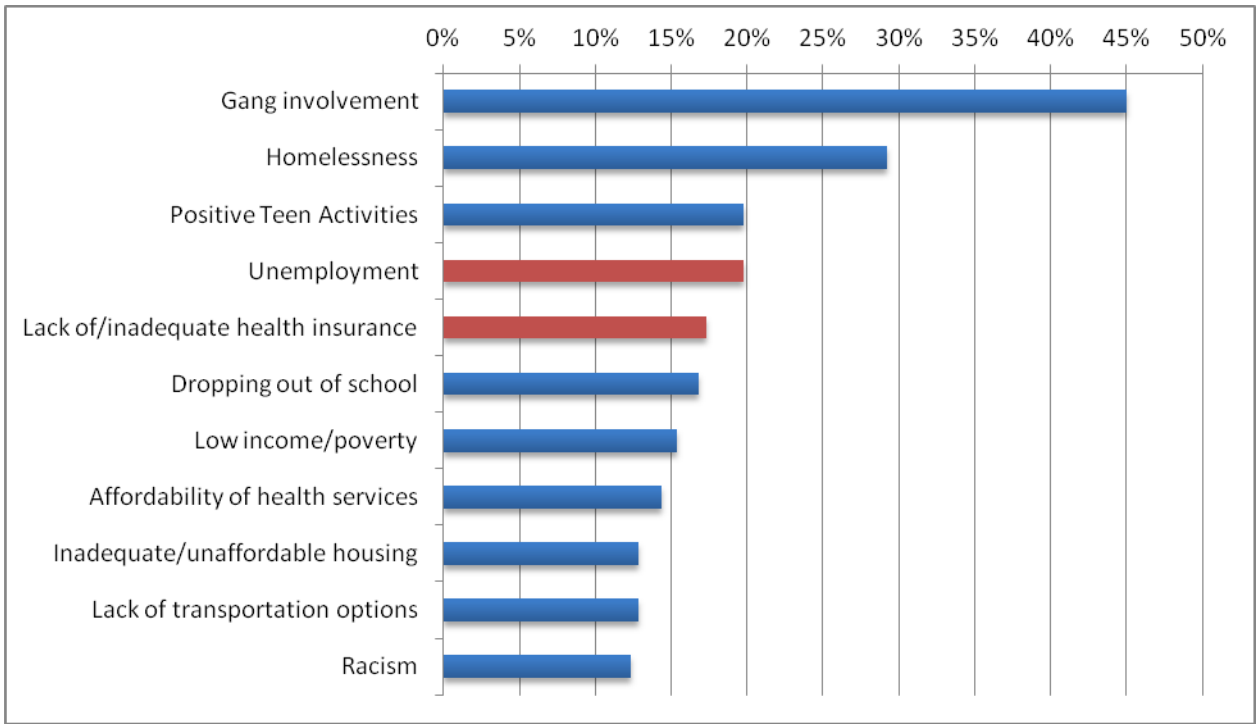

Figure 4.05(f) "Choose the top 3 issues that impact quality of life in Durham County"

Interpretations: *Disparities, gaps, emerging issues*

Disparities

Racial Disparities

The 2005-2009 census estimates for Durham County provide unemployment data among the civilian labor force for 16 years of age and older by race, which is illustrated in Figure 4.05(g).[157] Minorities, and particularly American Indians, are much more likely to be unemployed compared to Whites.

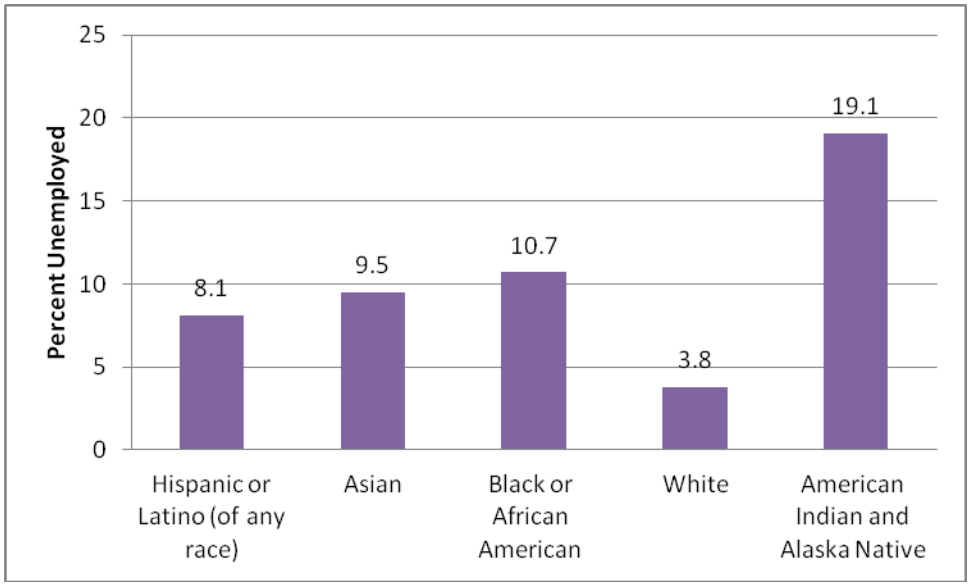

Figure 4.05(g) Employment Racial Disparities

Whites and Asians have higher annual incomes compared to African Americans and Hispanics:[158]

- Hispanic or Latino (of any race) – $14,101
- Asian – $31,692
- Black or African American – $21,105
- White – $39,601

Persons with Disabilities[159]

Persons with disabilities may also experience challenges securing suitable employment. A breakdown of estimated county data from the U.S. Census Bureau 2006 American Community Survey indicates that the median earnings for the civilian non-institutionalized population 16 years and over with a disability was $20,408 (in 2006 inflation-adjusted dollars); compared to median earnings of $28,405 for non-disabled individuals.

Gaps and Unmet Needs

Barriers exist that make securing or sustaining a job difficult for many people. These barriers include a lack of availability or access to reliable transportation or childcare, educational factors, homelessness, criminal history, substance abuse/mental health issues and credit problems. Lack of a GED or high school diploma, basic/intermediate computer knowledge (internet, typing, word processing, book keeping, databases), and soft skills (i.e., resume building, interviewing, job retention, conflict management) also affect an individual's ability to competitively seek, gain, and retain employment. Furthermore, most companies now require applicants to submit job applications electronically. In some industries walking in the door to get a job used to be the norm;

that trend has been erased due to competition for jobs, increased applicant flow and a need for greater operational efficiency.

Some of the unmet needs for those who are unemployed or underemployed include:

- A transportation system that provides better access to area employers including access to communities outside of Durham County.
- More robust and free job training: computer skills training, job getting skills and job retention skills.
- Healthy living information, including living within one's means (or living within a budget)

Much of the population, whether employed or underemployed, is unable to afford employer-sponsored health insurance plans due to cost vs. wage. The average health insurance plan is simply out of reach for many people.

Emerging Issues

In 2010, it was announced that 2,612 jobs and over $815 million of development and capital investment will be created by new and expanding businesses over the next several years which will help diversify and strengthen the economy.[160] These announced jobs are for positions in manufacturing, construction, clean energy, financial services, disaster planning, pharmaceuticals, medical instruments, information technology, biotechnology, healthcare and document management. Many of these positions will require degrees, professional certifications or industry experience. In addition, construction and service-related jobs will be spurred by the announced development and capital investment.

With the growth and creation of new jobs, comes a new issue--the issue of talent mismatch. The immediate problem is not the *number* of potential candidates. Rather, there are not enough sufficiently skilled people in the right places at the right times. In the U.S., 14% of employers reported having difficulty filling key positions within their organization, down from 19% in 2009.[161] Worldwide, 31% of employers are experiencing challenges finding the right talent.[162] As indicated by the table below, the top four most difficult U.S. jobs to fill in 2010 were Skilled Trades, Sales Representatives, Nurses and Technicians; in 2009, it was Engineers, Nurses, Skilled Trades and Teachers.[163] These job titles have appeared on the U.S. survey in past years and closely mirror the global results of the survey this year. according to a survey of more than 35,000 employers across 36 countries, which included 2,000 U.S. employers, the hardest jobs to fill are Skilled Trades, Sales Representatives, Technicians and Engineers,.[164] These are the same jobs that employers have reported struggling to fill for the past four years, suggesting that there is an ongoing, systemic global shortage in these areas. Durham faces similar shortages.

Table 4.05(b) **2010 and 2009 U.S. Jobs Most in Demand**[165]

2010 U.S. Jobs Most in Demand	2009 U.S. Jobs Most in Demand
1. Skilled Trades	1. Engineers
2. Sales Representatives	2. Nurses
3. Nurses	3. Skilled Trades
4. Technicians	4. Teachers
5. Drivers	5. Sales Representatives
6. Restaurants & Hotel Staff	6. Technicians
7. Management/Executives	7. Drivers
8. Engineers	8. IT Staff
9. Doctors, Other Non-Nursing Professionals	9. Laborers
10. Customer Service Representatives, Customer Support	10. Machinist/Machine Operator

Simultaneously, employers are seeking ever more specific skill sets and combinations of skills – not just technical capabilities alone, but in combination with critical thinking skills or other qualities that will help drive a company forward. As a result, the "right" person for a particular job is becoming much harder to find, and the problem shows no signs of easing. While this is a global issue and is not unique to Durham, it is currently impacting and will continue impacting Durham area employers as we compete for talent attraction and retention.

Durham also enjoys an emerging entrepreneurial and creative business base that serves as a promising job creation engine. Partly, this is attributed to the strength of the university system and the quality of place and life of the region.

Recommended Strategies

Employment

Numerous strategies exist for addressing unemployment or underemployment including:

1) Creation of grant-funded training programs to meet talent needs of emerging and growth markets.
2) Offering recruitment and training subsidies to encourage businesses to hire unemployed individuals by offsetting costs related to initial hire or training.
3) Providing competitive training grant funds to firms to utilize in training existing workers to assist with the skill enhancement and career advancement.
4) Offering job-creation incentives for businesses that locate or expand within the county and including work plans within the incentive agreement that require businesses to utilize the local Onestop as a recruiting resource to encourage local hiring.

5) Provision of short-term training opportunities and soft skill training within the community college to facilitate career change and work readiness for the unemployed or underemployed.
6) Provision of career counseling and assistance with employment search by professional employment counselors.
7) Conducting career fairs and workshops.

Worksite Wellness

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When it comes to worksite wellness, there are several recommended strategies for North Carolina employers. T he first is to create the North Carolina Worksite Wellness Collaborative, which would include representatives of state and local government, organizations with expertise in worksite wellness, insurers and other natural groupings of employers.[166] This Collaborative, using evidence-based strategies, should then lead efforts towards implementing the four components of a statewide worksite wellness program:[167]

1) Assessment of organizational-level worksite indicators such as policies, benefits, and workplace environments that influence employee health, and development of an organizational-level worksite action plan for workplaces to make improvements.

2) Individual employee assessments via Health Risk Appraisals (HRAs) tied to personal feedback and an actionable and specific plan for employees.

3) Technical assistance to worksites to help them implement evidenced-based strategies to address needs identified in both organizational and individual employee-level assessments and to assist worksites in meeting criteria for comprehensive employee wellness programs.

4) A data collection system that includes both organizational and individual employee indicators, tracks progress, and evaluates outcomes at the organizational and employee level.

Current Initiatives & Activities

Durham County has a bounty of resources to assist underemployed and unemployed individuals with employment search and training, as well as addressing socio-economic factors that contribute to lack of employment.

Numerous short-term training opportunities, designed to be completed within 6 months, are available through Durham Technical Community College to assist entry- level or career changers in their search for employment. Soft skill trainings are also offered to accommodate individuals with work readiness components, such as resume writing, applications and interviewing. Furthermore, tuition funds are available on a select basis for individuals whose families have been adversely affected by the demise of the tobacco industry within the county.

Additionally, various employment services are offered through the county's local one-stop referred to as the Durham JobLink Career Center. JobLink is a partnership of public and private entities that provide workforce development benefits to both business and jobseekers in the county. Some of the JobLink partners and their services include:

- ***The North Carolina Employment Security Commission (ESC)***

Primarily assists jobseekers with job search and filing unemployment insurance claims and business with recruitment assistance and labor market information. Also provides services to Veterans.

Website: http://www.ncesc.com
Phone Number: (919) 560-6880

- ***The Durham Workforce Development Board (DWDB)***

Coordinates and oversees federal Workforce Investment Act programs geared towards serving unemployed/underemployed adults and youth ages 14-21 through career counseling/awareness, employment search and short-term training. T he DWDB also serves business through competitive training grants, employee retention efforts, recruitment assistance and hiring and training subsidies to incentivize the hiring of unemployed persons.

Website: http://www.Durhamworkforce.org
Phone Number: (919) 560-4965

- ***The Department of Social Services***

Offers a wide range of services for residents. WorkFirst is North Carolina's TANF (Temporary Assistance for Needy Families) plan to help families transition from public assistance to employment. WorkFirst provides assistance with job search, vocational training and employment retention benefits such as day care assistance, transportation and time limited cash assistance to families with children under age 18 who meet income and resource guidelines.

Website: http://www.durhamcountync.gov
Phone Number: (919) 560-8331

- ***N.C. Division of Vocational Rehabilitation Services***

Assists businesses with hiring individuals with disabilities and provides career guidance and job search assistance to jobseekers with disabilities.

Website: http://www.ncdhhs.gov/dvrs/
Phone Number: (919) 560-6810

- ***Durham Technical Community College***

Provides various short-term training opportunities, designed to be completed within 6 months, to assist entry- level or career changers in their search for employment.

Website: http://www.durhamtech.edu/
Phone Number: (919) 536-7200

- ***City of Durham's Ex-Offender program***

Provides professional career counseling, employment search and retraining for individuals with criminal backgrounds.

Website: http://www.Durhamworkforce.org
Phone Number: (919) 560-6880

In addition there are numerous private firms that provide outplacement assistance to individuals affected by layoffs/closures.

Numerous healthy living programs also exist including:

- ***Eat Smart, Move More, Weigh Less***

Eat Smart, Move More, Weigh Less is a 15 week weight-management program that uses strategies proven to work. Each lesson informs, empowers and motivates you to live mindfully as you make choices about eating and physical activity. The program is offered in the community and local worksites through a collaborative effort between Durham County Health Department and Cooperative Extension.

Website: http://www.eatsmartmovemorenc.com/
Phone Number: (919) 560-7771/560-0501

- ***Wellness for Life***

An employee wellness program offered to small businesses located in Durham County. The program includes assessments, assistance starting a worksite wellness committee, resources, programs and recommendations to offer activities that will improve the health of employees. Activities are based upon commitments and management approval.

Website: http://www.durhamcountync.gov/
Phone Number: (919) 560-7771

Section 4.06 *Crime and safety*

Overview

Nationally, the estimated number of violent crimes in 2010 declined for the fourth consecutive year; property crimes also decreased for the eighth straight year.[168] When compared with 2009 statistics, the estimated volumes of national violent and property crimes in 2010 declined 6% and 2.7%, respectively.[169] Crime rates in North Carolina also declined; the Part 1 index crime rate, which combines all violent and property crimes, decreased almost 6% from 2009 to 2010.[170]

Recent Durham County crime data reflect this same downward trend. Overall, residents feel that Durham is a "good place to live;" and for the past 5 years, both property and violent crime continue to be on the decline[vi,171] In 2010, overall Part 1 index crime was the lowest it had been in almost a decade, dropping 31% since 2001.[vii] In 2001, the Part 1 index crime rate was at 8,332 per 100,000 residents; by 2010 this rate had dropped to 5,719 per 100,000.[viii] Durham's crime is at or below average compared to communities of similar size and makeup nationally and in the Southeast, as shown in Figures 4.06(a) and 4.06(b) below.[172]

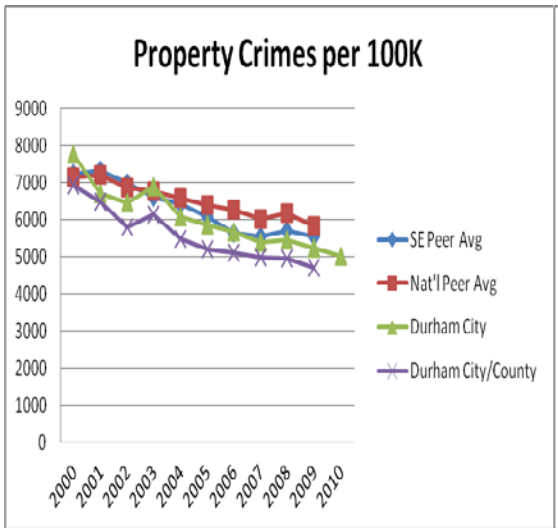


Figure 4.06(a) Property Crimes per 100,000 pop.

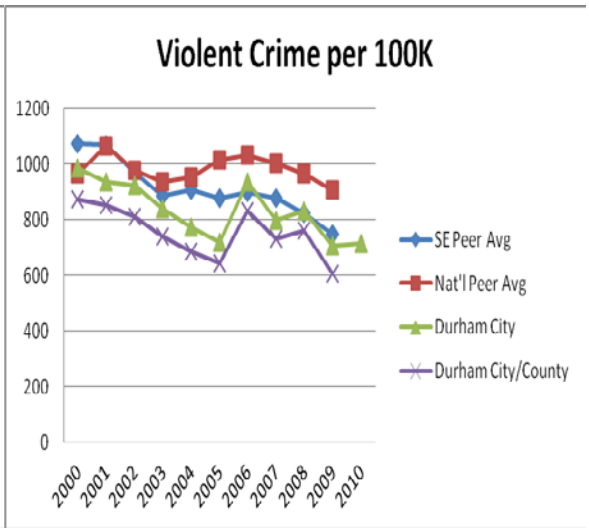


Figure 4.06(b) Violent Crimes per 100,000 pop.

Healthy NC 2020 Objective

There is no Healthy NC 2020 Objective for Crime and Safety.

[vi] Durham crime statistics compiled by Durham Police Department's Crime Analysis Unit. Written (email communication). June 17, 2011.
[vii] Ibid.
[viii] Ibid.

Secondary Data: *Major findings*

2010 Durham County Crime Statistics

In 2010, both Part 1 index crime (violent and property crime) and property crime (burglary, larceny and motor vehicle theft) dropped by 2% from 2009.[ix] Conversely, violent crime (homicide, rape, robbery and aggravated assault) increased by approximately 2% from 1,605 reported cases in 2009 to 1,635 in 2010. Of note, in 2009, firearms were involved in over 60% of robberies and in over 40% of aggravated assaults.[173] The use of firearms in robberies tends to be significantly higher in Durham when compared to its peers in the South.[174]

On the whole, in 2010, reported crimes were down in three out of seven Part 1 crime categories: robberies, larcenies and motor vehicle thefts; the number of reported rapes remained the same.[x] Tables 4.06(a) and (b) detail more explicit crime data for Durham County spanning 2008-2010.

Table 4.06(a) **2008-2010 Durham County Crime Part 1 Violent Crime Statistics** [xi]

Part 1 Violent Crime	*3-Year Average*	*2008*	*2009*	*2010*	*09-10 % Change*
Homicide	23	24	21	25	19%
Rape	68	71	67	67	None
Robbery	757	889	716	666	-7%
Aggravated Assault	835	826	801	877	9%
Violent Crime	1683	1810	1605	1635	2%

Figure 4.06(c) illustrates the weighted distribution of violent crime, which includes homicides, within the city limits of Durham in 2009. Red indicates a "hot spot" or high level of violent crimes while yellow indicates medium level and blue indicates a lower level. The two red hotspots on the map are at the intersections of N. Roxboro Street / Old Oxford Road and Holloway St / N. Alston Ave (NC-55).

[ix] Durham crime statistics compiled by Durham Police Department's Crime Analysis Unit. Written (email communication). June 17, 2011.
[x] Ibid
[xi] Ibid.

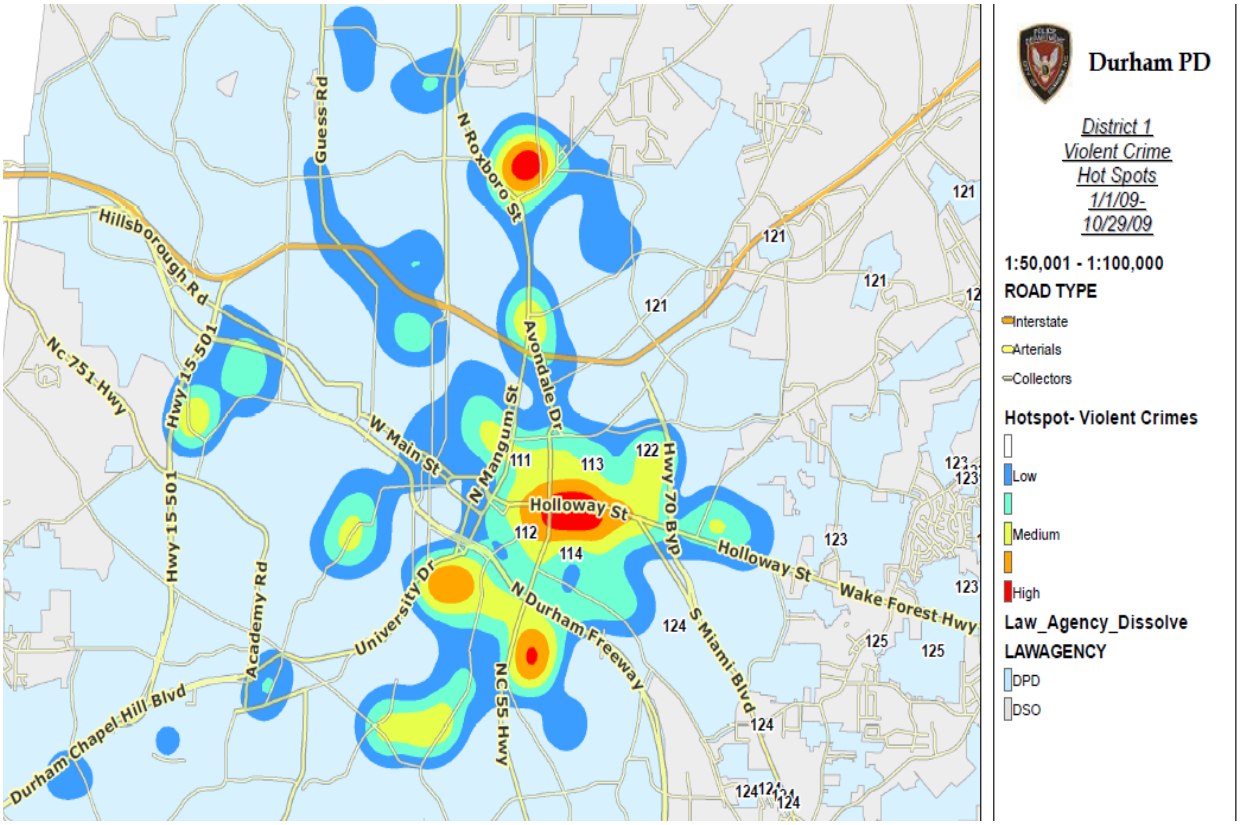


Figure 4.06(c) 2009 Violent Crime Hot Spots in Durham County[175]

Table 4.06(b) **2008-2010 Durham County Crime Part 1 Property Crime Statistics**[xii]

Part 1 Property Crimes	*3-Year Average*	*2008*	*2009*	*2010*	*09-10 % Change*
Burglary	3615	3503	3655	3687	1%
Larceny	7284	7494	7313	7046	-4%
Vehicle Theft	780	878	743	719	-3%
Property Crime	11679	11875	11711	11452	-2%

Overview of 2010 Part 1 Crimes in Durham County[xiii]

Homicides (For more information on homicides, please visit Chapter 9.)

There were 25 c riminal homicides reported in Durham in 2010, which was a 19% increase from 2009. The victims ranged in age from 16 t o 83 years old. Twenty-one victims were males and four were females. Eighteen victims were shot, five were stabbed and two were killed by blunt force.

[xii] Durham crime statistics compiled by Durham Police Department's Crime Analysis Unit. Written (email communication). June 17, 2011.
[xiii] Ibid.

Aggravated Assault and Rape

There were 695 aggravated assault incidents reported in 2010 with a total of 877 victims. Approximately one-third of the cases involved domestic violence and approximately 45% of cases involved strangers or unknown suspects.

Approximately 18% of the reported rapes in 2010 were domestic and weapons were used in fewer than 10% of the cases.

Robbery and Burglary

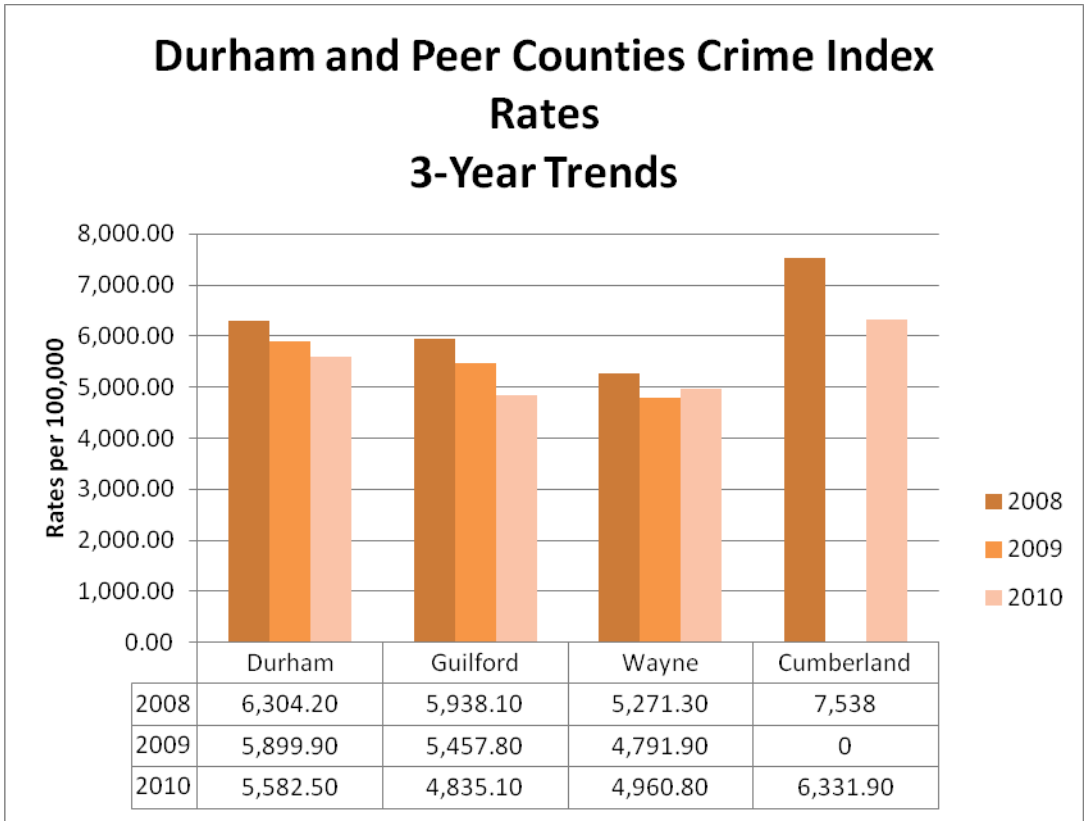
Robberies dropped 7% from 716 reported in 2009 to 666 reported in 2010. Approximately two-thirds of the robberies were from persons and an additional 19% were from home invasions. Commercial robberies comprised 16% of the robberies reported in 2010. There were also 10 bank robberies. The majority of the robberies occurred outside in parking lots and on the street.

Burglars stole more than $6.3 million worth of items during 2010. The most stolen items included computer software and hardware, electronic items, televisions, jewelry, tools and money. Approximately 85% of the burglaries were to residences.

Theft and Larceny

Thefts accounted for a property loss of more than $4.7 million in 2010. Close to half of all larcenies involved the acquisition of motor vehicles or of auto parts/accessories. Twenty-two percent of the larcenies involved shoplifting, and less than 1% were gas drive-offs.

As shown in Figure 4.06(d), in 2010, Durham's crime index rate was higher than two of its peer counties (Guilford and Wayne). However, similar to three of its four peer counties, this rate has shown to only decline between 2008 and 2010.[176]



	Durham	Guilford	Wayne	Cumberland
2008	6,304.20	5,938.10	5,271.30	7,538
2009	5,899.90	5,457.80	4,791.90	0
2010	5,582.50	4,835.10	4,960.80	6,331.90

Figure 4.06(d) Durham and Peer Counties Crime Index Rates, 3-Year Trends[177]

Primary Data

Youth Risk Behavior Survey Data (YRBS)[178]

The YRBS is a survey of 460 middle school students and 489 high school students attending Durham Public Schools. The data and charts below highlight the findings from the 2009 YRBS that relate to safety and crime:

- **Bullying:** 40% of Durham middle school students and 13.6% of high school students reported being bullied.
- **Left alone:** 25.4% of middle school and 38.9% of high school Durham youth are left unsupervised for at least three hours on most school days. This is much higher than students in the Central Region and North Carolina.
- **Carried a weapon:** 25.2% of Durham middle school students reported *ever* carrying a weapon while 15.8% of high school students reported carrying a weapon *in the last 30 days*. Durham youth in middle school carry weapons less frequently than those in the Central Region or North Carolina.
- **Gangs perceived to be a problem:** Students in Durham are much more likely to agree or strongly agree that gangs are a problem than compared to students in the Central Region and North Carolina.

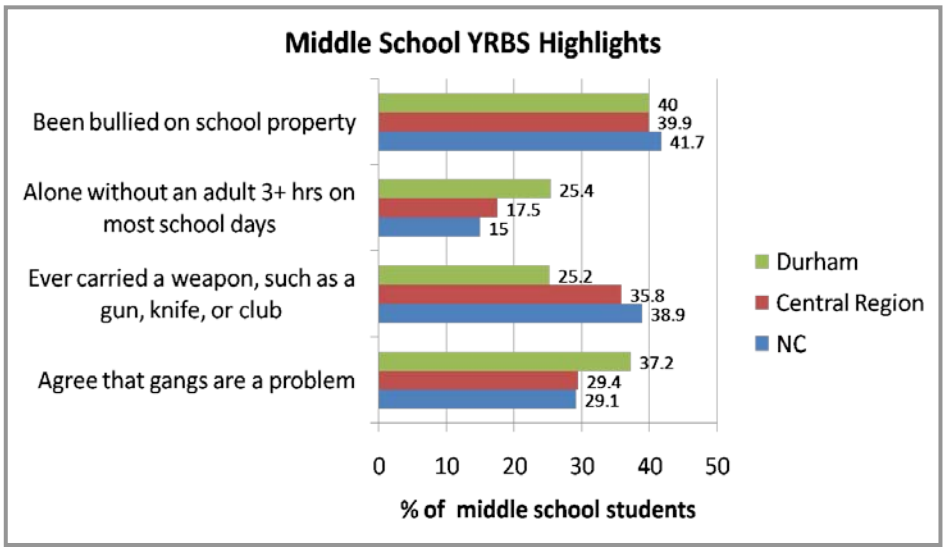


Figure 4.06(e) Middle School YRBS Highlights

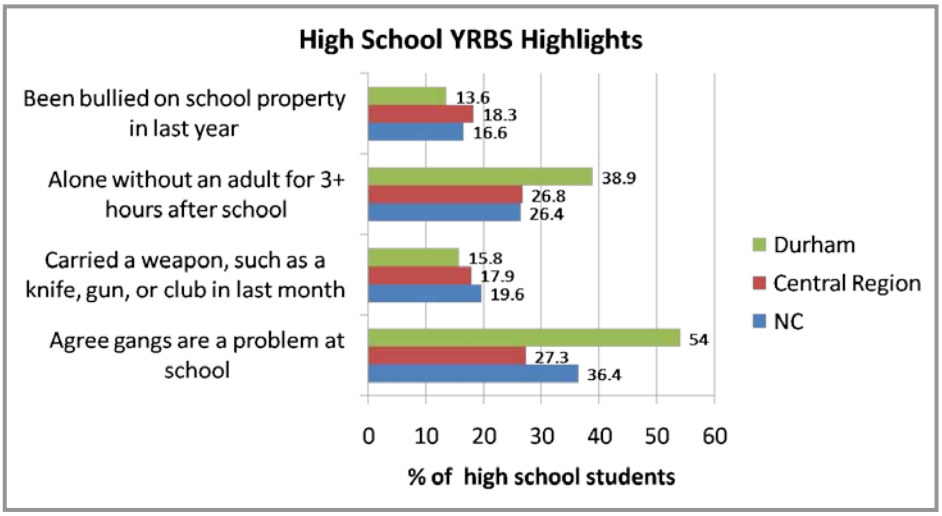


Figure 4.06(f) High School YRBS Highlights

Additionally, a disproportionate number of Black and other race high school students in Durham report not attending school because of feeling unsafe either at school or on their way getting to school.

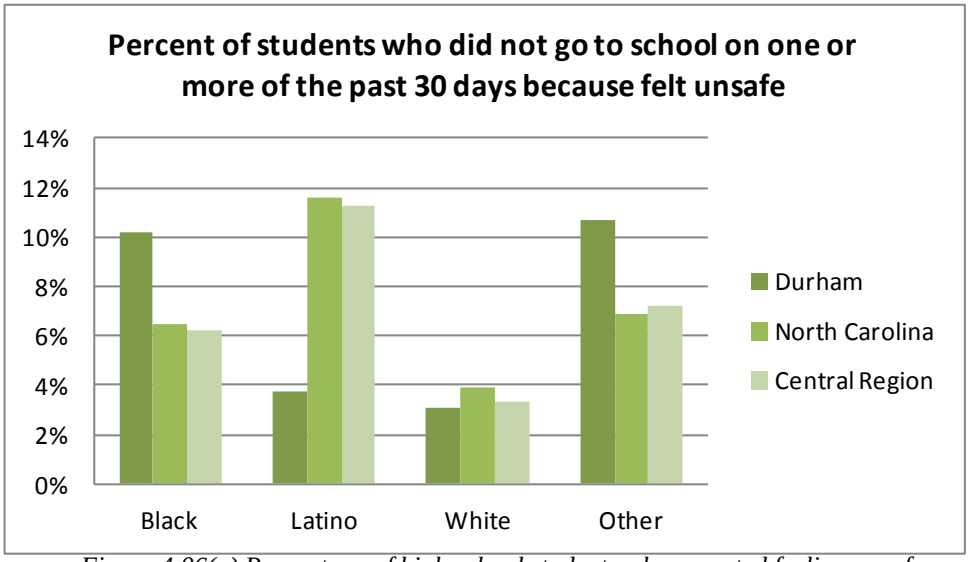


Figure 4.06(g) Percentage of high school students who reported feeling unsafe

2010 Durham County Community Health Opinion Survey[180]

According to results from the 2010 Durham County Community Health Opinion Survey, Durham residents consider crime to be a particularly important community-wide issue. When survey respondents were asked to cite what they felt were the top three community-wide issues that have the largest impact on the overall quality of life in Durham County, many cited some form of crime as at least one of their top three, as shown in Figure 4.06(h) below. The number one most frequently cited crime-related issue was gang involvement.

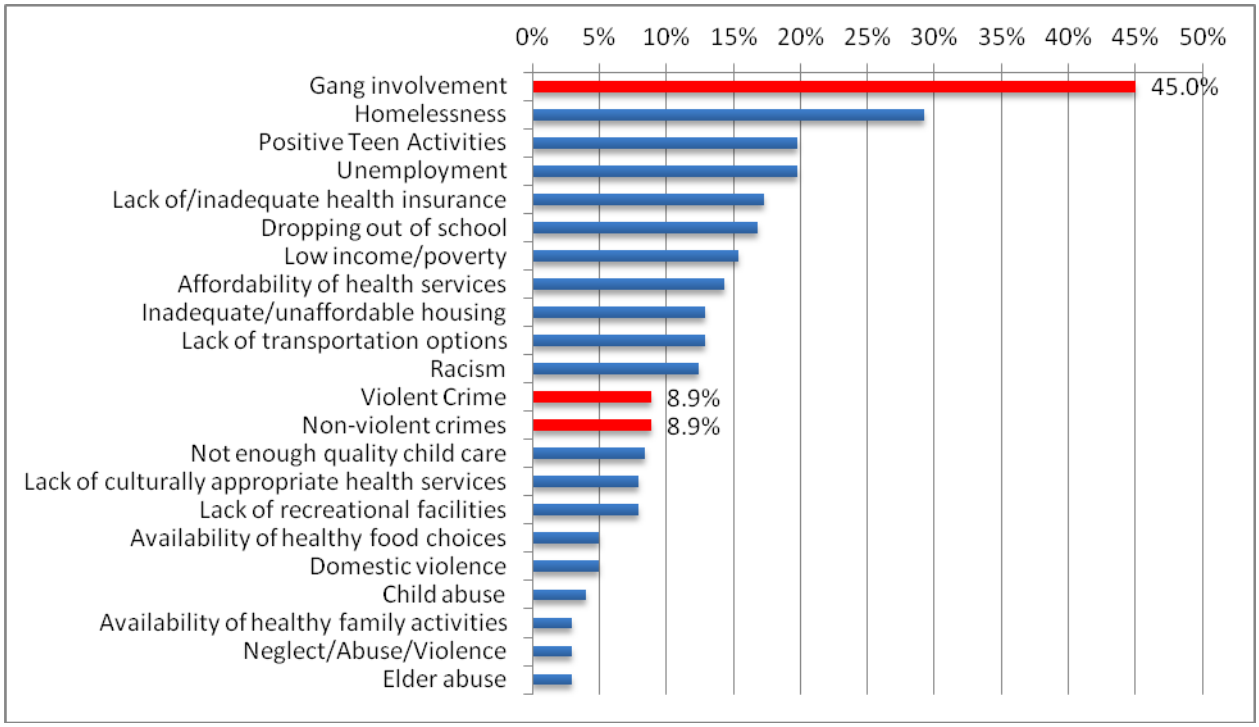


Figure 4.06(h) "Choose the top 3 issues that you feel impact the quality of life in Durham County"

Interpretations: *Disparities, gaps, emerging issues*

Disparities[181]

An alarming number of youths comprise identified crime suspects in Durham County:

- Youths between the ages of 16 and 25 years are identified as suspects in approximately 50% of violent crimes.
- Youths between the ages of 16 and 25 years account for over 55% of identified robbery suspects.
- In regards to aggravated assaults, 60% of suspects are distributed evenly between the age groups of 16-20, 21-25 and 26-30, with approximately 20% of suspects falling into each age group.
- More 17 year olds were identified as suspects in reported property crime than any other age.
- 19 is the most frequent age for violent crime suspects.
- 17 is the fourth most frequent age for violent crime suspects.

In North Carolina, youth committing delinquent acts are considered juveniles between the ages of 6 -15 years, and charged in the adult criminal justice system at age 16. However, 18 years of age is often recognized as the age of adulthood. There is an accelerated level of juvenile petitions as youth get older, with a noticeable jump at age 16 when youth can be arrested in the adult system. Table 4.05(c) details 2010 juvenile arrests in Durham County; petitions are broken down by age and crime; 17-year-olds comprise the majority of arrest/petitions. While only the primary offense is indicated in Table 4.05(c), suspects are generally charged with more than one offense.

Of note, crimes committed by youth consistently increase starting around 2 pm on weekdays, with the peak time being the 6 o'clock hour on Saturday evening.

Table 4.06(c) **2010 Juvenile Arrests/Petitions by Age/Crime**[xiv]

2010 Arrests/Petitions	8	9	10	11	12	13	14	15	16	17	Grand Total
Aggravated Assault		1				1	2	1	9	12	26
All Other Offenses					3	2	7	6	26	43	87
Burglary	1			2	2	3	7	30	10	27	82
Disorderly Conduct						1		1	4	2	8
Driving While Impaired										2	2
Drug Violations				1		1	2	7	19	44	74
Embezzlement										3	3
Fraud						1		2	3	10	16
Homicide								1		1	2
Larceny				2	10	14	21	31	51	70	199
Non-Reportable Offenses					1		1		1	1	4
Obscene Material						1					1
Rape			1	1			1	1			4
Robbery					1	6	3	1	8	22	41
Sex Offenses			1	1		1	3	1			7
Simple Assault			3	3	8	11	8	16	18	39	106
Stolen Property		1				1	2	4	4	7	19
Vandalism			5	2	1	3	6	4	2	9	32
Weapon Violations		1	1		1	3	2	5	11	10	34
Grand Total	1	3	11	12	27	49	65	111	166	302	747

An additional disparity worth mentioning is the disproportionate rate at which African American males are arrested; over 80% of suspects charged with robbery or aggravated assault are African American.

Emerging issues: Gang involvement[182]

In 2009, approximately 477 known subjects linked to a gang were involved in 1,022 incidents; this is any involvement (suspect, victim, witness, involved other, etc.). Tables 4.05(d) and (e) below depict gang involvement by age and race in Durham. The age group of 18-21 years comprises the largest amount of gang suspects, although the age group of 24 years and older comprises the largest amount of total gang involvements. Blacks comprise 88% of total gang involvements and 89% of total gang suspects.

[xiv] Durham crime statistics compiled by Durham Police Department's Crime Analysis Unit. Written (email communication). June 17, 2011

Tables 4.06(d) and (e) **2009 Durham Gang Subject Counts by both Age and Race**[183]

Gang Subject Count by Age Ranges:

Age	Total Gang Subjects (all involvements)	Total Gang Victims	Total Gang Suspects	TOTAL documented subjects affiliated with a gang
<10	0	0	0	0
10-14	0	0	0	1
15-17	16	3	13	37
18-21	152	27	137	350
22-24	87	17	70	224
>24	161	40	129	597

(note: some subjects have blank DOB's which will account for the missing numbers in the last column)

Gang Subject Count by Race:

Race	Total Gang Subjects (all involvements)	Total Gang Victims	Total Gang Suspects	TOTAL documented subjects affiliated with a gang
Black	421	91	353	1088
Hispanic	36	6	30	234
White	19	7	13	69
Asian/Pac	1	0	1	2
AmerInd	0	0	0	3
Multiple	0	0	0	1
Unknown	0	0	0	1

Recommended Strategies

According to research conducted by the National Institute of Justice, changing the built environment is important in lowering crime. It is important for cities to create a physical environment that deters crime and does not facilitate it.[184] The following recommendations have been extracted from the 1996 N ational Institute of Justice research report *Physical Environment and Crime:*[185]

1. **Design safer public housing.** Buildings with fewer apartments per entryway, fewer stories, and better views of the outside have residents with lower levels of fear and rates of victimization.
2. **Erecting barriers and changing street patterns.** In a North Miami neighborhood, building barriers and altering street patterns seem to have helped residents reduce the volume of drug dealers and buyers driving through the area. The result: Crimes such as auto theft and assault declined more rapidly in their neighborhood than in the city as a whole
3. **Controlling access to buildings, schools, parks, public housing, or other trouble spots through the use of regulated entry.** Measures used by the Bronx's Community and Clergy Coalition, for example, include requiring an identification

card, setting limited hours of usage, diverting traffic through specific checkpoints, and using metal detectors in schools or other public buildings.

4. **Creating safer public places.** Seattle's Adopt-a-Park program removes overgrown trees and bushes and increases lighting in neighborhood parks to deter drug dealing, vandalism, and the presence of homeless persons.

Regarding gang involvement more specifically, targeted efforts should be made towards Durham youths ages 12 to 13 years, as gang membership doubles during this time.[186]

Current Initiatives & Activities

Operation "Bull's Eye"[187]

On August 1, 2007, The Durham Police Department launched a new initiative called "Operation Bull's Eye;" which focuses resources on a two-square mile area of Northeast Central Durham. Figure 4.06(i) below illustrates "Operation Bull's Eye" targeted area. The target area was chosen by analyzing "shots fired" calls and violent gun crime in Durham from May 1, 2006 to April 30, 2007. This analysis showed that while the targeted area makes up only 2% of the City's area, it accounts for almost 20% of the violent gun crime, prostitution and possession of stolen goods.

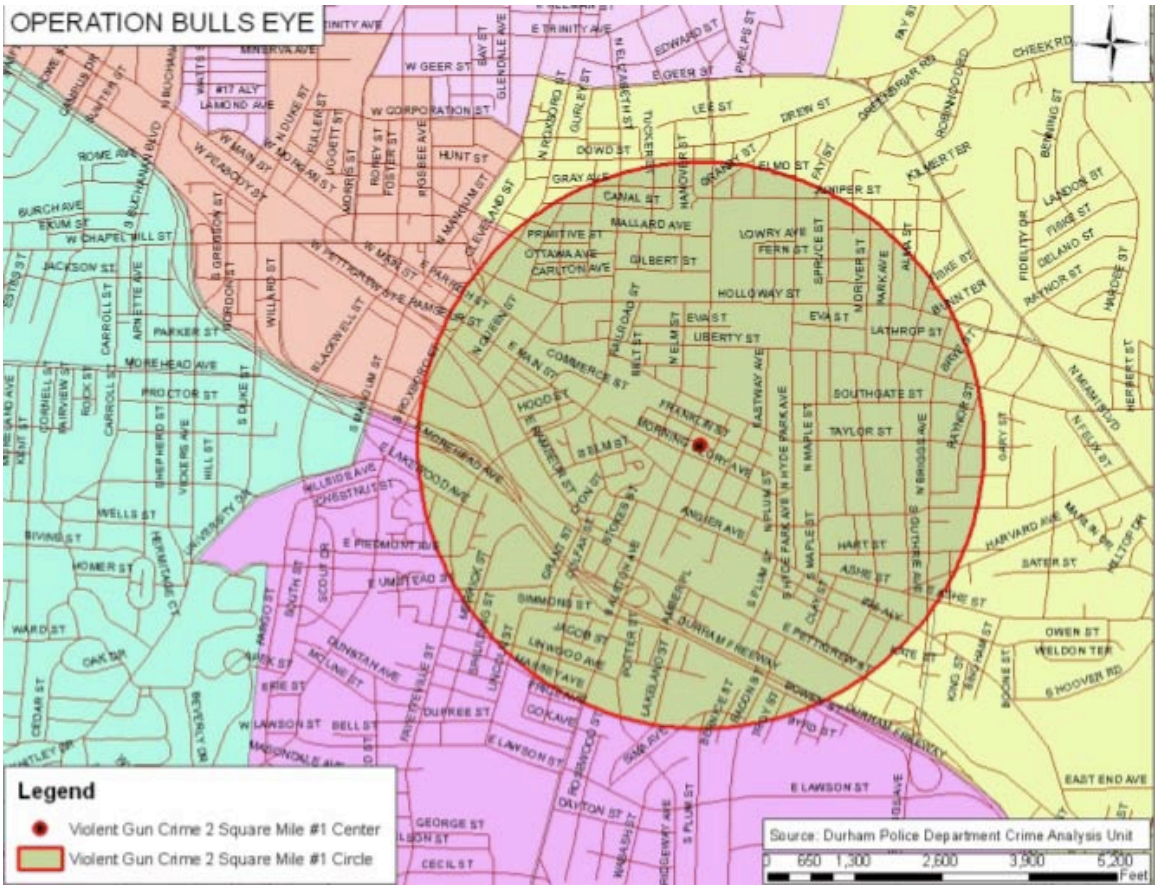


Figure 4.06(i) Operation Bull's Eye Targeted Area

A third year progress report of Operation Bulls Eye documents "shots fired" calls in the target area dropped 50% from the 1-year period prior to the initiative and violent gun crime crimes dropped 57%.[188]

Operation "Pick It and Ticket"[189]

Durham police officers issued 452 traffic citations during a two-week operation called "Pick It and Ticket" during October 2010. Officers from HEAT 1, HEAT 3 and the Warrant Squad targeted areas in Districts 1 and 3 issued citations based on complaints from residents about speeding, drug activity and other issues. The operation concluded with a DWI checkpoint on October 23 on North Alston Avenue near Hopkins Street. Officers arrested eight people for driving while impaired and arrested four wanted persons at the checkpoint. Officers also issued 83 traffic citations. The two-week operation netted the following results:

- 431 traffic stops
- 452 citations
- 55 orders for arrest served
- 23 license checks conducted
- 23 directed patrols
- 2 knock and talks
- 9 DWI arrests
- 8 prostitution arrests
- 3 firearms confiscated
- 370 misdemeanor arrests
- 11 felony arrests
- 6 cocaine charges
- 15 marijuana charges
- 43 hours in Bull's Eye target area
- 63 custodial arrests

- ***BECOMING Project***

In October 2010, BECOMING Project was implemented, which aspires to equip 800 youth diagnosed with serious emotional disturbances and mental illness with trauma focused treatment, literacy, education, employment, parenting training and pro-social skills. The initiative is funded by a $5.4 million federal grant through Substance Abuse and Mental Health Services Administration (SAMHSA) and $7.7 million non-federal match from 13 community partners over a six-year grant cycle.[190]

Website: http://www.becomingdurham.org

- ***Project Safe Neighborhoods (PSN)***

Project Safe Neighborhoods is Durham's comprehensive, strategic response to the gun violence in our community. PSN focuses on p artnering federal, state, and local law enforcement with local community and faith-based organizations to develop research-supported strategies to reduce violent crime. Law enforcement targets violent repeat offenders to remove them from our neighborhoods, while community partners develop viable resources for those offenders who are committed to changing their past involvement in crime and gun violence. Together, law enforcement and the community work to change the norms that make gun violence acceptable through targeted outreach efforts and public awareness campaigns. For information, please call PSN Coordinator Jennifer Snyder.

Website: http://www.durhampolice.com/psn/
Phone Number: (919) 560-4438, ext. 29230

- ***Durham Partners Against Crime (PAC)***

The Partners Against Crime program promotes collaboration among police officers, Durham residents, and city and county government officials to find sustainable solutions to community crime problems and quality of life issues. It is a community-based volunteer organization that promotes and executes safety strategies to prevent crime at the neighborhood level. Each of Durham Police Departments 5 police districts has a PAC organization that holds monthly PAC meetings.

Website: http://www.durhampolice.com/pac/
Phone Number: (919) 598-5398

- ***Durham Police Department***

Visit the Durham Police Department website for local law enforcement information.

Website: http://www.durhampolice.com/
Phone Number: (919) 560-4427 Desk Officer

Section 4.07 *Child care*

Overview

Child care is a basic need that helps families sustain their participation in the workforce, reduce dependency on public assistance and become more financially stable. High-quality child care also provides children with the dependable, nurturing relationships and safe, stimulating environments that are critical to building strong brains and supporting optimal child development.

Finding and paying for child care has a large impact on Durham County residents. Access to affordable, high-quality child care has a direct impact on residents' social, economic, and physical health. Without it, parents struggle to find employment that fits their schedules, struggle to choose between bills, and may leave younger children at home unattended or in the care of slightly older siblings rather than give up employment. In Durham County, an estimated 68% of children under the age of six and 79% of children ages 6-12 live in homes where all parents work, resulting in a significant need for child care.[191]

Healthy NC 2020 Objective

There is no Healthy NC 2020 Objective for Child care.

Secondary Data: *Major findings*

Affordability and quality are the two most important intersecting factors in determining access to child care. Affordability is a major issue in Durham County. The median monthly fee for full-time care for an infant in a 5-Star Rated center in Durham is $1,126 per month.[192] The median annual income for families with children under 18 in Durham is $53,862; thus child care fees represent 25% of their median annual income.[193] The median monthly fee for full-time care for a four-year old in a 5-Star Rated center in Durham is $805 per month, which represents 18% of annual median income.[194] While financial assistance is available for some, funds are simply not available for all those who need assistance. In April 2011, 2,018 of Durham's youngest citizens were on the waiting list for a child care subsidy.[195]

Licensed Child Care Centers versus Licensed Child Care Homes

- Durham County currently has 171 licensed child care centers and 213 licensed family child care homes. At the end of July 2010, 7,076 children ages birth – five and 2,215 school age children were enrolled in licensed child care centers and family child care homes.[196]
- Across North Carolina, there are 8,376 licensed child care businesses. Of these, 4,935 are centers and 3,441 are family child care homes. At the end of July 2010, 182,695 children ages birth – five and 71,776 school age children were enrolled in licensed child care centers and family child care homes.[197]

Figure 4.07(a) below compares the percentage of licensed child care homes versus licensed child care centers between Durham and two of its peer counties and the state as a whole. Noticeably, Durham has a lower percentage of licensed child care centers and a larger percentage of licensed child care homes than both the State and peer counties.[198]

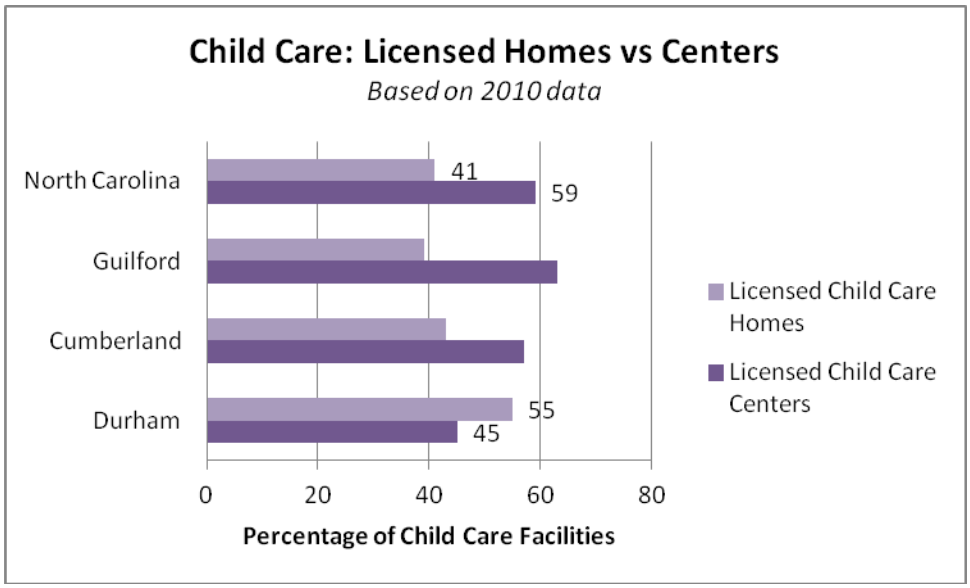


Figure 4.07(a) Licensed Child Care Centers vs Homes

The Star Rating System

Since its inception, the North Carolina Star Rating System has played a significant role in improving high-quality child care choices for consumers. Child Care Services Association (CCSA) uses the North Carolina quality rating system for licensed child care programs to connote those child care programs offering high-quality care. Research has shown that young children benefit from high quality child care and will be more ready for success in school as a result.

Quality child care consists of many components. The Star Rating System provides simplified information necessary for parents to make informed child care decisions. All child care businesses must meet basic health and safety standards for state licensure. Star Ratings allow these businesses to voluntarily demonstrate higher levels of quality and give parents the information they need to make informed child care choices. Star Ratings are measured on a 1 to 5 scale, with 5 stars ensuring the highest level of quality. The Star Rating System provides a consumer scorecard to demonstrate effectiveness, while ensuring the needs of children, families, businesses and investors are met.

Currently, 315 child care businesses in Durham County have voluntarily met the standards to earn a 2-5 star rating. Of all the licensed programs in the county, 57% of centers and 39% of homes have a 4 or 5 star rating. However, not all families can access high quality programs because of the high cost, as mentioned previously. Among birth to five-year old children enrolled in centers in Durham County, 60% are in 4 or 5 star

licensed centers. Among birth to five-year old children enrolled in homes in Durham County, 45% are in 4-5 star licensed homes[199].

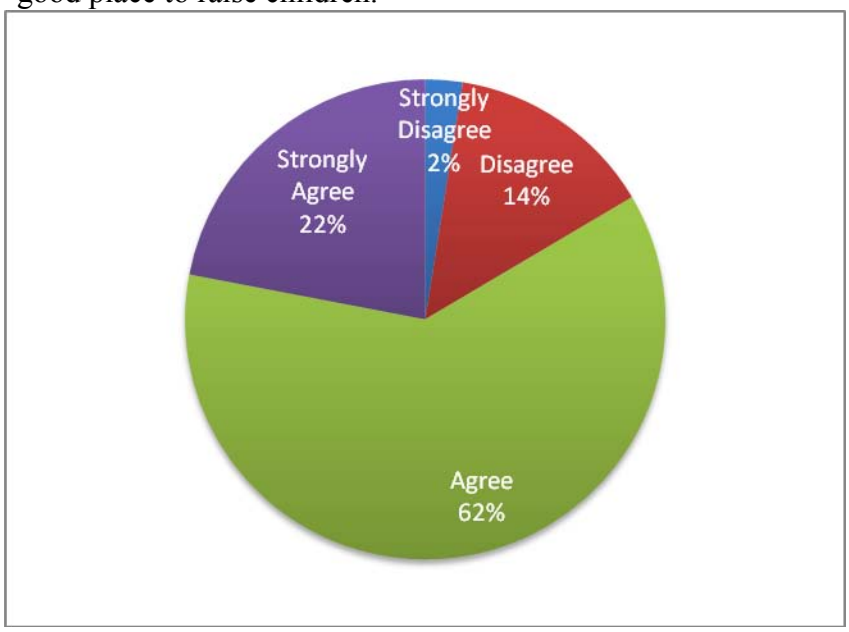
In 2010, 63% of North Carolina's children enrolled in early care and education attended 4- and 5-star programs as compared to 33% in 2001.[200] In 2011, 61% of all Durham County children ages birth to five in early care and education attended high quality (4- and 5-star) programs as compared with 27% in 2001. A dditionally, 90% of Durham County children birth to five with special needs and from low-income families were in high quality (4- and 5-star) programs as compared to 75% in 2001; 63% of Durham County children birth to five whose families received help paying for early childhood care and education attended high quality (4- and 5-star) centers as compared to just 17% in 2001.[201]

Fifty-seven percent of centers and 39% of homes have a 4 or 5 star rating in Durham County;[202] comparatively, in Cumberland County, 29% of centers and 30% of homes have a 4 or 5 star rating.[203] In Wayne County, which is another peer county of Durham though not depicted in Figure 4.07(a) above, 43% of centers and 14% of homes have a 4 or 5 star rating.[204]

Primary Data

Results from the 2010 Durham County Community Health Opinion Survey show that quality daycare is something that matters to Durham residents. When asked to provide their top three community-wide issues, 8.4% of the 207 households randomly surveyed cited lack of quality child care in Durham County as one of their top three concerns. Child care ranked 14th out of 24 options. The top four community issues were gang involvement, homelessness, lack of positive teen activities and unemployment.[205]

This survey also revealed that 84% of residents agree or strongly agree that Durham County is a "good place to raise children."



Interpretations: *Disparities, gaps, emerging issues*

The cost of child care is extremely high. Families who are not eligible for subsidy, or are on the waiting list for subsidy, and who cannot afford higher rated quality care for their children may be forced to place their children in unlicensed and therefore unregulated child care settings. Research shows that a child's early experiences have a measurable impact on brain development and later success in school and life. In an unlicensed setting, children may not be exposed to as positive and stimulating a learning environment as in licensed and higher rated child care settings, and therefore these children may not be as well prepared to enter school.

Gaps and Unmet Needs

While low vacancy rates in Durham child care programs have traditionally caused families to struggle to find quality child care, families in the current recession are grappling with an ever-shrinking capacity to afford care. For most, child care costs exceed almost all other household expenses. A Durham County family with an infant and preschooler can face over $20,000 in annual child care costs. As mentioned previously, the cost is high and there are hundreds of families on the waiting list for child care subsidies.

Emerging Issues

The availability of federally subsidized programs like Head Start, Early Head Start and child care subsidies help low-income families pay for child care, but they are not enough. Low-income families in our community are falling into crisis when the waiting list for child care programs outgrows their ability to wait any longer. High quality child care is expensive, and therefore more funds are needed to ensure that parents with young children can both work and provide good quality care for their children. In addition, child care teachers receive very low pay, despite increasing educational requirements, and many have little to no benefits such as health insurance. This could discourage qualified individuals from working in the child care field and will over time effect the quality of child care services available.

Current Initiatives & Activities

- ***Durham's Partnership for Children, a Smart Start Initiative (DPFC)***
  Provides funding to a variety of programs to help improve the quality and affordability of child care for children age birth to five. They provide funds to support higher education for child care teachers, improve the wages of child care workers who are in one of the lowest paid professions, and help with child care subsidies. The Partnership administers North Carolina's More at Four program which provides a preschool program for disadvantaged, four-year-old children in Durham County.

  Website: http://www.dpfc.net
  Phone Number: (919) 439-7107

- ***Durham's Alliance for Child Care Access (DACCA)***
  A collaboration of the Department of Social Services, DPFC, CCSA, and Operation Breakthrough Head Start. Through this partnership and sharing of resources, DACCA provides child care subsidies and scholarships to low-income families in Durham.

  Website: http://www.childcareservices.org/fs/resources.html
  Phone Number: (919) 560-8300

- ***Chapel Hill Training-Outreach Project, Inc. (CHTOP)***
  Durham Early Head Start
  Durham Early Head Start serves 120 children, families, and pregnant women through two different program options: intensive home visiting services and high-quality center-based child care. Participants also receive comprehensive family support and health services.

  Website: http://www.dpfc.net/EarlyHeadStart.aspx
  Phone Number: (919) 439-7107

- ***Child Care Services Association***
  Smart Start Child Care Scholarship Program
  Supports working parents by increasing the affordability and accessibility of high-quality child care and improves school readiness by promoting quality in the Durham early care and education system.

  School Readiness Quality Enhancement/Maintenance
  Provides technical assistance to child care programs seeking to improve and maintain the quality of child care for children birth to 5 years in Durham.

  Choosing & Using Quality Child Care
  Provides information and referral to parents about the quality and availability of child care programs and other family resources.

  T.E.A.C.H. Early Childhood ® AmeriCorps Program
  Provides educational release time to teachers of children birth to age 5 working in licensed, nonprofit child care centers.

  WAGE$®
  Provides education-based salary supplements to child care teachers, directors, and family child care providers.

  Website: http://www.childcareservices.org
  Phone Number: (919) 403-6950

- ***Community Partnerships, Inc***.
  Durham Inclusion Support Services
  Provides consultation, technical assistance and training to child care providers and families who care for a child for whom there is a developmental, behavioral or social/emotional concern.

  Website: http://www.compart.org
  Phone Number: (919) 402-9400

- ***Durham Council for Children with Special Needs***
  Hispanic/Latino Consultation Services
  Offers interpretation and translation services for Spanish speaking families with children with or at-risk for special needs.

  Phone Number: (919) 956-5016

- ***Durham County Cooperative Extension***
  Welcome Baby Family Resource Center
  Provides parent support groups, parenting classes and family literacy training for families with children, birth to age 5.

  Website: http://www.welcomebaby.org
  Phone Number: (919) 560-7150

- ***Durham County Health Department***
  Child Care Nutrition Consultation
  Provides professional nutrition consultation and training to child care staff and parents to promote nutrition and physical activity.

  Website: http://www.co.durham.nc.us/departments/phth/
  Phone Number: (919) 560-7600

- ***Durham's Partnership for Children***
  Community Awareness & Education
  Works collaboratively with organizations, coalitions, groups and individuals across Durham County to educate the local community about issues affecting young children and families and how quality early care and education is a vital piece to our overall education system.

More at Four
Provides quality pre-k to eligible 4-year-old children. The program is designed to prepare children academically and socially for kindergarten.

Website: http://www.dpfc.net
Phone Number: (919) 403-6960

- ***Operation Breakthrough***
  Head Start
  Head Start is designed to provide a quality education for young children and help parents establish goals designed to aid the entire family.

  Website: http://www.obtnc.com/HeadStart.htm
  Phone Number: (919) 688.5541 x227

- ***El Centro Hispano, Inc.***
  The Family Support Program
  Provides Spanish speaking families with referrals to community resources, ESL classes, parent education and family literacy activities.

  Website: http://www.elcentronc.org
  Phone Number: (919) 687-4635

- ***Exchange Clubs' Family Center***
  Early Childhood Outreach Project (EChO)
  Provides consultation, training, support and referral services to Durham child care providers and families to enhance the social-emotional development or decrease the challenging behaviors of children at-risk for difficulties in kindergarten.

  Website: http://www.exchangefamilycenter.org
  Phone Number: (919) 403-8249 x233

Contributors

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4.07	Child care	Colby Falconer	Child Care Services Association, Development Manager

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