

# Community Health Assessment 2007

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# Section I Introduction

### Introduction

The purpose of this project is to conduct a detailed Community Health Assessment (CHA) of Caswell County. This process began in July 2006. The data collection and research for the 2007 Community Assessment was conducted through the Caswell County Health Department. A Community Health Assessment Process Team (CHAP) was established to manage the process. The CHAP Team was involved in the process through each phase, from developing survey questions to providing input for the development of recommendations.

The Community Assessment process was guided with the belief that community members are the most qualified individuals to effectively prioritize the health and safety concerns in their community. The Caswell County Health Department in partnership with local agencies will continue to plan and execute creative solutions to Caswell County's most severe health problems. The CHAP Team understands that Community Health Assessment is a work in progress. Assessment and evaluation of programs and initiatives are continuous and the information gathered through this process will continue to guide community organizations as they strive to improve the health of Caswell residents.

### 2007 Caswell County Community Health Assessment Team

### Jennifer Eastwood, MPH - CHA Coordinator \*\*\*

Caswell County Health Department - Health Educator

### Fred Moore, MD - Data Team Co-Facilitator \*

Caswell County Health Department - Health Director

### Sharon Ferguson - Data Team Co-Facilitator \*\*\*

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Caswell County Board of Health - Member

Caswell Senior Center, Advisory Board - Member

Caswell Parish, Advisory Board - Member

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### Donnie Powell, RS - Resource Team Co-Facilitator \*

Caswell County Environmental Health Department – Environmental Health Program Specialist

### Zulay Clark - Resource Team Member

Prospect Hill Community Health Center - Director

### Shirley Deal, RN - Resource Team Member

Caswell Family Medical Center - CEO

### Betty Gentry - Resource Team Member

Caswell County Cooperative Extension Services – EFNEP Extension Agent

### Beverly Hargis, RN - Resource Team Member \*\*

Caswell Family Medical Center - Director of Nursing

### Sandra Hudspeth - Resource Team Member \*

Caswell County Partnership for Children - Executive Director

### Susan McWhorter - Resource Team Member

Caswell County Board of Health – Member Yancey Village Preservation Advisory Board – Member

### Patricia Morales - Resource Team Member

Prospect Hill Community Health Center - Migrant Outreach Worker

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### Donna Pointer - Resource Team Member

Caswell Senior Center - Director

### Jack Turner, - Resource Team Member

 $Caswell\ County\ Board\ of\ Health-Chairperson$ 

### Beatrice Williamson - Resource Team Member

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### **Non-Team Contributors**

Jason Barrow – Survey Development \*

Caswell County Parks & Recreation – Director

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Caswell County Planning Department - County Planner

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The Caswell Messenger – Advertising Manager

\*Survey Development Team \*\*Community Reporting Committee

### The Assessment Process

Caswell County CHAP Team was the guiding force behind the 2007 Community Assessment. The Team was divided into two groups at the first meeting. The Resource Team was given the task of developing a resource map to account for the county's assets. The Data Team began collecting secondary data from a variety of sources. Their task was to collect and analyze this data.

The CHAP Team decided that it would be appropriate to use the convenience sampling method to collect the primary data because of the ease of reaching individuals. Team members identified community groups who would receive community assessment surveys. A subcommittee was formed to develop the Survey. This committee used the 2003 Community Health Assessment Survey as a template. For a complete survey distribution list see Appendix A.

The survey results were tabulated and a report was created. This report was distributed by the same method and in the same locations as the original surveys, except for the Caswell Messenger. The final report findings will be reported via the newspaper after the final report is given to Caswell County Commissioners and Board of Health.

Two other health assessments were being conducted at the same time as the CHA. The CHAP Team made every effort to be involved in both of the other surveys and share information as appropriate. Arin Ahlum Hanson, a student at UNC-CH's School of Public Health conducted a Caswell County Prenatal Needs and Services Assessment. This report describes the prenatal needs and services in Caswell County and proposes options that might improve the health of pregnant mothers in the county. The student used statistical information and also interviewed prenatal service providers within and outside the county, as well as mothers who live in Caswell County and key stakeholders. This report can be found in Appendix B.

The Dan River Community Health Assessment was conducted on behalf of MDC, Inc in Chapel Hill for the Danville Regional Foundation. The Danville Regional Foundation was formed from the sale of the Danville Regional Health System. The funds from this foundation profit the City of Danville and Pittsylvania County, VA, as well as, Caswell County. The foundation's Board selected three areas for long-term investment—health, education, and economic development. The consulting team for the Dan River CHA conducted focus groups in Caswell County and interviewed key leaders in the region. This report can be found in Appendix C.



# **Section II:**

# **Community Information**

Geographical & Historical Information

**Population** 

Workforce

Agriculture

Transportation

Education



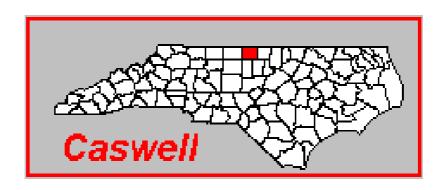
Caswell County is located in north-central North Carolina. Acres of virgin forest, fertile fields of crops, rolling pastures and miles of winding country roads and meandering streams create the perfect backdrop for Caswell's rich history. Nestled among Person, Orange, Alamance, and Rockingham counties, it is bounded by the state of Virginia to the north. The county has a total area of 428.9 square miles.

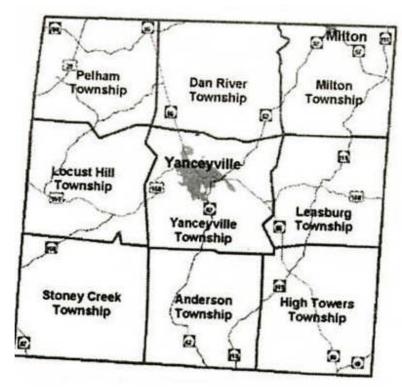
Caswell County was formed on May 9, 1777 and was named in honor of Richard Caswell—member of the first Continental Congress, Major General in the Revolutionary army, and first governor of North Carolina after the Declaration of Independence. On February 1, 1792, Caswell was reduced in size when Person County was formed from its eastern half. Prior to the Civil War, Caswell was one of the wealthiest counties in the state.

Agriculture has been a vital part of Caswell's history. The Brightleaf Tobacco Curing Process originated in Caswell and tobacco production remains an important industry in the county. In addition to tobacco, the agriculture industry in Caswell includes soybeans, corn, grains, and various types of livestock.

Caswell is conveniently located within an easy driving distance from Greensboro, Raleigh, Durham, and Chapel Hill. Its rural nature and rich history make Caswell County an excellent destination for a day trip.

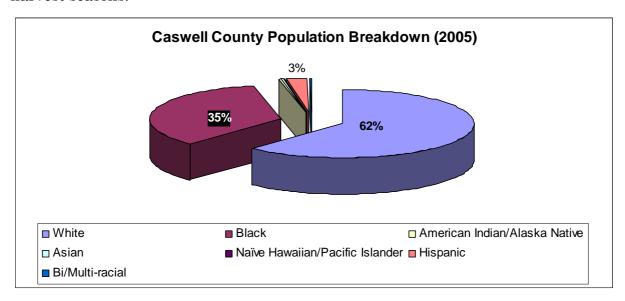






### **POPULATION**

Caswell County is mostly rural. The county is divided into nine townships, and includes two municipalities--Yanceyville and Milton. The largest municipality in Caswell County is Yanceyville, which is also the county seat. According to the U.S. Census Bureau the 2006 population of Caswell County was estimated to be 23, 546—a 0.2% increase from the 2000 Census. The Caswell County distribution of population by race is broken down as follows: 62.3% White/Non-Hispanic, 34.7% Black or African American, 2.6% Hispanic or Latino origin, 0.2% American Indians or Alaska native persons, 0.2% Asian, and 0.3% reporting two or more races. It is possible that Caswell County's Hispanic/Latino population is higher than actually reported due to the presence of a migrant population during the planting and harvest seasons.



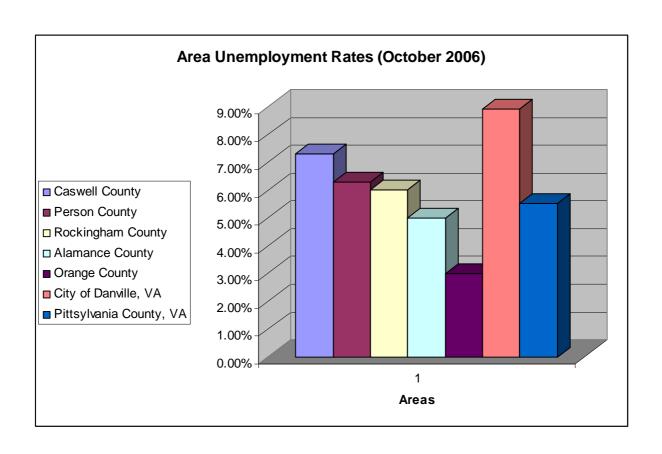
The population density of Caswell County is 55.3 persons per square mile. Per Capita income in the county is \$22,046 which ranks it 83<sup>rd</sup> out of North Carolina's 100 counties (#1 Rank = highest). The Median Family income is \$34,058.00. 14.8% of Caswell County's total population is below the poverty level according to 2003 data.

### **WORKFORCE**

Caswell County is mostly rural and it is perceived that farming is a major economic activity. Since it was founded in 1777, Caswell County has been comprised of farming communities with crops including grains, corn, soybeans, tobacco, and various livestock operations. In addition to the traditional crops, other agricultural opportunities have been realized through horticultural nurseries and strawberry patches and other fruit orchards. Only 1.6% of the Caswell workforce, however, belongs to the agriculture, forestry, fishing, & hunting industry group.

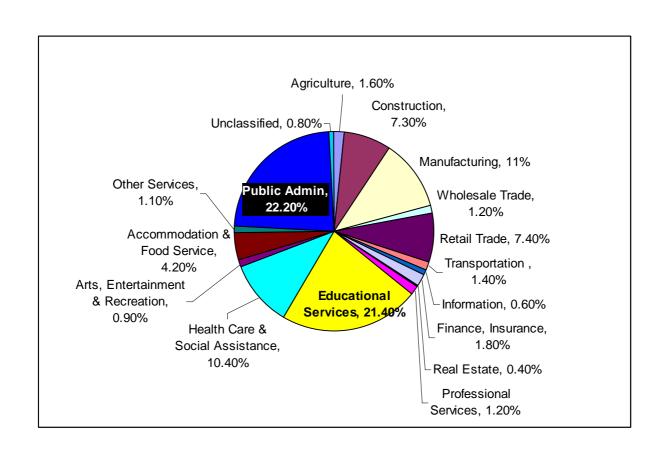
It is surprising to know that the 18-34 year old labor force within thirty miles of Yanceyville is over 85,000. This labor force is predominantly comprised of workers experienced in traditional manufacturing including textiles, metal fabrication, food processing, and electronics. Caswell County's average weekly wage for 2005 was \$396, while the average weekly wage for surrounding counties was \$550. Over 68% of workers living in Caswell County work outside the county. They drive an average of 25 minutes each way. Most of the commuting workforce would prefer to work nearer home. Approximately 23% of workers employed in Caswell County commute into the county to work each day. Thirty-two percent of the in-commuters come from Danville, VA. Generally speaking, area residents are not sensitive to county borders when considering where they would like to be employed.

Next to quality labor, worker training is one of the most important concerns of any area when attracting industries. Piedmont Community College in Yanceyville designs and offers worker training program for a variety of industries. PCC conducts pre-employment and skills training for many existing Caswell County companies.



# Workforce by Industry Group 3rd Quarter 2006

	County Workforce		Average Weekly Earnings	
	Number	Percent	County	State
Agriculture, Forestry, Fishing, & Hunting	53	1.6%	\$529	\$535
Construction	234	7.3%	\$449	\$688
Manufacturing	355	11.0%	\$464	\$891
Wholesale Trade	39	1.2%	\$1,140	\$1,051
Retail Trade	238	7.4%	\$316	\$448
Transportation and Warehousing	46	1.4%	\$557	\$725
Information	19	0.6%	\$229	\$1,119
Finance and Insurance	58	1.8%	\$787	\$1,849
Real Estate and Rental and Leasing	13	0.4%	\$402	\$685
Professional and Technical Services	38	1.2%	\$600	\$1,080
Educational Services	688	21.4%	\$568	\$644
Health Care and Social Assistance	334	10.4%	\$469	\$679
Arts, Entertainment and Recreation	29	0.9%	\$307	\$535
Accommodation and Food Services	136	4.2%	\$173	\$248
Other Services ex. Public Admin	35	1.1%	\$397	\$459
Public Administration	715	22.2%	\$563	\$723
Unclassified	27	0.8%	\$321	\$508
Total	3,219	100%	\$493	\$744



### Top 5 Employers in Caswell County 3<sup>rd</sup> Quarter 2006

Employer	Employment Range	Industry
Caswell County Schools	500 - 999	Education & Health Services
County of Caswell	250 - 499	Public Administration
State of North Carolina	250 - 499	Public Administration
Brian Center	100 - 249	Education & Health Services
Royal Park Uniforms, Inc	50 - 99	Manufacturing
Royal Textile Mills, Inc	50 - 99	Manufacturing



### **AGRICULTURE**

Agriculture continues to have a presence in Caswell County, although, as with most of Piedmont North Carolina, the number of farms and the number of farmers continue to decline rapidly. The number of acres farmed and the number of cropland acres harvested, though, has shown only modest declines over the past twenty years. Nearly half the county's land acres are still classified as farm, with much of the remainder as rural non-farm. Throughout the state, as commercial farms have increased in size and economic value, farming as a way of life has given way to agriculture as a business, with relatively large investments in land, equipment, and other purchased inputs. While commercial farms have not become a direct threat to small farmers in Caswell, the county's farmers are indirectly feeling the pressure to compete. In fact, Caswell County has become home to a number of hobby farms or rural residences where the income from the farm is not a major component in continued use of the land.

The latest Census of Agriculture shows Caswell County with 517 farms. The majority of Caswell Farms (65%) are 180 acres or less. However, only eight of Caswell's farms sell over \$500,000 per year. Caswell County still has more than 3,000 harvested acres of tobacco, but this number is declining. There were around 6,000 acres in 1997. In addition to tobacco, corn, soybeans, small grains, hay crops, and pastures complete the majority of farm enterprises. More than half of the farms in Caswell are livestock operations. There are small acreages of fruits and vegetables, nursery crops, and berries.

Landowners and prospective purchasers continue to seek ways to farm profitably in Caswell County, both by increasing the size of traditional agricultural enterprises, and by alternative enterprises that have the possibility of greater value added per acre such as vineyards, tomatoes, and alfalfa and orchard grass for the horse industry. Some farms will continue to be operated as hobbies or as the traditional "way of life," supported by off farm jobs or other income sources. The value of the county's rural setting to current residents, prospective buyers, and county visitors alike is a constant in any discussion of land use, tourism, or just as a "nice place to live."

### **TRANSPORTATION**

Caswell County is situated among a matrix of primary and secondary travel routes. Caswell County's highway system contains nearly 122 total miles of paved, primary roads (both municipal and non-municipal). In addition it contains 461 paved and almost 46 miles of unpaved secondary roads. Yanceyville and Milton do contain some sidewalks, however, because the county is rural in nature, pedestrian traffic is limited. Highway 29, a four-lane divided highway runs through a corner Caswell.

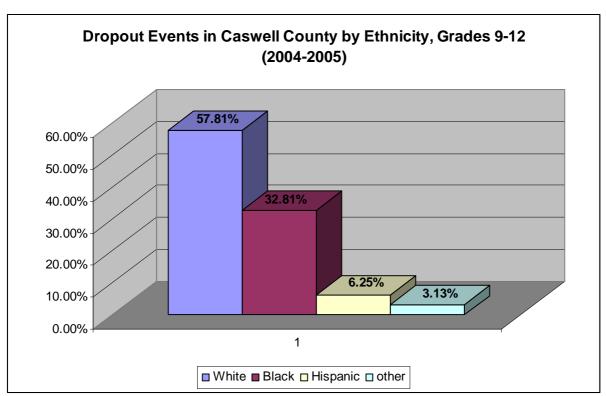
Caswell County Area Transportation (C-DOT) provides subscription and dial-a-ride services for certain authorized residents of the county. Currently, there are no general public routes.

# To A The Service of t

### **EDUCATION**

Caswell County's education system is made up of four public elementary schools which contain Pre-K through fifth grade, one public middle school which serves sixth through eighth grades, and one public high school serving ninth through twelfth grades.

According to 2004-2005 information published by North Carolina Department of Public Instruction the rate of high school drop outs in Caswell County was 5.95 (64 students). This is a slightly higher rate than the North Carolina drop out rate of 4.74. The graph below shows the percentage of drop out events by ethnicity. Drop out rates are equal between males and females. Dropout Rates for Caswell County seem to have peaked during the 2003-2004 school year at 8.27 and have been declining since.



Source: North Carolina Department of Public Instruction

The table below shows the number of student applications for Free or Reduced lunch by site. Overall 55.82% of Caswell County Students are considered to be "needy," whereas 48.46% of North Carolina Students are considered to be "needy." The School with the highest amount of "needy" is Oakwood Elementary School in Yanceyville.

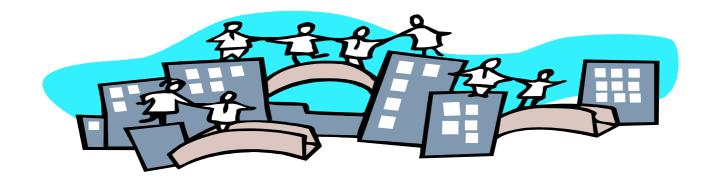
Tancey vine.						
	North	Carolin	a Departmer	nt of Public	Instruction	
	Child Nutrition Services					
	Free and Reduced Application Data By Site					
	Public School Year-to-Date Data					
_			2006 - 2	2007		
	Provided by: 0	Operation	nal Accounti	na Section	- Financial Services	
	ADM	Applications		Needy	Grade	
Site Name		Redu ced	Free	%	Level	
Bartlett Yancey High	1001	82	352	43.36%	09 12	
North Elementary	471	40	247	60.93%	PK 05	
N L Dillard Middle	766	76	348	55.35%	06 08	
Oakwood Elementary	425	44	269	73.65%	PK 05	
South Elementary	357	30	182	59.38%	PK 05	
Stoney Creek Elementary	228	15	128	62.72%	PK 05	
Sponsor				55.82		
Totals:	3,248	287	1,526	%		

### School Health

Caswell County Schools employs three, state-funded school nurses, which equals a 1:1,088 nurse to student ratio. This is higher than the state recommended 1:750 nurse to student ratio. The Caswell Nursing program began three years ago with two nurses. Additional funding was recently received from the state to hire a third nurse. The School Nursing program has implemented a school health program that has positively impacted the health of Caswell County students, faculty, and staff.

In addition, the Caswell County Schools has an active School Health Advisory Council (SHAC). The SHAC was created as a result of the Healthy Active Child Policy by the State Board of Education. The SHAC continues to analyze components of school health and implement policies and procedures to improve health in these areas. A list of SHAC members can be found in Appendix D.

Continuing education is now conveniently available in Caswell County at the Piedmont Community College—Caswell Site. In addition to traditional college-level courses, PCC in Caswell can design and offer worker training programs for any type of industry. The college is also recognized for excellence in Criminal Justice and Emergency Medical Training programs. In addition, they operate a center for training film production camera operators, electricians, set carpenters, and other film technicians through their Motion Picture Production Technology Program, which draws students from throughout North Carolina and other states.



# **Section III:**

# Engaging the Community Primary Data

Community Health Assessment Survey 2007
Caswell County Schools BMI Report
Community Resources



## Community Health Assessment Survey 2007

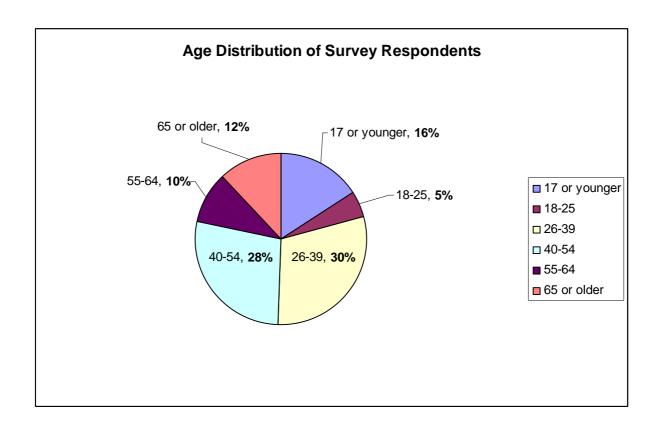
The Caswell County CHAP Team developed the 2007 survey by compiling individual ideas, community issues, common interests, and by using the 2003 survey as a guide. The result was a seventy-five-question survey that proved lengthy, but proficient.

Between January and March 2007, approximately 11,000 surveys were distributed to the people of Caswell County through various locations. Surveys were distributed as an advertisement wrap in The Caswell Messenger for one week circulation (4,800) and were distributed to students and staff at all Caswell County Schools (3,727). Some teachers actually gave homework grades to students who brought back surveys that had been completed by their parents. High School students were allowed to complete their own surveys. The remainder of the surveys were distributed to churches, businesses, medical facilities, and civic organizations. In addition, an online version of the survey was posted. CHAP Team members distributed the link to their various contacts in the county and a link to the survey was posted on the health department's website. A total of 898 surveys were returned completed, or an 8% rate of return.

The CHAP Team feels the information received from the completed surveys is a good representation of what issues need to be addressed in the community. The 2007 Community Health Assessment Survey & Results can be found in Appendix E.

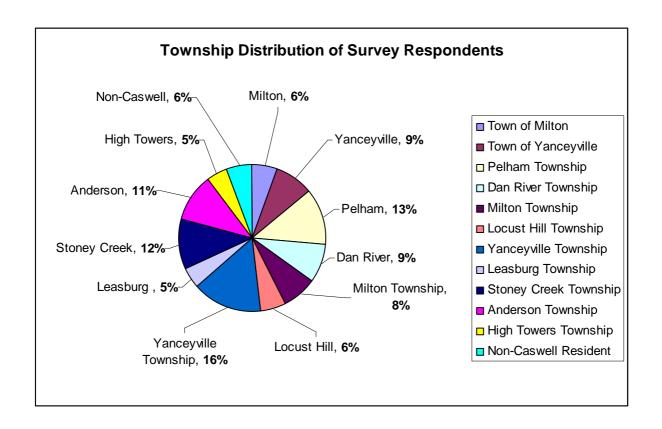
### SURVEY DEMOGRAPHICS

A total of 898 surveys were completed by Caswell County residents or people who work in Caswell County between January and March 2007. Of the people who completed the survey, 16% were 17 or younger, 5% were between ages 18 and 25, 30% were between ages 26 and 39, 28% were between ages 40 and 54, 10% were between ages 55 and 64, and 12% were 65 or older. 75% of respondents were female and 25% were male.

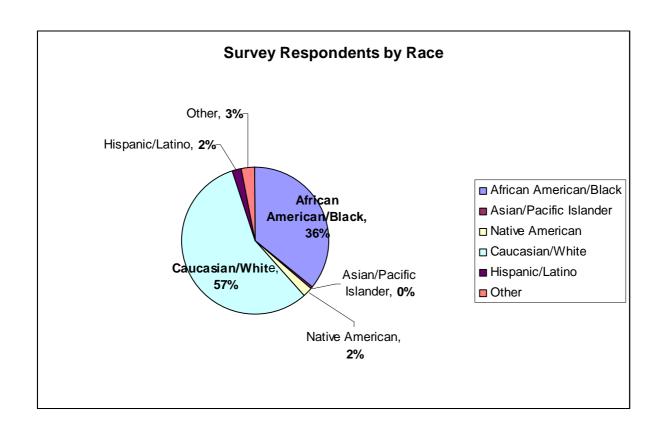


Surveys were distributed to the citizens by way of churches, medical offices, schools, senior center, government agencies, businesses/restaurants, by community volunteers, and online. The surveys were dispersed among all nine townships and two municipalities in Caswell. Respondents were asked to indicate the township or

municipality in which they reside. A map of the townships was included in the survey as a reference for residents.



Out of 898 Caswell County residents surveyed, **57**% were white, **36**% were black, **2**% were Hispanic/Latino, and **3**% reported something other than one of these categories. The race distribution of the survey respondents accurately portrays the racial breakdown of the county's population.



### SURVEY RESPONSES

The survey was broken down into various sections including Healthcare Cost & Access, Environmental Health, Weight Management, Tobacco Use, Public Health Preparedness, Substance Abuse, Health Conditions and Problems, Child & Adult Care, and Recreational Activities.

### Healthcare Cost and Access

- Most respondents (50%) pay for their health care through private insurance provided by their employer. 28% have Medicare or Medicaid, and 15% pay out-of-pocket. Only 5% have purchased private insurance for themselves.
- 70% of respondents reported that they spend less than \$50 out-of-pocket for visits to a doctor's office or other health care provider. This does not include dental visits or pharmacy expenses.
- 74% of respondents reported that they had not been without health care coverage at any time within the last 12 months. Of those who were without

- 9% reported that they could not afford premiums for private insurance and 7% reported that they were ineligible for Medicaid or other medical assistance. 7% lost insurance when they changed jobs and 4% indicated that they could not afford premiums for insurance offered through their employer. Only 2% could not get coverage because of pre-existing conditions.
- The majority (84%) of respondents have insurance to cover at least some cost of prescription medications and 68% of respondents report they spend less than \$50 out-of-pocket for prescriptions.
- 76% of respondents report that they have seen a doctor for a routine checkup in the past year. 5% report that it has been more than 5 years since they had a routine checkup with their physician. This does not include sick or emergency visits.
- Respondents were asked if there was a time during the past 12 months when they thought they needed to see a doctor but did not, and what their reasons were for not seeing a physician. Over half (59%) reported there was no such time. 14% could not afford to get medical care and 10% report that it takes too long to get an appointment or wait to be seen. 8% had "other" undisclosed reasons for not receiving care, 4% had no transportation, and 3% say that the medical office was not open during a time when they could get there.
- The same question was asked of respondents with regards to seeing a dentist within the past 12 months. Again, over half (55%) reported there was no such time. 21% could not afford to get dental care. 9% indicated "other" reasons they had not been to the dentist; several stated they do not like going to the dentist, or that they have dentures. 8% report that it takes too long to get an appointment or be seen and 3% say they had no transportation.
- 64% of respondents say they have visited the dentist within the past year and 10% indicate it has been 5 or more years since they have seen a dentist.
- When respondents get sick or need medical care 54% say they go to a
  provider outside of Caswell County, 36% see a provider in Caswell County,
  and 6% go to a hospital ER.

• **75**% of respondents do not believe there are enough health care providers in Caswell County.

### **Environmental Health**

- 86% of respondents have wells as their water source, the rest use public or community sources.
- 77% have not noticed any discoloration or odor to their water; 10% have noticed discoloration only; 8% have noticed odor only, and 5% have noticed both.
- Only **20**% of respondents personally know someone whose well is or has ever been contaminated.
- The majority (54%) believe there is no need for a county-wide water system.
   However if a county-wide water source were available 53% of the respondents indicated that they would use it.
- Most people (52%) indicated that their septic system has never
  malfunctioned and 54% of respondents report they have their septic tank
  pumped as recommended every three to five years. 26% do not know if their
  septic system has malfunctioned.

### Weight Management

- **49**% of respondents consider themselves to be overweight. The rest do not believe they are overweight.
- 62% indicated that their doctor or other health care professional has not given them advice about their weight in the past year. 29% say their health care provider has encouraged them to lose weight.
- 47% of respondents are not trying to lose weight. 23% are attempting to lose weight through a combination of diet and exercising more.
- 81% of respondents believe obesity is a problem in Caswell County.

- 86% of respondents indicate that they walk on regular basis and 19% play sports. Other popular physical activities included weight training, running/jogging, and aerobics.
- 20% indicate they engage in physical activity one day per week or less, 38% are physical active one to three days per week, 24% report three to six days, and 18% are physically active every day.
- When respondents do in engage in physical activity **34**% report they get less than 30 minutes, **57**% get anywhere from 30 to 90 minutes, **9**% get more than 90 minutes.
- Respondents indicated that they would be more active if the following were offered:

À	Greenways or Walking Trails	<b>50%</b>
_ <b></b>	Pools	36%
₩	Bike lanes & paths	24%
	Sidewalks	22%
	Aerobics	21%
7	Golf	2%
Ψ'	"Other"	6%

Responses included Horse Trails (Bridal Paths), facilities for weight training, and gyms.

Note: Since this survey a Ladies Only Gym has opened in Yanceyville.

- 18% of respondents say they would not be more physical active even if the above were offered.
- 18% of respondents would not be more likely to eat better if "healthy" options
  were clearly marked on menus at area restaurants. The rest of the
  respondents would be more likely eat better.
- 16% of respondents would not be more likely to make healthier food selections if "healthy" options were clearly marked at the grocery store. The rest of the respondents would be more likely to make better choices is they were clearly marked.

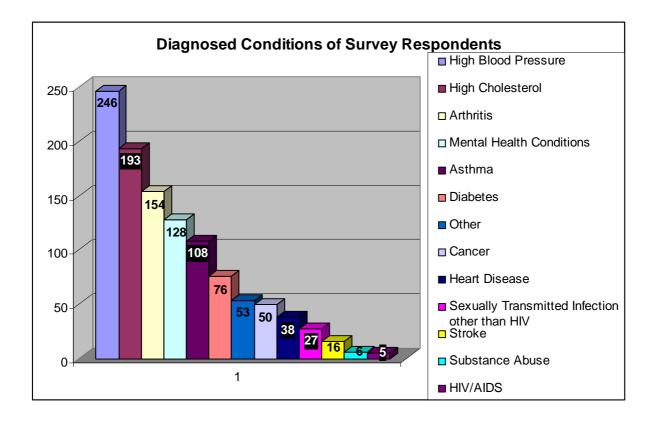
### **Tobacco Use**

- 73% of respondents have not used tobacco products in the past year. 21% have used cigarettes. 6% used cigars, pipe tobacco, snuff, and chewing tobacco.
- For those who currently, or have ever, used tobacco products 19% began
  using between the ages of 15 and 18. 10% began using before age 15 and 59%
  of respondents have never used tobacco products.
- 77% are not tobacco users or have already quit using. 10% indicate that they are not ready to quit. Of those remaining, 10% believe Nicotine Replacement Therapy would help them quit, 4% believe individual counseling would help, and 3% believe a support group would be helpful.
- 77% of respondents believe tobacco use is a health concern in Caswell County.
- 53% of respondents are concerned by secondhand smoke in restaurants. 20% are concerned by secondhand smoke at work and 20% at home. 33% are unconcerned by secondhand smoke anywhere.
- **75**% of respondents believe there should be regulations against smoking in public.

### Public Health Preparedness

- 48% of respondents do not have an emergency plan for their family in case of a disaster.
- 43% do not have water stored. Only 11% have more than a week's supply of water stored for each member of their family.
- **63**% of respondents do not know where their closest emergency shelter is located.
- 21% of respondents do not have a supply of non-perishable food items stored for each member of their family. 21% have more than a week's supply.
- **Half** of respondents have heard of the possibility of a Pandemic Flu and understand the threat; **28**% have not heard.

### Health Conditions & Problems



- Survey respondents were asked with which health conditions they had been diagnosed. 44% indicated they had high blood pressure, 34% had high cholesterol, 27% had Arthritis, 23% had been diagnosed with mental health conditions or illnesses, 19% had Asthma, 13% had Diabetes. Less than 10% had been diagnosed with cancer, heart disease or stroke, Sexually Transmitted Infections, Substance Abuse, or HIV/AIDS.
- 25% of respondents are dissatisfied with health care in Caswell County.
- Respondents were asked to rank the five most important health problems or conditions facing Caswell County. They are listed below in order of importance, with 1 being the most important.
  - 1. Cancer
  - 2. Obesity/Overweight

- 3. Tobacco Use
- 4. Cost of doctor or health care visits
- 5. Cost of prescriptions
- Respondents were asked to rank the five most important unhealthy behaviors facing Caswell County. They are listed below in order of importance, with 1 being the most important.
  - 1. Drug Abuse
  - 2. Alcohol Abuse
  - 3. Unsafe Sex
  - 4. Poor diet or eating habits
  - 5. Lack of physical activity
- Only 5% of respondents would rate their own personal health as unhealthy.
   The rest believe they are somewhat healthy to very healthy.
- 81% of respondents agree that Caswell County is a healthy place to live.

### Adult & Child Care

- 84% of respondents agree that Caswell County is a good place to raise children.
- **56**% of respondents do not agree there are enough child care facilities in Caswell County.
- 73% of respondents do not agree there are enough activities for youth, ages 20 and younger, in Caswell County.
- **67**% of respondents do not agree there are enough activities for adults, ages 21 to 64, in Caswell County.
- **56**% of respondents do not agree there are enough activities for senior adults, older than 65, in Caswell County.
- Most respondents (79%) agree that Caswell County is a good place to grow old.
- **67**% of respondents do not agree that there are enough residential adult care facilities in Caswell County.

### Recreational Activities

- **58**% of respondents never use the county provided recreation facilities in a typical month; **36**% use it once to 10 times, and **6**% use it more than 10 times.
- Respondents were asked what current recreation facilities they or their families have used in the past year. The following were the responses:

Walking Trail	27%
Tennis Courts	8%
Athletic Fields	23%
S.R. Farmer Lake	8%
Gymnasium	16%
Picnic Shelter	16%
Playground	22%
Other	2% (included use of game lands)
None	39%

- Almost half of respondents (48%) do not feel that Caswell County currently offers sufficient recreation facilities.
- 39% feel that the Caswell County recreation facilities are adequately maintained, but 21% feel they are not; 40% don't know.
- Respondents were asked what currently offered recreation programs they, or their family, participate in. The following were responses were collected:

•	Youth Sports	31%
•	Summer Camps	10%
•	Senior Games	4%
•	Adult Sports	4%
•	Special Olympics	4%
•	Other	6%
•	None	<b>55%</b>

• Respondents were asked what programs that are NOT currently offered that they, or their family, would participate in if they were offered. The following were responses collected:

•	Youth Sports (Soccer and Volleyball)	11%
•	After-school activities	17%
•	Arts/crafts	25%
•	Adult Sports	12%
•	Fitness Classes	46%
-	Other	<b>7</b> %

"Other" included bridal paths/horse trails, walking trails, aquatic center, and weight training facilities

■ None 27%

- Respondents were asked to rank currently unavailable recreation facilities that would have the greatest impact on them or their family. They are listed below in order of importance with 1 having the most impact.
  - 1. Walking/hiking trails
  - 2. Air conditioned gymnasium
  - 3. Outdoor basketball courts
  - 4. Soccer/football fields
  - 5. Other (included aquatic facility, bridal path/horse trails, weight training facility)
- **53**% of respondents learn about recreational activities by reading about them in the Newspaper (The Caswell Messenger) and **49**% learn of them by word of mouth. **37**% indicated they learn about these activities from flyers distributed in school.

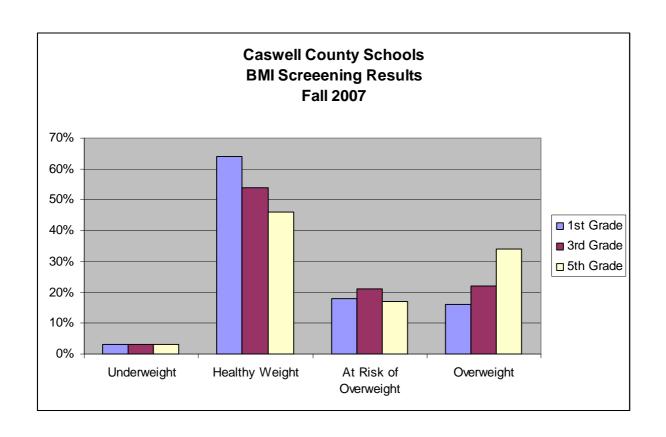
# Caswell County Schools Body Mass Index Report

The Caswell County School Nurses conducted Body Mass Index Screenings at four of the elementary schools. The nurses sent home notices to the parents of first, third, and fifth-grade students. Parents were given the right to "opt" their child out of the BMI screening.

Body Mass Index for children is broken down into the following categories:

- Underweight equals BMI less than 5<sup>th</sup> percentile
- Healthy Weight equals BMI from 5th percentile up to 85th percentile
- At Risk of Overweight equals BMI from 85th to 95th percentile
- Overweight equals BMI greater than or equal to the 95th percentile

As shown in the following graph the percentage of "Overweight" students increases with the grade level. The percentage of first-grade students who are Overweight is 16%. By third grade it has increased to 22% and continues to increase to 34% in fifth grade. By comparison, the total percentage of Overweight children in Caswell County is 26%. This is barely higher than the state rate of 25.2%, however it is considerably higher than the national rate of 19%.





# Community Resources

The Resource Team worked to develop a list of community resources. The Team turned to the Chamber of Commerce for a list of faith-based and civic organizations. Though these lists are available through the Chamber, the information they contain is not current. Therefore, each team member was assigned a township and asked to create a list of the following assets:

- Faith-based organizations
- Civic Organizations
- Medical Providers & Facilities, including long-term care facilities
- Educational Facilities, including child care providers
- Human Service Organizations

- Physical Activity Facilities
- Businesses and Restaurants
- Elected Officials & Other People of Influence

The Resource Team found that resources in Caswell County are generally clustered within the Yanceyville Township, especially with regards to health services and opportunities for physical activity.

The list of resources generated by the Resource Team can be found in Appendix F.



# Section IV: Health Information

Population
Pregnancy Related Statistics
Causes of Death
Access to Care

#### <u>Initial Considerations:</u>

This section of Caswell County's Community Health Assessment is a review of population and health statistics that were compiled by the North Carolina State Center for Health Statistics and the US Census Bureau. While these data provide useful and interesting information about Caswell County, it is important to remember that any statistics derived from small numbers must be interpreted carefully. Data can sometimes appear to indicate that major changes have take place while in reality it is just a random fluctuation within a small population. For example, if only two events happen during one year and three the next year, this mathematically increases the event rate by 50% while it only involved one additional event.

Another situation that can lead to uncertainty in the data for Caswell County is that there is no hospital within our borders and there are only four medical providers. As a result of this, residents of the county go to hospitals and medical providers that are located within the surrounding counties, as well as across the state line in Danville, VA. Statistics about care provided in North Carolina are probably fairly accurate but data about the large amount of care provided in Virginia are probably quite limited.

#### Total Population

Over the last 75 years, Caswell County's population has remained remarkably stable while North Carolina's and the USA's population have undergone major changes. During the 25 year period between 1980 and 2005, the total population of

#### Population Change From 1930 To 2005

	1930	1940	1950	1960	1970	1980	1990
USA	122,800,000	131,700,000	150,700,000	179,300,000	203,300,000	226,500,000	248,700,000
North Carolina	3,170,276	3,571,623	4,061,929	4,556,155	5,084,411	5,880,095	6,632,448
Caswell	18,214	20,032	20,870	19,912	19,055	20,705	20,693

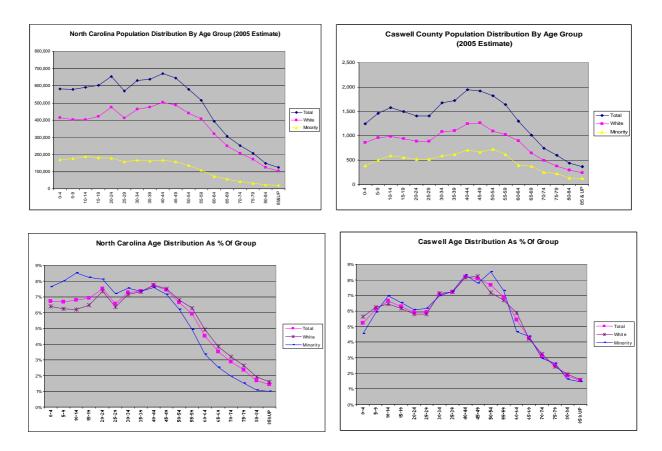
	2000	2005 (est.)	
USA	281,400,000	288,400,000	
North Carolina	8,082,261	8,682,066	
Caswell	23,501	23,759	

1930-	2005	1980-2005		
Population Change	% Change	Population Change	% Change	
165,600,000	135%	61,900,000	27%	
5,511,790	174%	2,801,971	48%	
5,545	30%	3,054	15%	

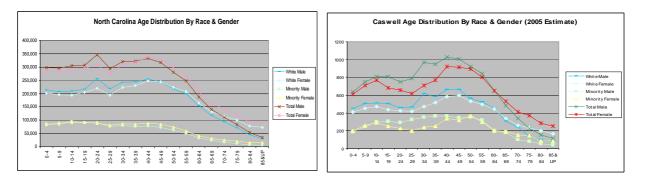
US increased by 27% and that of North Carolina increased by 48%. During that same time period, Caswell County's total population increased by only 15% and most of that change occurred during the 1990s. Between 1930 and 2005 the population of the US more than doubled and North Carolina's almost tripled while Caswell County's total population only increased by 5,545 (30%). The county's high death rate in combination with the low live birth rate as well as the number of economic migrants that leave Caswell County all contribute to its slow growth.

#### Population Distribution By Age, Race and Gender:

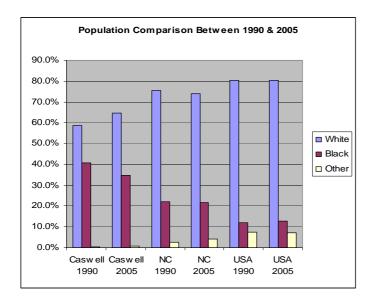
A comparison of the age distribution of North Carolina's and Caswell County's total population shows that Caswell County has a slightly older population. Most of this age distribution difference seems to be accounted for by a larger population in North Carolina of younger minorities and a smaller portion of Caswell County residents of all races under the age of twenty. This corresponds to Caswell County's low birth rate that will be discussed later. In contrast to North Carolina, Caswell County does not seem to have a racial difference in population distribution by age (e.g. 40 to 44 year olds make up 8% of both white and minority populations)



A comparison of gender distribution by age in North Carolina and Caswell County shows an interesting difference in the young female population. In Caswell County, females between 15 and make up a smaller portion of the population than in North



North Carolina. Most of this difference was accounted for by the minority female population.



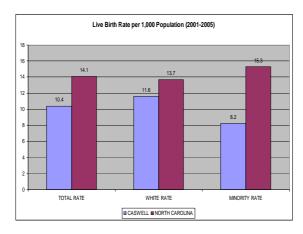
While no evidence was seen to explain this difference, the authors speculated that it may have to do with a higher proportion of females leaving the county for educational, employment or marriage opportunities.

While the population of Caswell County has not changed much over the last 15 years, there has been a

noticeable shift in the racial makeup. Caswell County continues to have a significantly larger minority population than North Carolina and the USA but over time, Caswell County's racial makeup appears to be changing to become more like the rest of North Carolina and the USA. Between 1990 and 2005 the black population in Caswell County dropped from 41% to 35% (a decrease of about 170 individuals) while North Carolina's and the USA's remained steady at 22% and 12% respectively. Compared to North Carolina and the USA, Caswell County has a much smaller proportion of "other" races and that percentage is not increasing as fast as it is in the rest of North Carolina and the USA. Some of this trend may be due to a higher birth rate within Caswell County's white population as compared to the black population but migration may also play a role.

#### **Pregnancy Related Statistics**

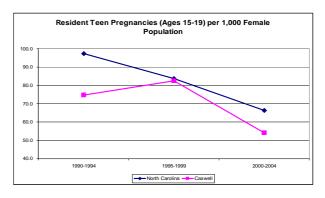
The total birth rate in Caswell County is about 26% lower than the statewide birth



rate. Caswell County's birth rate of 10.4 births per 1,000 population is the 16<sup>th</sup> lowest rate in the state. When this figure is broken down by race, the minority population's birth rate in Caswell County is 46% lower than the statewide minority birth rate while the white birth rate is only 15% lower. Caswell's minority population has the 13<sup>th</sup> lowest birth rate

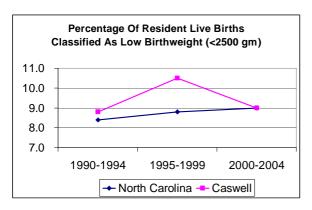
in the state. This low birth rate probably plays an important role in the county's relatively slow growth over the last 75 years and is at least partly a reflection of the county's relatively older population.

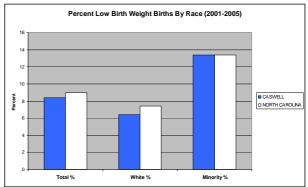
One of the issues that can lead to poor health outcomes of pregnancy as well as social complications is teen pregnancy. Between 1990 and 2004, the rate of teen pregnancy in Caswell County stayed at or below the statewide average. These



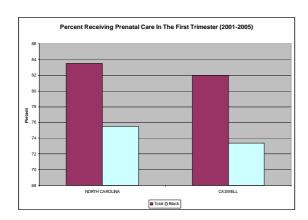
statistics describe fairly small numbers so it is possible that the variation between years might be erroneous but the pattern over 15 years probably indicates that teen pregnancy in Caswell County is less prevalent than in the rest of North Carolina.

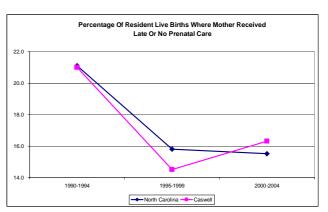
One of the major goals of prenatal care is to reduce the number of low birth weight babies. Based on the following graph, in the past Caswell County has had more of a Problem with this than the rest of North Carolina, but this has improved more recently. While more recent data show that Caswell County's percent of low birth





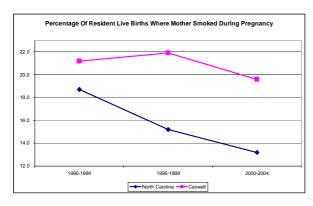
weight babies is slightly better than the rest of North Carolina, there is still a significant disparity between white and minority newborns. The minority rate of low birth weight babies is almost twice that of white babies in Caswell County as well as the rest of North Carolina.





The initiation of care early in pregnancy has long been considered one of the primary indicators of high quality prenatal care. The flip side of this statistic is that late or no prenatal care is a risk factor for a poor pregnancy outcome. The statistics indicate that pregnant women in Caswell County receive less care during the first trimester than women elsewhere in North Carolina. There also appears to be a significant racial disparity when it comes to early prenatal care with black women receiving less care than white women. While most Caswell County residents are used to leaving the county to receive health care and other services, the limited number of prenatal providers in the county produces a barrier that needs to be

overcome to help resolve this issue. Part of the solution may also be to educate the community that there are three different prenatal providers within the county, all of which have a sliding fee program to reduce financial barriers.



More than 20 percent of women smoke in the USA. This is a major public health problem because, not only can smoking harm a woman's health, but smoking during pregnancy can lead to pregnancy complications and serious health problems in newborns. As can be seen

from this graph, pregnant women in Caswell County smoke at a significantly higher rate than women in the rest of North Carolina. While there seems to be a decline in smoking rates of pregnant women in both Caswell County and North Carolina, the decline over the last 15 years has been significantly less in Caswell County.

The following several paragraphs of information about the effects of smoking during pregnancy was provided by the March of Dimes web site. If all pregnant women in the United States stopped smoking, there would be an estimated 11 percent reduction in stillbirths and a 5 percent reduction in newborn deaths, according to the U.S. Public Health Service. Currently, at least 11 percent of women in the United States smoke during pregnancy.

Cigarette smoke contains more than 2,500 chemicals. It is not known for certain which of these chemicals are harmful to a developing baby. However, both nicotine and carbon monoxide are believed to play a role in causing adverse pregnancy outcomes. Smoking nearly doubles a woman's risk of having a low birth weight baby. In 2002, 12.2 percent of babies born to smokers in the United States were of low birth weight (less than 5½ pounds), compared to 7.5 percent of babies of nonsmokers. Low birth weight can result from poor growth before birth, preterm

delivery or a combination of both. Smoking has long been known to slow fetal growth. Studies also suggest that smoking increases the risk of preterm delivery. Premature and low birth weight babies face an increased risk of serious health problems during the newborn period, chronic lifelong disabilities (such as cerebral palsy, mental retardation and learning problems) and even death.

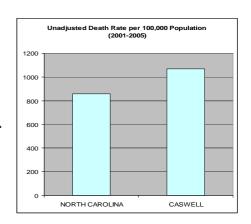
Smoking has been associated with a number of pregnancy complications. Smoking cigarettes appears to double a woman's risk of developing placental problems. These include placenta previa (low-lying placenta that covers part or all of the opening of the uterus) and placental abruption (in which the placenta peels away, partially or almost completely, from the uterine wall before delivery). Both can result in heavy bleeding during delivery that can endanger mother and baby, although a cesarean delivery can prevent most deaths. Placental problems contribute to the slightly increased risk of stillbirth that is associated with smoking.

Smoking in pregnancy also appears to increase a woman's risk of premature rupture of the membranes (PROM) (when the sac inside the uterus that holds the baby breaks before labor begins). When PROM occurs before 37 weeks of pregnancy it is called preterm PROM, and it often results in the birth of a premature baby.

Babies whose mothers smoked during pregnancy are up to three times as likely to die from sudden infant death syndrome (SIDS) as babies of nonsmokers. Studies also suggest that babies of women who are regularly exposed to second-hand smoke during pregnancy may have reduced growth and may be more likely to be born with low birth weight. Pregnant women who do not smoke should avoid exposure to other people's smoke.

#### Causes Of Death

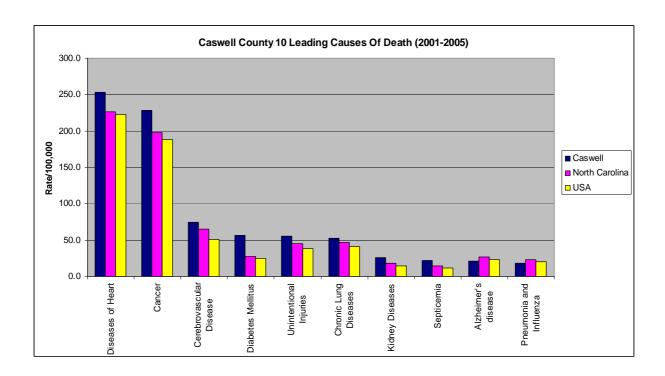
As seen in the graph to the right, the residents of Caswell County have a higher death rate than in the rest of North Carolina. Reasons for this disparity may include an older population, decreased access to medical care and poverty, all of which are present in Caswell County.



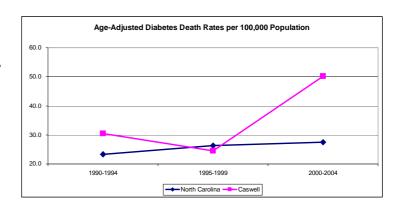
These death rates are broken down further in the

next few graphs by disease, gender and race. While the death rates may vary some between Caswell County, North Carolina and the USA, the top ten causes of death are about the same. In addition, except for two of the causes, the death rate in Caswell County is higher than North Carolina's which in turn is higher than the USA's. The two causes of death that are the exception to this trend are Alzheimer's disease and pneumonia/influenza.

While the death rates for most of the top ten causes of death are incrementally higher in Caswell County than in North Carolina and the USA, diabetes stands out with a rate that is twice that of North Carolina and the USA. Since diabetes is a risk factor for at least six (heart disease, cancer, cerebrovascular disease, kidney disease, septicemia and pneumonia/influenza) of the other causes of death in the top ten, it is not too surprising that Caswell County has higher death rates than North Carolina and the USA.

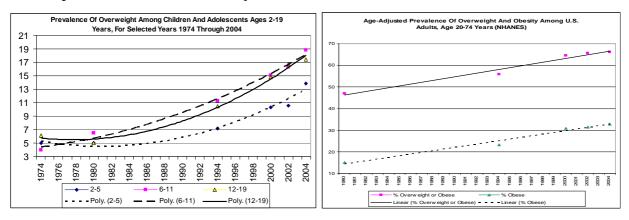


The death rate from a disease and the incidence of that disease are not the same thing, but they are related and it is likely that the incidence of diabetes in Caswell County is also significantly higher than in the rest of the state and

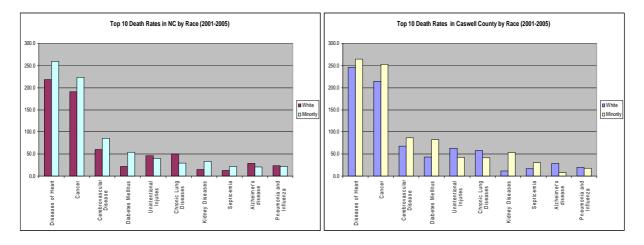


country. The significant morbidity associated with diabetes can be reduced by tightly controlling the disease with medication, monitoring, education and support. The intensive quantity of care that is needed to treat diabetes in a comprehensive manner requires many resources that are not readily available within the boundaries of Caswell County.

It is difficult to talk about diabetes without mentioning the obesity crisis in our country. The graphs above use data from NHANES that show a rapidly increasing number of overweight or obese adults and evidence from children that indicate a trend of the problem getting even worse in the future. There is also data from the Caswell County schools shown previously in this document that indicates an even worse problem within the county.

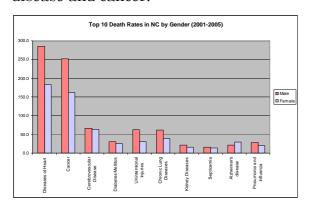


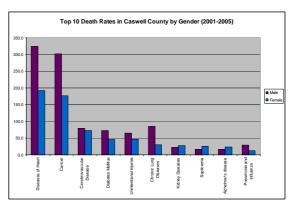
When these same ten diseases are evaluated for racial disparity throughout North Carolina it is readily apparent that minority populations suffer disproportionally compared to the white population. This same disparity in almost every one of the top ten killers is also present in Caswell County's minority population.



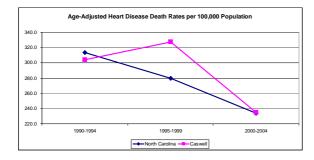
The death rate from diabetes among whites in Caswell County is almost twice the North Carolina rate, but the death rate among minorities in Caswell is double the white population's rate. Clearly, diabetes and its sequela are major problems in Caswell County and will continue to be a problem with the high and ever increasing rate of obesity in the country, state and county.

Looking at the top ten death rates in Caswell County with a gender filter shows that in most causes of death, men have a significantly higher death rate than women. This is particularly true in the more common causes of death like heart disease and cancer.





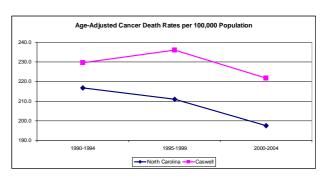
While the statistics are not publicly available at the time of this writing, 2006 data indicate that heart disease in North Carolina has dropped from the leading cause of death to the second leading cause of death with cancer moving to first place.



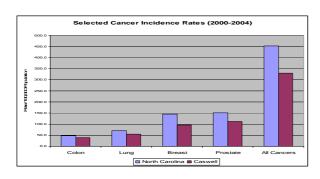
However, there is concern that with the increasing rates of obesity, it may not be long before heart disease moves back into first place. While the numbers for Caswell County fluctuate, it appears that the death rate from heart disease is higher

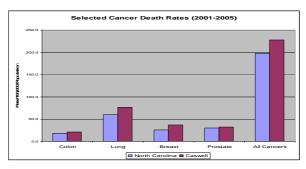
that that of North Carolina but has been on a downward trend that parallels North Carolina over the last 15 years.

The following graphs depict a picture of cancer care in Caswell County that needs to change. Over the last 15 years, the overall death rate from cancer in Caswell County has remained consistently higher than the



death rate in North Carolina. While the death rate has decreased during that time, the amount of decrease has lagged behind the improvements seen in the rest of North Carolina. This discrepancy is not just in one or two types of cancer. The graphs below show that North Carolina in general has higher incidence rates than Caswell County of the more common types of cancer and cancer in general. However, Caswell County consistently has higher death rates for these same cancer types.





Access to care is a likely cause of this increased death rate. While Caswell County is within a 1-2 hour drive of the finest cancer treatment centers in the country, a delay in diagnosis and treatment can limit the treatment options and the success of treatment. With most people leaving the county for their primary care and other health services, delays in care are not uncommon.

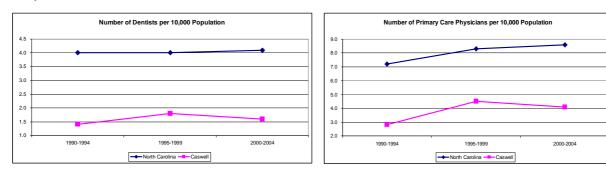
#### Access To Care

Lack of access to care is a long term problem in Caswell County. In most North Carolina counties, a hospital is the focus of health care and often has the resources to be a catalyst for improving a county's health. Caswell County has no hospital

within its boundaries and none of the providers from the four medical offices within the county have active admitting privileges at any, let alone the same hospital.

For at least the last 15 years the number of primary care physicians in Caswell County has been consistently at a level that is half of North Carolina's level. Three out of the four primary care medical offices in Caswell County are subsidized by federal, state and/or local funds and provide care on a sliding scale based on income and family size but specialists and hospitals in the surrounding counties where patients are referred do not operate under the same rules, which often requires patients to make difficult choices about the level of care they receive. These various circumstances paint a picture of a rather disjointed and incomplete system for providing health care to Caswell County's residents. For the most part health care in Caswell County is in the hands of the counties that surround us.

Dental care within Caswell County is also very limited. The number of dentists in Caswell County consistently stays at a level about a third of the rest on North Carolina. There are two dental offices in Caswell County that are staffed by part time dentists and there are no dentists in private practice. There are dentists in the surrounding counties but most significantly limit the number of Medicaid patients they treat.



In addition to a small number of providers, a smaller proportion of residents in Caswell County have health insurance than in North Carolina as a whole. A 2004 report from the Sheps Center for Health Services Research shows that 19.1% of Caswell County residents ages 0-64 do not have health insurance while the

uninsured rate for the same age group in North Carolina is 17.5%. The Sheps Center says that this is a trend seen across rural North Carolina due in part to higher insurance premiums in rural North Carolina than in urban areas. Insurers say that this rate discrepancy is due to aging rural populations, more frequent hospitalizations and a higher incidence of diabetes and obesity among rural people; all of which applies to Caswell County.

#### Summary

These statistics paint a picture of Caswell County as a slow growth county with a significantly larger minority population and a slightly older population than the rest of the state and country. We have limited health resources within the county, causing people to leave the county for much of their health care as they do for most of their other needs. This barrier to care leads to problems like late diagnosis, late start to prenatal care and less intensive treatment of chronic diseases. We have higher rates of babies being born with a low birth weight and higher death rates of many diseases.

Unfortunately, the people of Caswell County will likely face an increasing need for health care caused by the high smoking and obesity rates. However, with its slow population and economic growth, Caswell County is unlikely to attract the needed health care resources and, as in the past, it will continue to look outside its boundaries for these services.



# Section V: A Look at the Future

**Community Priorities & Recommendations** 

#### Community Priorities and Recommendations

Primary and secondary data were reviewed by the CHAP Team. The Team identified the top health priorities. During community meetings, conducted by the Danville Regional Foundation's Community Health Assessment these priorities were discussed. In additions, team members informally talked about survey results and data with people in the community. Through these methods, and the compelling statistical evidence, the community health priorities were established by the CHAP Team.

#### 1. Obesity

Obesity has reached epidemic proportions nationwide, statewide, and in Caswell County. Obesity is a risk factor for other conditions such as heart disease, cancer, high blood pressure, high cholesterol, and others. Combating obesity in Caswell County reaches beyond simply losing weight. It will mean residents must make lifestyle and behavior changes. It will mean all aspects of the county working together to decrease the number of overweight and obese within our population.

#### RECOMMENDATION

Develop an Obesity Coalition. This Coalition should include healthcare providers, school health personnel (nurses, P.E. & Health Teachers), child care providers, members of the faith community, and others. This coalition will work together to develop a long-term county plan to combat obesity in both children and adults.

#### 2. Diabetes

Death rates from Diabetes in Caswell County are double the state and national rates in all age groups. Deaths can be contributed to many factors including undiagnosed cases and non-compliance among those who are diagnosed for a variety of reasons including lack of access to care, lack of knowledge about the disease, and the cost of treatment.

#### RECOMMENDATION

Develop a countywide Diabetes Educational Program. Hire a Diabetes Educator to coordinate this program. This program will include increased screening efforts, education and support services, and coordination of treatment. This program will be a community-based program. In other words, the diabetes educator should be mobile in the county, taking programs and screenings to churches and other community organizations such as the Senior Center and not confined to an office.

#### 3. Recreation Plan

Community Health Assessment Survey Results show an interest in increased Recreational Activities, especially when they create opportunities for physical activity. Specifically, this includes trails and/or greenways, bike lanes/trails, fitness classes, and swimming facilities. The county's Parks and Recreation Department plans to create a Parks and Recreation Master Plan for Caswell County. Funding for such a plan has not been made available.

#### RECOMMENDATION:

Support the creation of a countywide Parks and Recreation Master Plan.

This plan should include trail/greenway development objectives. In addition, this plan should include other intergenerational opportunities for physical activities.

#### 4. Development of a Healthy Carolinians Partnership

One recurring idea from the 2003 Community Health Assessment was the lack of communication between county organizations and a lack of current information regarding available resources. Developing a Healthy Carolinians

Partnership would offer a forum to bring all health issues to the table and would continue teamwork established through the 2007 Community Health Assessment Process.

#### RECOMMENDATION:

Form a Healthy Carolinians Partnership in Caswell County.

The Community Health Assessment Action Plan can be found in Appendix G. The Health Promotions Community Action Plan for 2007-2008 can be found in Appendix H.

#### **References**

Caswell County: <a href="https://www.caswellcountync.gov">www.caswellcountync.gov</a>

Community Assessment Guide Book, Healthy Carolinians: NC Community Health

Assessment Process: 2002

County Data Book: NC State Center for Health Statistics: <a href="www.schs.state.nc.us/SCHS">www.schs.state.nc.us/SCHS</a>

NC Department of Public Instruction: www.ncdpi.state.nc.us

NC Rural Health Economic Development Center, Inc: www.ncruralcenter.org

NC Department of Transportation: www.ncdot.org

United States Census Bureau: www.census.gov

United States Department of Agriculture: <a href="www.usda.gov">www.usda.gov</a>

#### **APPENDIX A - Survey Distribution List**

The following is a list of places where the surveys were distributed.

- The Caswell Messenger
- Oakwood Elementary School
- North Elementary School
- Stoney Creek Elementary School
- South Elementary School
- Dillard Middle School
- Bartlett-Yancey High School
- Caswell County Schools Central Office
- Caswell County Senior Center
- Caswell County Parks & Recreation
- Caswell County Health Department
- Providence Volunteer Fire Department
- Shady Oak Baptist Church
- 86 Convenient Mart
- Providence Baptist Church
- Gatewood Baptist Church
- Park Springs Pentacostal Holiness Church
- Pleasant Grove Presbyterian Church
- Bethesda Presbyterian Church
- Pelham United Methodist Church
- Oakview Church
- Ebenezer Missionary Baptist Church
- High Rock Missionary Baptist Church
- Providence Missionary Baptist Church
- Red Hill Missionary Baptist Church
- River Zion Baptist Church
- True Gospel Fellowship
- Lively Stones Church
- Shelton Baptist Church
- State Line Baptist Church
- Church on the Square

- Mineral Springs Baptist Church
- New Ephesus Baptist Church
- Corbett Springs Baptist Church
- Macedonia Baptist Church
- Milton Baptist Church
- New Haven Baptist Church
- God's Blessings Center
- Oak Level Baptist Church
- Gwynn's Chapel Missionary Baptist Church
- Smith Chapel Missionary Baptist Church
- Graves Chapel Missionary Baptist Church
- Prayer of Faith
- Shady Grove Missionary Baptist Church
- Beulah Missionary Baptist Church
- Bible Way
- Bluestone Baptist Church
- Allen's Chapel Baptist Church
- Welcome Baptist Church
- Lea Bethel Baptist Church
- Beulah Baptist Church
- Baynes Chapel Baptist Church
- Yanceyville Baptist Church
- Yanceyville Presbyterian Church
- Yanceyville Methodist Church
- Jimmy & Hope's Family Restaurant
- Caswell Family Medical Center
- The Brian Center
- Prospect Hill Community Health Center
- Caswell County Rotory Club
- The Yancey House Restaurant
- The Kiwanis Club
- The Women's Club of Milton

# **Appendix B - Caswell County Prenatal Needs and Services Assessment:** Findings and Recommendations

# Caswell County Prenatal Needs and Services Assessment: Findings and Recommendations

October 22, 2007

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### **Executive Summary**

This report describes the prenatal needs and services in Caswell County, North Carolina and proposes options that might improve the health of pregnant mothers in the county. This assessment found that although it appears that the existing prenatal services are meeting the needs of pregnant women with a good level of satisfaction, there are barriers to getting quality prenatal care, areas of weakness in prenatal service delivery and a great need to increase assessment of prenatal health in Caswell. The assessment answered the following questions through analysis of statistics and 39 interviews with key stakeholders, service providers and recent mothers:

- What are the prenatal needs of women from Caswell County?
- How well are the prenatal needs of Caswell County women being met?
- How do Caswell County women choose where to receive prenatal care?
- How satisfied are Caswell County women with the prenatal care they receive?

The assessment found that the majority of prenatal care occurs outside of the county in an eight county area and across the state line in Virginia. Although there are three medical providers within the county who offer prenatal care to predominately Medicaid and uninsured clients, these providers see only 50% of the pregnant Caswell County women with Medicaid. The majority of stakeholders, service providers and mothers reported that women in Caswell are satisfied with the existing prenatal services within and outside the county. However, many stakeholders and service providers felt that prenatal services could be improved. This assessment found that the prenatal needs of women in Caswell County are similar to the needs of pregnant women in other areas of the state and around the country. The main prenatal need identified was the need for more education concerning pregnancy and available prenatal services. The majority of mothers interviewed for this assessment felt that their prenatal provider met their needs and the needs of other women from Caswell. Stakeholders, service providers and recent mothers identified key barriers to receiving

quality prenatal care as a woman's attitude toward prenatal care, lack of transportation, limited financial resources and cultural and language differences between pregnant women and service providers. Four considerations arose as key deciding factors for choosing a prenatal care provider: comfort and familiarity with the medical provider; distance and convenience of the medical provider; recommendations from friends and family; the reputation of the provider and hospital.

Ten recommendations for the improvement of prenatal services and the health of pregnant women in Caswell County were identified. The recommendations are as follows:

#### Assessment Recommendations

- 1 Create a formal structure for service provider communication.
- **2** Create a Prenatal Services Guide targeted to medical and non-medical service providers.
- 3 Develop prenatal health collaborations between community groups and agencies on initiatives to increase community knowledge about prenatal services and reduce community divisions.
- **4** Develop an infrastructure for the timely sharing of critical medical information for prenatal patients.
- 5 Enhance Spanish language prenatal services.
- **6** Create a prenatal services strategic outreach plan.
- 7 Work to reduce negative stigma around Caswell County Health Department services.
- 8 Strengthen and expand the Maternity Outreach Worker Program.
- 9 Increase availability and participation in childbirth education classes.
- 10 Establish a continuous monitoring system for tracking prenatal health, quality of care and location of prenatal care.

Since Caswell County Health Department is also preparing for a significant change in the staffing of their prenatal program, this assessment concludes with the identification of nine possible restructuring options for providing prenatal care to Caswell County Health Department patients.

### Section One: Overview, Statistics and Available Prenatal Services

#### I. Introduction

"When we are talking about the citizens of the county, we should always be talking about 50 issues and one of them should be prenatal care. Because [poor prenatal care] could lead to mental health issues, problems in school. That child may not graduate. That child may be out on the street corners. They might do crime. It all costs the county."

- Caswell County Commissioner

Having high quality prenatal care and pregnancy support is not only a concern for a pregnant mother and her immediate family but for the whole community. The health of newborns is one of the key health indicators that assesses the health of the overall community (North Carolina State Center for Health Statistics, 2006). Studies have shown that high quality prenatal care improves children's health throughout their lives (Sheiner et al., 2001). In this report, I describe the prenatal needs and services in Caswell County, North Carolina and propose options that might improve the health of pregnant mothers in the county. This assessment found that although existing prenatal services appear to be meeting the prenatal needs of pregnant women with a good level of satisfaction, there are barriers to obtaining quality prenatal care, areas of weakness in prenatal service delivery and a great need to increase assessment of prenatal health in Caswell.

#### II. Assessment Overview and Purpose

In order to better understand the health patterns of pregnant women, the Caswell County Health Department (CCHD) requested a community-wide assessment of prenatal needs and services. Reacting to the a decline in the number of prenatal patients seen by CCHD as well as anticipating a prenatal service provider staffing change within the next year, CCHD recruited a Masters in Public Health graduate student from the University of North Carolina at Chapel Hill, Department of Health Behavior and Health Education, to complete the assessment, beginning in late May, 2007 and

concluding in September, 2007. Although the impetus for the assessment came from CCHD, the graduate student reviewed of prenatal and maternity services accessed within and outside of the county by pregnant women in Caswell.

For this assessment, prenatal care was defined broadly to encompass all ambulatory care services for pregnant women from the beginning of their pregnancy to two months after birth.

The time period is based on the coverage limits set by the North Carolina Medicaid for Pregnant

Women, which covers women until two months after the birth of their infant. Prenatal care excludes hospital in-patient care provided to women during and following labor and birth. The questions below were developed to guide the assessment.

#### **Table 1: Guiding Project Questions**

- 1. What are the prenatal needs of women from Caswell County?
- 2. How well are the prenatal needs of Caswell County women being met?
- 3. How do Caswell County women choose where to receive prenatal care?
- 4. How satisfied are Caswell County women with the prenatal care they receive?

#### III. Prenatal Services Available to Caswell County Pregnant Women

Three medical centers currently offer prenatal care to patients living in Caswell County.

Although all three take private insurance, they primarily serve Medicaid or uninsured patients. No private OB/GYN practices are located within Caswell County; there are, however, private OB/GYNs within a 30 to 45 minute drive in Roxboro in Person County, Reidsville in Rockingham County, Eden in Rockingham County, and Burlington in Alamance County, as well as across the Virginia state line in Danville. For an overview of selected prenatal services available to women in Caswell County, see Table 2.

Table 2: Overview of Selected Prenatal Services Accessed by Women Without Private Insurance from Caswell County

Name	Location	Prenatal Care Staff	Hospital	On Site Services
Caswell County Health Department	Yanceyville, Caswell County	<ul><li>(once a month)</li><li>Nurse Practitioner from UNC-CH (once a Month)</li></ul>	UNC Hospitals	✓ MCC ✓ MOW ✓ Pediatrics ✓ Presumptive Medicaid ✓ Childbirth Education ✓ Post-Partum Home Visits
		2 enhanced role maternity nurses		Bilingual Providers Ultrasound  September 2  Enhanced Role Maternity Nurses Obstetrician
Caswell Family Medical Center	Yanceyville, Caswell County	Kristy Powers (PA), providers in the practice, see prenatal patients until 36 weeks. Prenatal Patient chose a OB-GYN and transfer at 36 weeks		WIC MCC MOW  ✓ Pediatrics Bilingual Providers Ultrasound  Delivery Care Presumptive Medicaid Childbirth Education Post-Partum Home Visits Enhanced Role Nurses Obstetrician
Prospect Hill Community Health Center	Prospect Hill, Caswell County	<ul> <li>All medical providers see prenatal patients.</li> <li>No prenatal specialization.</li> </ul>	UNC Hospitals	<ul> <li>✓ MCC</li> <li>MOW</li> <li>✓ Presumptive Medicaid</li> <li>Childbirth Education</li> <li>Post-Partum Home Visits</li> <li>✓ Bilingual Providers</li> <li>Ultrasound</li> <li>Obstetrician</li> </ul>
Family Tree OB/GYN	Rockingham County	<ul> <li>Dr. Ferguson</li> <li>Dr. Eure</li> <li>2 Certified Nurse Midwives</li> <li>1 Nurse Practitioner</li> </ul>	Annie Penn Hospital	WIC MCC MOW Pediatrics  ✓ Bilingual Providers ✓ Ultrasound  ✓ Delivery Care Presumptive Medicaid Childbirth Education Post-Partum Home Visits Enhanced Role Nurses ✓ Obstetrician
Dr. Lewis	County	<ul> <li>Dr. Lewis</li> <li>Lisa Lewis, Certified Nurse</li> <li>Midwife</li> </ul>	Person Memorial Hospital	WIC MCC MOW Pediatrics Bilingual Providers ✓ Ultrasound ✓ Delivery Care Presumptive Medicaid Childbirth Education Post-Partum Home Visits Enhanced Role Nurses ✓ Obstetrician
Healthcare for Women	Danville, Virginia		Danville Regional Hospital	WIC MCC MOW Pediatrics  ✓ Bilingual Providers ✓ Ultrasound  ✓ Delivery Care Presumptive Medicaid Childbirth Education Post-Partum Home Visits Enhanced Role Nurse ✓ Obstetrician

Notes: WIC= Women Infant and Children Nutritional Program, MCC=Maternity Care Coordination, MOW=Maternity Outreach Worker; All providers accept North Carolina Medicaid and some private insurance

Caswell County Health Department (CCHD) is the largest in-county prenatal care provider. CCHD offers prenatal visits weekly and provides the majority of prenatal support services to Caswell residents. CCHD prenatal program is an "outlying clinic" of the University of North Carolina Department of Obstetrics and Gynecology (OB/GYN). As an outlying clinic, the UNC Department of OB/GYN provides consultation, care protocols, and labor and delivery services to CCHD. Prenatal patients deemed to be at high-risk are transferred to UNC for continuing care. All CCHD prenatal patients come to UNC Hospitals in Chapel Hill for their ultrasounds and are expected to deliver at UNC Hospitals. However, due to emergencies or because of personal preference, every year some CCHD patients end up delivering at other hospitals. In 2005, 19 or 65% of the 24 CCHD prenatal patients who were cared for through their 36-week of pregnancy delivered at UNC Hospitals. Therefore, 35% of CCHD patients gave birth at another hospital.

CCHD is the only outlying clinic where the UNC Department of OB/GYN provides clinician coverage twice a month. As part of their training, UNC OB/GYN residents come to CCHD once a month; a UNC nurse practitioner sees prenatal patients monthly, as well. This CCHD affiliation with UNC has been in place for over twenty-five years. In addition to the UNC providers, CCHD employs two "enhanced role" maternity nurses who have participated in additional prenatal training. They assist prenatal patients in the weeks that UNC providers do not come to Caswell. However, the UNC staffing for this position will be significantly changing within a year (See Section 3). While a goal for services in Caswell County should be to expand and enrich the availability of local prenatal care, instead the county is faced by the possible diminishment of services due to this upcoming staffing change.

In addition to prenatal clinic services, CCHD also offers prenatal support services. The Women, Infant, and Children (WIC) Nutrition Program, Maternity Care Coordination (MCC) and Maternity Outreach Worker Program (MOW) are offered by CCHD to Caswell residents who meet

eligibility requirements. The WIC program provides nutritional counseling and food for the pregnant mothers and young children. Pregnant women in the MCC program work with a social worker to access services and community resources. The MOW program offers pregnant women home visits that focus on providing pregnant women support, prenatal education and breastfeeding consultation. CCHD also offers post-partum/newborn home visits with nurses to eligible mothers immediately after birth. Since CCHD offers all these programs in a centralized location, pregnant woman's medical and psychosocial care of prenatal patients at CCHD is well coordinated.

Prospect Hill Community Health Center is another outlying clinic of the UNC
Department of OB/GYN that serves Caswell County. Prospect Hill prenatal service providers are family practice providers who care for prenatal patients through their prenatal and post-partum course. At Prospect Hill, all service providers share the prenatal patient load and no provider has specialized prenatal training. Like CCHD, Prospect Hill utilizes the UNC Department of OB/GYN for consultation, high-risk care and delivery services; patients travel to UNC Hospitals for ultrasounds and delivery. However, unlike the CCHD neither UNC OB/GYN residents nor other UNC staff see patients at Prospect Hill. Prospect Hill also offers WIC and MCC services. Unlike the other clinics in Caswell County, Prospect Hill's clientele is not predominately from Caswell County. Rather, Prospect Hill primarily serves Hispanic patients from Burlington, Person and Orange Counties. Less than 10% of Prospect Hill patients who delivered at UNC Hospitals between 2001-2005 (76 out of 791) were Caswell County residents.

Caswell Family Medical Center (CFMC) offers prenatal care to pregnant women with low-risk pregnancies. Patients are seen by one designated family physician and one physician's assistant on staff until they are 36 weeks along in their pregnancy. CFMC's practice to date has been to transfer patients at 36 weeks to a private OB/GYN outside of the county. These OB/GYNs usually see the patient during the last few weeks of the pregnancy and then deliver the infant. An interview with a

CFMC staff person yielded the estimate that CFMC cares for five active prenatal patients a month and roughly eight prenatal patients a year.

Although CCHD, Prospect Hill and CFMC provide prenatal services within Caswell County, the majority of non-Medicaid women and half the women who have Medicaid leave the county each year to receive prenatal care. Some women travel to Chapel Hill and Durham to receive prenatal care; others go to Reidsville, Roxboro, Burlington, Eden and Danville, VA. Women with Medicaid frequently seek care outside of the county usually with Family Tree OB/GYN in Reidsville, Dr. Lewis in Roxboro and Healthcare for Women in Danville. Over half of the patients of these OB/GYN practices are Medicaid recipients. Each provider offers prenatal care through labor and delivery, including in-office ultrasounds. In-county prenatal providers do not offer either ultrasound or delivery services.

#### IV. Methods

I used two strategies to answer the four assessment questions (Table 1). One was to review state and county health statistics on infant health and births in the last fifteen years and the other was to interview prenatal service providers within and outside the county, as well as mothers who live in Caswell County and key community stakeholders. In addition to reviewing statistics, open-ended interviews were conducted with 39 people (Table 3). Each interview lasted between 20 minutes and an hour. Because it was not possible to interview all women giving birth or take a random sample of them, it is difficult to determine exactly where Caswell women are getting prenatal care, much less draw valid conclusions about the quality of the prenatal care they are receiving. However, with the combination of interviews and statistics, I was able to answer my guiding questions. In the interviews, prenatal needs, deciding factors, and level of satisfaction were

asked about broadly. Interview informants were not asked to rank a list of options or consider a response scale.

**Table 3: Informant Interview Overview** 

Type Of Participant	Total	Number of Caswell Residents
Service Provider	16	7
Stakeholder	11	9
Recent Mother	12	12
Total	39	28

A prenatal service provider in this assessment was a clinic or individual clinician who provided direct prenatal care services to women from Caswell County. Prenatal care services reviewed included clinical or medical services as well as pregnancy support services such as nutritional counseling, childbirth education, and breastfeeding consultation. Sixteen prenatal service providers were interviewed for the assessment. These interviews were conducted with staff from the three medical centers offering prenatal care within the county and three private obstetric practices outside the county.

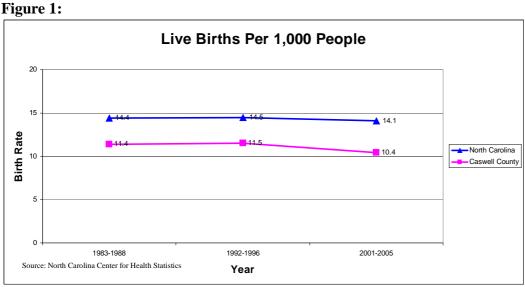
In order to gain perspective on how women are making prenatal decisions and their level of satisfaction with these decisions, women who had recently given birth were interviewed. Recent mothers were defined as women who lived in Caswell County and gave birth within the last four years. Most of the women interviewed were recruited by word of month recommendations from other interviewees. Some women responded to flyers advertising the interviews or letters sent to childcare centers. In total, twelve recent mothers were interviewed. See Appendix A for interview mothers' demographic information and place of prenatal care.

Key stakeholders, those individuals holding relevant-to-prenatal care positions in local political bodies, other service agencies, and the community at large, were also recruited and interviewed. For this assessment, a stakeholder was defined as someone who was identified as being concerned about prenatal care in Caswell County or someone who held a position of social,

economic, or political power that could influence prenatal care in Caswell. Eleven interviews were completed with stakeholders. These included individuals from the Caswell County Department of Social Services, Caswell County Board of Health, Caswell County Board of Commissioners, Caswell County Schools, county-wide service organizations as well as church leaders and business owners. Service providers and other key stakeholders helped to identify other key stakeholders in a snowball sampling approach.

#### V. **Caswell County Statistical Profile**

Overall, county health statistics indicate that the birth rate in Caswell was at, or slightly below, statewide rates (Figure 1). Furthermore, Caswell experienced a small decline in its birth rate<sup>1</sup> between 1988 (11.4 per 1,000 people) and 2005 (10.4 per 1,000 people) (North Carolina State Center For Health Statistics, 1989; North Carolina State Center For Health Statistics, 2006). In 2005, there were 60 live births to residents of Caswell County. At 10.4 per 1000 people, Caswell County's birth rate in 2005 was lower than North Carolina's birth rate of 14.1 live births per 1,000 people (North Carolina State Center For Health Statistics, 2006).



<sup>&</sup>lt;sup>1</sup> Birth rate = (Number of live births/total population) X 1,000

Similarly, Caswell's low birth weight infants<sup>2</sup> and teen pregnancy<sup>3</sup> rates 2001-2005 were lower than the state's low birth weight and teen pregnancy rates (Table 4) (North Carolina State Center For Health Statistics, 2006; North Carolina State Center for Health Statistics, ). On the other hand, Caswell had a slightly higher rate than the overall state rate for perinatal deaths<sup>4</sup>, fetal deaths<sup>5</sup>, and neonatal deaths<sup>6</sup> for 2001-2005. Caswell was slightly below the state rate for infant death.<sup>7</sup>

Table 4: Selected Rates per 1,000 Live Births from 2001-2005

	Perinatal Death	<b>Fetal Death</b>	Neonatal Death	Infant Death	Teen Pregnancy	Low Birth* Weight
Caswell County	16.1	9.7	6.5	8.1	27.7	8.4%
North Carolina	12.9	7.1	5.9	8.5	37.2	9.0%

<sup>\*</sup> Low birth weight is reported as percentage rather than a rate per 1,000 live births

It is difficult to determine if the small rise in the neonatal death rates since 1982 is a problematic trend. From 1982 to 1988 the infant death rates in Caswell County were lower than the comparable state rates, whereas the comparable rates from 1992-1996 for Caswell were higher than the state rates for perinatal and neonatal death but lower for fetal deaths (North Carolina State Center For Health Statistics, 1989; North Carolina State Center for Health Statistics, 1997). In addition, Caswell County has so few births that aggregated yearly statistics may be an unreliable measure.

More detailed statistics comparing Caswell County with state averages can be found in Appendix B.

<sup>&</sup>lt;sup>2</sup>Low birth weight infants are classified as live born infants weighing less than 2,500 grams or 5 lbs, 8 oz regardless of gestational age(North Carolina State Center for Health Statistics, 2006). Low Birth Weight Rate = (Number of low birth weight live births / number of live births) X 100

<sup>&</sup>lt;sup>3</sup> Teen Pregnancy = (Number of births to girls 15-17 / total population of girls 15-17) X 1,000 <sup>4</sup> Perinatal death combines fetal deaths and neonatal deaths.

<sup>&</sup>lt;sup>5</sup> A fetal death is defined as death of an infant prior to its expulsion from its mother after 20 weeks of gestation where there is no signs of life and is not a result of a pregnancy termination.

<sup>&</sup>lt;sup>6</sup> Neonatal death is a death of an infant who is born alive but dies before he/she is 28 days of age.

<sup>&</sup>lt;sup>7</sup> Infant death is a death of an infant under one year of age.

Statistics also show that Caswell County has a higher percentage of Medicaid coverage for prenatal and delivery service than does the state overall. Out of the 718 deliveries in Caswell County that occurred between 2003 -2005, 42% of them were Medicaid<sup>8</sup>, 2.5% were Emergency Medicaid<sup>9</sup> and 56% were non-Medicaid births paid for by a private insurance or self-pay (Table 5). In comparison, Medicaid paid for 35% of the births in North Carolina in 2005. This difference reflects the lowwealth status of Caswell County.

Table 5: Estimated Division of 260 Total Live Births to Caswell County Residents in 2005 by Medicaid Status

	Percentage of Total Births <sup>1</sup>	Number of births
Non-Medicaid	55.9%	145
Prenatal Medicaid	41.6%	108
Emergency Medicaid	2.5%	7
Total	100%	260

<sup>&</sup>lt;sup>1</sup>2003-2005 Percentages

Since Caswell County does not have a hospital, almost all births occur in the various hospitals in the counties surrounding Caswell. These births are spread across a number of hospitals rather than concentrated in one hospital. The closest hospitals are located in Danville, VA and Rockingham, Person, Alamance counties. Although hospital births are the norm, there is a small but measurable group of women in the county who chose to have home births every year. Statistics indicate that women are choosing hospitals from all eight contiguous surrounding counties and across the Virginia state line. Of the 718 deliveries that occurred between 2003 and 2005, 24% occurred at UNC Hospitals, 19% occurred out-of-state, 18% occurred at Alamance Regional Medical Center and 14% occurred at Annie Penn Hospital in Rockingham County. The majority of the out-of-state births most likely occurring at Danville Regional Medical Center

<sup>&</sup>lt;sup>8</sup> Medicaid for Pregnant Women will cover prenatal care, labor and delivery and post-partum care until two months after birth.

<sup>&</sup>lt;sup>9</sup> Emergency Medicaid will cover the cost of labor and delivery for pregnant women who do not have health insurance and who meet Medicaid income limits. It does not cover prenatal care. However, if the pregnant woman has complications to her pregnancy or if the unborn baby is at risk, then Emergency Medicaid will cover the cost of care.

in Virginia. Some of these hospitals served a disproportionate amount of Prenatal Medicaid patients from Caswell County. Of the Caswell County births at UNC Hospitals from 2003 -2005, 72% were paid for by Prenatal Medicaid. In comparison, 64% of births at Anne Penn Hospital and only 34% of births at Alamance Regional Medical Center were paid for by Prenatal Medicaid in the same period. See Appendix C for a map of area and Appendix D for a further breakdown of delivery statistics.

Choice of prenatal care provider also spans multiple counties. Since the perception is that the incounty prenatal care services serve only Medicaid or uninsured patients, most women with private health insurance seek prenatal care elsewhere. To determine how many of the Caswell County Medicaid recipients are using in-county prenatal care services, UNC hospital delivery statistics and staff reports were combined. From these I estimated that around 50% of pregnant Medicaid recipients sought prenatal care inside of the county (Table 6).

Table 6: Percentage of the Medicaid Births for 2005 by site of Prenatal Care (N=115)

G	Percent of Medicaid Births	<b>Number of Births</b>
Caswell County Health Department	30% <sup>1</sup>	34
Prospect Hill	13% <sup>2</sup>	15
Caswell Family Medical Center	7% <sup>3</sup>	8
Out of County Prenatal Care	50% <sup>4</sup>	58
Total	100%	115

Caswell County Health Department report

Although quality of prenatal care is more challenging to measure with statistics, mothers do report when they started their prenatal appointments at the time they get their child's birth certificate. Using data from birth certificates from 2001 to 2005, 82% of women in Caswell received prenatal care in their first trimester. The state rate for the same period was 84%. Although slightly higher than the state rate of 16% for late<sup>10</sup> or no prenatal care for the same time period, it is unlikely that this is statistically significant or a clinically relevant difference if only 14 infants out of 1,230 live

<sup>&</sup>lt;sup>2</sup> UNC-CH Hospital Delivery Statistics

<sup>&</sup>lt;sup>3</sup>CFMC staff estimate combined with UNC-CH Hospital Delivery Statistics

<sup>&</sup>lt;sup>4</sup>Estimated by adding estimated three in-county prenatal provider patients and subtracting from 100.

births (1%) had no prenatal care provided between 2001 and 2005(North Carolina State Center for Health Statistics, 2006; North Carolina State Center for Health Statistics, 2007).

### Section Two: Assessment Findings

Predominant themes emerged from the interviews with key stakeholders, prenatal service providers and mothers. The differences and similarities within and among the groups provide answers to the four questions guiding this project (Table 1). Participants' answers were organized by subject matter and then reviewed for common themes. Informed by these findings, recommendations for future improvements for prenatal care are discussed in Part V of this section.

#### I. Prenatal Needs of Women from Caswell County

"[The needs] are the same as in most counties. Women need to get into prenatal care early, and have transportation, WIG, childbirth education, and breastfeeding education. There is no hospital here, which makes it different from other counties."

- Stakeholder

The majority of individuals from all three groups interviewed agree that the prenatal needs of women in Caswell County appear to be similar to the needs of women in other areas of the state and country. Participants mentioned common prenatal needs such as good nutrition, starting and continuing prenatal care early in the pregnancy, obtaining necessary medical tests and having access to well-trained prenatal service providers. Since many participants did not view Caswell County as unique, they had difficulty listing and explaining county-specific prenatal needs in the interviews. However, a few stakeholders believed that transportation needs are something that makes

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<sup>&</sup>lt;sup>10</sup> Late prenatal care is considered to be after the first trimester.

Caswell County unique, especially as compared to more urban areas. These stakeholders cited the limited public transportation options in Caswell as an unmet need for low-income pregnant women.

"I think that [pregnant women] need to be better educated on the importance of prenatal care and the reasons for their care. If they knew that they might access more of the services that are available to them, like the childbirth classes."

- CCHD Service Provider

The need for more education was the focus of the majority of the prenatal needs identified. Participants from all three groups believed that pregnant women need more education on the type of services available and their eligibility for these services, as well as nutrition education during pregnancy and breastfeeding and newborn parenting education after the birth. One OB/GYN explained that he felt that many of his Medicaid patients began prenatal care later than private insurance patients because they were not aware of their eligibility or how to apply for Medicaid. Many of the interviewed stakeholders, service providers and mothers felt that if pregnant women became more aware of services and healthy behaviors through educational programs, that they would change their behavior, make healthy choices, and access more services.

#### II. Fulfillment of the Prenatal Needs and Common Barriers

"For anyone who gets connected [to services], their needs are being meet. The ones who aren't connected, they aren't [getting their needs met]. We can't get to them. Women get connected to services through the Health Department and Caswell Family Medical."

- Stakeholder

The majority of mothers interviewed for this assessment felt that their prenatal provider met their needs and the needs of other women from Caswell. However, despite the interviewed mothers' positive reports, some service providers and stakeholders described the system as disorganized and haphazard. Most of the service providers interviewed mentioned the lack of communication among service providers, including social service providers, and CCHD as limiting the quality of prenatal

care for women from Caswell County. When discussing social support needs, stakeholders overwhelmingly felt that patients going to CCHD had their medical and social support needs met due to the level of attention they received from CCHD prenatal nurses, and the MOW and MCC programs. One stakeholder reflected,

"I do go to the health department. In fact, when I need a hug, I go to the health department. They are wonderful. It is great to see these dedicated people [working at CCHD] who aren't getting paid what they could be if they went to Durham or Danville."

- Stakeholder

CCHD staff as well as a few Board of Health members expressed concern that private OB/GYN offices outside of the county were not providing pregnant women with the same level of social support and nutritional counseling as did CCHD. This assessment was unable to confirm this concern.

On the other hand, only two out of twelve mothers interviewed were unhappy with the care they received at CCHD and Caswell Family Medical Center. They pointed out that these facilities do not have the medical technology and expertise needed to meet the medical needs of prenatal patients. Both these mothers experienced major medical complications with their first pregnancies, which they believed could have been prevented with more technologically sophisticated prenatal care. A few stakeholders felt that having a board-certified OB/GYN at the medical centers within Caswell would better meet the needs of pregnant women than would the nurse practitioners, OB/GYN residents from UNC or generalist family doctors who are currently providing prenatal care.

Despite the minority view that existing services were not meeting the needs of Caswell County pregnant women, those interviewed all agreed that certain barriers limited quality prenatal care. Key barriers mentioned were women's attitudes towards prenatal care, lack of transportation, limited financial resources and cultural and language differences between pregnant women and service providers.

Mothers, stakeholders and service providers agreed that there is a small number of pregnant women, especially young women, who are not seeking prenatal care. Some viewed this problem as being solely caused by a woman's "bad" attitude. As one mother explained, "If she doesn't want to get out of bed, then she isn't getting prenatal care." Others concluded that women, who are not placing a high priority on prenatal care, are not doing so because there are more pressing concerns in their lives, such as substance abuse, mental illness or family problems. Lack of education and awareness of services was also identified as influencing pregnant women's attitude and actions. As one service provider explains,

"Basic needs. They don't have the right food, they don't have food stamps or they aren't going out to get those things. They have so many needs that their prenatal care is often the last thing. That is why I personally think that an outreach worker needs to get out there to support her through her decisions, so she can take care of her family and support herself."

- CCHD Service Provider

Lack of transportation was also mentioned as a barrier to getting prenatal care in Caswell County. Many service providers and stakeholders explained that a good portion of their clients do not have reliable transportation. Mothers interviewed agreed that transportation was a major problem in Caswell. The Department of Social Services does provide transportation for pregnant women on Medicaid to medical services through Caswell Department of Transportation (CDOT). Several mothers and stakeholders felt that many people do not want to use this service due to stigma and the inconvenience and waiting time that is often involved. It was reported by some that using CDOT services identifies a person as poor. Some mothers felt that the transportation service was adequate. As one mother explained, "Transportation isn't a problem here. They provide transportation. All you have to do is go to Social Services. All you have to do is call a day ahead and they will come and get you. [Saying transportation is a problem] is a cop out. It is just laziness. It is easy."

In addition to maternal attitudes and lack of transportation, stakeholders and service providers also focused on financial resources and cultural and language differences as barriers to receiving high quality prenatal care. Although most stakeholders and service providers believed that the majority of uninsured women qualify and receive Medicaid for Pregnant Women, they agreed that lack of financial resources limited pregnant women's ability to access healthy food and medications. Cultural and language differences between pregnant women and service providers can also be a major barrier to getting prenatal care. Prospect Hill is the only medical center in Caswell County that has bilingual Spanish speaking staff. Although CCHD and other providers use Spanish-translation phone services, this limits communication with non-English speakers and potentially, affects the quality of care. Racial, ethnic and class differences between service providers and pregnant women were mentioned as barriers to receiving care.

Some participants reported that Caswell County remains segregated by race and class. Although no one reported racial or class discrimination in receiving existing prenatal services, some mothers reported that it was difficult to talk to service providers. A few mothers said that they felt like they were not listened to during appointments. However, the majority of mothers reported feeling comfortable asking questions and communicating with their providers.

Although it would appear that, for the most part prenatal needs are being met, potential barriers exist for some women to get high quality care. Since only a small number of mothers were interviewed, it is difficult to assess how and to what extent various barriers are affecting prenatal care in Caswell.

#### **III.** Deciding Factors

Since location of delivery statistics revealed that women from Caswell County were receiving prenatal care and birthing their infants with medical practices that spanned a wide geographic area,

the next step was to look at how pregnant women decided where to go for their prenatal care. Four considerations arose as key deciding factors: comfort and familiarity with the medical provider; distance and convenience of the medical provider; recommendations from friends and family; the reputation of the provider and hospital.

"I was already going there before I got pregnant. That is where my doctor has always been. They were exceptional in providing me with things that I needed. They knew me really well. It was like being at home."

- CCHD prenatal patient

Mothers emphasized the importance of feeling comfortable with their providers. For instance, most of the women interviewed who used CCHD prenatal services were already patients at CCHD before becoming pregnant. They reported choosing CCHD because they were already familiar with the staff and felt comfortable there. Many interviewed mothers told stories of attentive nurses and providers who asked about their other children and cared about their lives. Comparing across the interview groups, mothers seemed to emphasize this factor more than stakeholders and service providers. Stakeholders and service providers tended to focus on distance, transportation and word of mouth recommendations as important factors.

In a rural low-wealth county, distance to medical providers or hospitals can greatly influence where women decide to get prenatal care. Without reliable transportation, one's options are limited. The women interviewed explained that they considered the convenience and close distance of the provider when making their choice. Stakeholders and service providers also considered distance to be a key deciding factor for pregnant women.

"[Patients in Caswell County] divide themselves on a geographic bases. I think access and convenience has more to do with [why they come here] than my almost perfect record of medical care. You know I'm joking, right? There is this magic 30-minute window in which people will travel. They don't want to go there if it is outside of 30 minutes."

- OB/GYN who practices outside of Caswell County

Recommendations from friends and family also influence where women decide to go for care.

The majority of service providers reported little advertising of their services because the majority of

patients came because of a referral from another patient. A Department of Social Services staff member reported that the majority of the Medicaid for Pregnant Women applicants already knew which provider they wanted prior to applying for the Medicaid program. The majority of applicants explained that they made this decision by considering recommendations from friends and family.

The reputation of the hospital and provider also influences decision-making. Many stakeholders and mothers reported low level of trust in the medical care at Danville Regional Medical Center. This opinion was based primarily on reputation rather than direct experience with the hospital. CCHD patients who delivered at UNC Hospitals reported being frustrated with the distance to Chapel Hill but most of them felt access to technology and expertise that UNC Hospitals provided was worth the drive. One woman explained that she believed that all women would go to UNC Hospitals for prenatal care and delivery if transportation and money were not a problem because its care is "the best." These examples demonstrate the importance of a provider's and hospital's reputation.

#### IV. Satisfaction with Existing Prenatal Services Within and Outside Caswell County

"[Pregnant women from Caswell] probably say that they are satisfied. They are focusing on the outcome of having a healthy baby not on their prenatal care or process. I think providers are dissatisfied because we know that we can do better."

- OB/GYN practicing outside of Caswell

The vast majority of stakeholders, service providers and mothers reported that women in Caswell are satisfied with the existing prenatal services within and outside Caswell County. The majority of mothers reported that they felt that their level of satisfaction was similar for other mothers in Caswell. They reported rarely hearing complaints from friends and family about their prenatal care. Some stakeholders and service providers noted that although they believed that there was satisfaction with the existing services, there were aspects that could be improved. For instance, stakeholders and service providers connected with CCHD repeatedly mentioned that the biggest

complaint was the length of the waiting time at CCHD. Since interviews were done with a convenience sample, it is possible that this assessment's sample was biased toward women who were overly positive about the level of satisfaction and therefore willing to be interviewed. One provider describes women from Caswell County as trusting and satisfied with their care.

"Generally speaking, [Caswell County pregnant women] are a pretty trusting bunch... They are rural. They are just glad that they have someone. They are not super discriminating consumers. There is an assumption that there is a certain level of care that they should be provided and they are by nature pretty trusting. They aren't worried if they are allowed to have a birth plan in the room with X number of pillows. They aren't worried about the minutia that sometimes the extreme customer is. They accept that you are working in their best efforts. They will work with you."

- OB/GYN practicing outside of the county

#### VI. Recommendations for Improvement of Prenatal Services

In addition to answering the four guiding questions, this assessment also sought to identify areas of improvement for prenatal services in Caswell County. Each interviewee was asked how her or she would like to see prenatal care improved for Caswell County women. The suggestions from the 39 individuals interviewed were synthesized with general observations and identified areas of weaknesses, to develop 10 recommendations for enriching prenatal services and the health of pregnant women in Caswell County.

#### Table 7:

#### **Assessment Recommendations**

- 1 Create a formal structure for service provider communication.
- **2** Create a Prenatal Services Guide targeted to medical and non-medical service providers.
- 3 Develop prenatal health collaborations between community groups and agencies on initiatives to increase community knowledge about prenatal services and reduce community divisions.
- **4** Develop an infrastructure for the timely sharing of critical medical information for prenatal patients.
- 5 Enhance Spanish language prenatal services.
- **6** Create a prenatal services strategic outreach plan.
- 7 Work to reduce negative stigma around Caswell County Health Department services.

- 8 Strengthen and expand the Maternity Outreach Worker Program.
- **9** Increase availability and participation in childbirth education classes.
- **10** Establish a continuous monitoring system for tracking prenatal health, quality of care and location of prenatal care.

All of the interviewed service providers described a lack of communication among the various providers serving Caswell County. One informant suggested that this lack of communication was because there is not a hospital located in the county that connected all medical providers. As this prenatal needs assessment showed, a communication network also needs to extend outside of the county because the majority of Caswell residents are leaving the county to get medical services. Specifically, service providers did not seem aware of the general practices or services of other providers. This lack of awareness may result in some pregnant women not being referred to the support services available to them (e.g. WIC, MCC, childbirth education, etc). Limited communication between providers also affects care when pregnant women seek emergency services at area hospitals. Some service providers identified lack of communication in emergency situations as a weak point in Caswell's prenatal service delivery. One service provider explains his interest in working with Caswell County by stating,

"Then we have the occasional [pregnant woman from Caswell] who panics and calls an ambulance and goes to the nearest hospital which frequently is us. This tells us that we should probably be actively involved with the Caswell County's medical solutions."

- OB/GYN practicing outside of the county

Recommendation 1: Create a formal structure for service provider communication. Recommendation 2: Create a Prenatal Services Guide targeted to medical and non-medical service providers.

This assessment recommends two strategies to improve communication between service providers. A formal structure for service providers to communicate at least biannually should be established. There have been attempts in the past to have regular meetings or informal gatherings of medical service providers working in the county but it was reported that there was not much

interest. However, this assessment reveals that service providers feel that communication is lacking and that this is a problem. If an in-person gathering is not feasible, biannual phone calls between medical directors and lead clinicians could improve communication. An email listsery, website or video conferencing could also be explored as other communication options. All of the OB/GYNs reported wanting more direct communication with CCHD.

A second way to improve communication between service providers is to create a prenatal services guide for them. Many stakeholders and service providers were found to be confused or misinformed about the services available to pregnant Caswell County women. The proposed prenatal services guide would give detailed descriptions of various programs available to prenatal and postpartum women and any eligibility requirements that applied. Unlike outreach materials, the purpose of this guide would be to inform medical and non-medical service providers about prenatal services. A prenatal services guide would reduce confusion, increase referrals to other services and decrease the perception of discoordinated services. This guide could be written as a pamphlet or created as a website that could be regularly updated. Since CCHD is tasked with overseeing the health of all Caswell County residents, CCHD is in a unique role to strengthen the communication between service providers and community agencies across the county. It is essential that CCHD's services be well publicized and understood by other service providers, since CCHD provides the majority of the psychosocial support services to eligible women in the county and employs the only Maternal Outreach Worker (MOW) in the county. One way to fulfill their role is for CCHD to assume the lead in creating a prenatal services guide.

Recommendation 3: Develop prenatal health collaborations between community groups and agencies on initiatives to increase community knowledge about prenatal services and reduce community divisions

Lack of communication affects collaboration across agencies and community groups in Caswell. Although most service providers, stakeholders or recent mothers did not identify this area as a problem, my informal conversations and observations of available services and community divisions led me to infer that collaboration is an area for improvement. Caswell County does not have the financial resources of larger, more urban counties. Greater collaboration and clear delineation of service roles could help streamline prenatal services. Some stakeholders reported that class and race divide the county. One informant reflected,

"It says a lot that groups here don't work together. You will never see the Kiwanis Club and the Rotary Club working together. You will never see black and white churches together. That is the part that has frustrated me more than anything else. This is the most segregated town I have ever lived in. It isn't that people aren't polite to each other. I haven't heard any racist remarks or any homophobic remarks."

- Stakeholder

Caswell County also lacks a large central shopping or entertainment district. This leads to geographic divisions because residents leave the county to socialize and shop. Developing collaborations between community groups divided across these lines may improve prenatal services not only by increasing community knowledge about available services for the entire county but also by promoting different community groups to work together, the groups will become less divided.

Granting organizations often look for evidence of collaboration between community groups and agencies. Evidence of increasing collaboration between community groups and service agencies may improve the county's ability to attract grants to fund new prenatal programs in the county. Some vehicles for collaboration are already in place. The Interagency Coordinating Council is comprised of community agencies that work together to plan children-related activities in the county. Caswell County Partnership for Children and CCHD have collaborated in the past on providing a childbirth education and adult literacy program. Potential prenatal service collaborations

could be developed between the Caswell County Schools, Caswell County Partnership for Children, the Parents As Teachers Program, Kiwanis Club, Rotary Club, local churches, Cedar Grove Association, the various medical providers and others. When collaboration was discussed during the interviews, interest was high among many of the stakeholders.

## Recommendation 4: Develop an infrastructure for the timely sharing of critical medical information for prenatal patients.

Two out of the three OB/GYNs informants described the system for pregnant women using area hospitals for emergency care or unplanned deliveries as "inefficient." One explained that he often repeated basic laboratory tests on emergency department patients because he did not have a patient's chart, which would have documented the patient's test results when the patient arrived at the hospital. When a patient's arrives at a hospital, the hospital must contact the primary provider so that the patient's chart can be faxed to the hospital. This process slows down the patient's care or confuses care if the chart provides poor documentation. One OB/GYN explicitly identified chart documentation from CCHD's prenatal program as very thorough. From my interviews, it was difficult to assess how this procedure worked in practice or how much breakdown in the procedure affected patient care.

Electronic records would make an integrated process faster, but having all Caswell County providers switch to compatible electronic records within the next few years is highly unlikely. One potential solution is to give patients cards that document their key pregnancy indicators and test results. Patients would be instructed to carry this card with them at all times and present it if they had to go for care outside their home provider, and especially at the emergency room. An example of a medical history card used by the Wake County Health Department, which might provide a model for Caswell, can be found in Appendix E. One interviewed mother, a CCHD patient who did not want to travel to UNC Hospitals for her delivery, reported carrying her full chart with her for the last few

weeks of her pregnancy because she knew that she wanted to deliver at the closest hospital and that hospital would not have her chart. Further explorations into how to ensure quality care is received by Caswell County pregnant women in unplanned situations is warranted. Providing all patients with medical history cards summarizing their laboratory results should be considered in the absence of wide scale electronic records.

#### Recommendation 5: Enhance Spanish language prenatal services.

"Spanish speaking resources are lacking. Ideally, I would want to start up another childbirth class for Spanish speaking patients. There needs to be more breastfeeding information and formula feeding formation in Spanish. There needs to be more consistency with UNC hospital services and more Spanish-speaking support for breastfeeding. Orange County is the only county with a Spanish speaking lactation consultant. Spanish speaking services are a big need."

- Service Provider

Although Caswell County has a relatively small Latino community compared to its neighbors, Person and Alamance Counties, it is likely this community will grow over the next few years. In 2001, 10 of the 245 infants born to county residents were Hispanic (4% of births). By 2005, 21 infants out of 260 births were Hispanic (8% of births) (North Carolina State Center for Health Statistics, 2007). Caswell County needs to address this demographic shift by providing culturally appropriate prenatal care services to support non-English speaking Hispanic pregnant women and their families. The majority of the services provided to Hispanic patients at Prospect Hill Community Health Center are in Spanish. Nonetheless, there are currently significant gaps in Spanish-language prenatal services. This assessment identified gaps in the provision of childbirth education classes, Medicaid application support, and Maternity Outreach Worker services. These gaps will only become more significant as Caswell's Latino community grows. This assessment recommends that Caswell County develop strategies to address the prenatal services of Latina and other emerging minority populations.

#### Recommendation 6: Create a prenatal services strategic outreach plan.

In order to increase the number of Medicaid prenatal clients seeking care in-county, providers within Caswell should create a strategic outreach and marketing plan, which would take into consideration the key factors women used to select prenatal care services identified through this assessment. The majority of interviewed mothers reported choosing their prenatal service provider based on their familiarity and comfort with the facility's providers and staff. Recommendations from friends and family also influenced many pregnant women's decisions. A strategic outreach plan for prenatal service delivery should build on positive and close relationships between patients and providers. For example, CCHD might consider attracting new patients through a formal marketing campaign that emphasized the high quality of prenatal care at CCHD. For example, letters could be sent to every prenatal patient at the conclusion of their care asking for feedback and encouraging that patient to tell friends and family about CCHD services and providing a toll-free number for people to call if they had questions.

#### Recommendation 7: Work to reduce negative stigma around CCHD services.

"Women also consider prestige when choosing a provider. There is a stigma about coming to the Health Department for services."

- Stakeholder

"Too many people don't like anyone in their homes. Before when I started getting [MOW], people thought I was getting Social Services in my business. They are afraid that [CCHD] would report to DSS. When [MOW] explained that we are here for this. That is when I started involving myself more."

- Recent Mother

It is important to note that for some, CCHD services are stigmatized as providing inferior medical care because by and large CCHD serves low-income clients yet statistics reviewed and interviews done for this assessment confirmed that CCHD offers high quality prenatal care. Although, as a rural, relatively poor county, Caswell is under-resourced, in fact, this assessment revealed many

strengths of CCHD's prenatal program. These included close personal connections between patients staff; well-coordinated care with excellent communication between clinic, WIC, MOW, and MCC staff; extensive follow-up with non-compliant patients; an excellent emphasis on patient education; the ability to process and accept Presumptive Medicaid applications (the only one of two prenatal providers to do so).

However, some community members mistrust CCHD simply because they had a general distrust of government-provided services. Some mothers interviewed reported having friends who were uncomfortable accepting the psychosocial support provided by the CCHD because they were afraid those services were connected to the Department of Social Services; others believed that CCHD had the power to remove their children if they had problems. A marketing campaign to "sell" the CCHD as a medical care home on the basis of its high standards and popularity among users might target this source of perception by promoting community services and expertise as well as clarifying the CCHD's distinction from Department of Social Services.

#### Recommendation 8: Strengthen and expand the Maternity Outreach Worker Program.

"I would love to see more [women] breastfeeding and going to more [of their] prenatal appointments. I think they need more people like Pauletta Cates [the MOW]. She is the only one in Caswell County [that comes to] talk to women about their pregnancy. People need to talk more about their pregnancies. They need more information."

- Recent Mother

Outreach services to vulnerable pregnant women are essential in improving the health of infants and families (Corrarino & Moos, 2004; Hodnett & Fredericks, 2003). The MOW program, which offers home visits to pregnant mothers throughout their pregnancy, is a service provided by the CCHD. This program can be invaluable to mothers who need additional support such as teenage mothers, first-time mothers, and pregnant women from unstable homes. The MOW plays an

active role in connecting pregnant women to the various prenatal services, demystifying these services and encouraging women to use them. In addition, the MOW follows women through their birth and postpartum period. The MOW program, however, currently serves only a portion of the eligible pregnant women in Caswell County. The MOW program should continue to increase its outreach efforts, work with the Maternity Care Coordinator and recruit more participants.

#### Recommendation 9: Increase participation in childbirth education classes.

Question: Why do you think other moms are not going to childbirth classes?

"They think they know it all. I thought I knew it all [with my first pregnancy] but [I attended childbirth classes for my second child] and she showed me all the positions to prevent having a C-section and I wish I knew that with my oldest one."

- Recent Mother

CCHD offers the only Childbirth Education Classes (CBE) classes in the county.

Although CBE is offered and paid for by Medicaid, the class instructor has found that the low level of interest makes it difficult to fill these classes. Hospitals in the surrounding counties do offer CBE but these classes are more expensive than the CCHD class and some of the hospitals in do not accept Medicaid reimbursement for their childbirth classes. The CCHD class is a significantly underutilized asset in the Caswell community. The mothers interviewed as part of this assessment who participated in the CCHD classes reported were all highly satisfied. Mothers who did not attend, explained that they did not have enough time to attend CBE classes or mentioned other barriers, such as lack of childcare or transportation, that prevented them from attending. Some mothers reported feeling that they did not need the skills the class provided because they believed that their bodies would automatically know how to go through labor and delivery.

"I started [CBE classes with my first child] but I was working at the time and I didn't have time for it. They seemed fun. I liked that they gave you a car seat and other things. I wish I could have done it more. When I got pregnant again, I was working two jobs and also couldn't find the time to go. I was trying to get ready for [the new baby]."

- Recent Mother

More advertising and outreach beyond CCHD prenatal clientele might improve participation in childbirth education classes. Other locations, times and childcare options to make the class more accessible should be explored. Classes held at a consistent time and providing the yearly schedule on a website would help other service providers more easily refer pregnant women to the class and could prevent confusion about the program. Holding the class at CCHD reinforces the community's assumption that the class is solely for CCHD patients and/or low-income Medicaid recipients. More affluent pregnant women, who could also benefit from a closer local option for CBE, might be more likely to participant at a different venue. Many interview participants suggested offering incentives to attract women to CBE classes. There is also no CBE offered in Spanish in Caswell County. A formal or informal community survey that focused on what women are looking for in CBE and deterrents to participating in the CCHD offering, could also help CCHD or other providers create a CBE program that best meets the needs of all pregnant women and couples in Caswell.

## Recommendation 10: Establish a continuous monitoring system for tracking prenatal health, quality of care and location of prenatal care.

The final recommendation is that prenatal health, quality of prenatal care, where pregnant women are seeking care and determinants of poor outcomes be routinely monitored. A system to routinely track information provided by the birth certificates or infant and fetal death reviews, was not apparent. Simple monitoring systems will help Caswell County become more proactive in addressing perinatal health problems. CCHD is appropriate to take a lead role because it receives a copy of every birth certificate in the county. Although CCHD plays a key role in ensuring

that prenatal needs are being met, other political bodies such as the Board of Health and Caswell County Commissioners should also be monitoring the county's prenatal health. The support of prenatal needs hinges on the respect and collaboration between CCHD, Board of Health and Caswell County Commissioners.

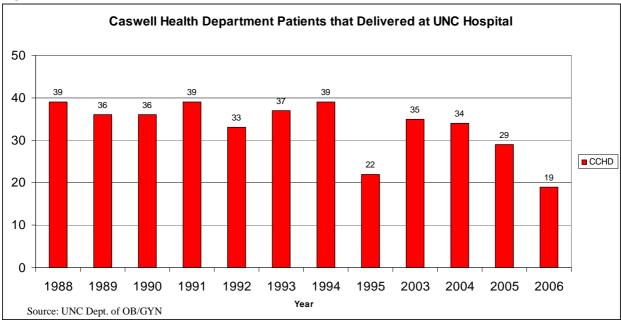
This prenatal needs assessment revealed that the existing prenatal care system in Caswell County has many strengths. It also identified shortcomings. By addressing weaknesses identified during this assessment, more women may select to receive quality services within the county.

### Section Three: CCHD Options for Restructuring Prenatal Services

#### I. Trends in Prenatal Patients Seen at CCHD Over the Last 18 Years

CCHD has noticed a decline in their number of prenatal patients over the last few years. This decrease has been especially notable within the last year. Although not all CCHD prenatal patients give birth at UNC Hospitals, the number of CCHD UNC Hospital deliveries over the last 15 years replicate this decrease (Figure 2). In 1988 there were 39 CCHD patient deliveries; in 2006 there were 19 deliveries at UNC. Although it is difficult to determine if this decrease is indicative of a long-term trend, what is certain is that the decrease in patients seen at CCHD has placed financial stress on CCHD. The specialized expertise and staff time required by prenatal patients and for chart documentation, makes the prenatal program at CCHD one of the most expensive programs that CCHD offers. A loss of Medicaid reimbursement revenue accompanies the decline in prenatal patients seen at CCHD.

Figure 2:



#### II. Why the decrease in prenatal patients seen at CCHD?

This prenatal needs assessment was not able to determine why the decrease in CCHD prenatal patients has occurred. The sampling strategies and research designed necessary to accurately answer this questions were beyond the resources allocated for this assessment. Several factors probably affect this decrease. The majority of the mothers interviewed were not aware of the decrease in numbers and many believed that CCHD services were well utilized. Stakeholders and service providers, who were aware, offered a number of opinions on the root cause of the decline. Some wondered if the decrease was due to a declining birth rate. The decrease in the birth rate has been slight, however, and not large enough to account for the decline in patients. A long-term employee of CCHD believed the decrease was just part of a cyclical process that happens with CCHD programs over time. She felt confident that the number of patients would increase again in the future. Others believed that the decrease was due to an increase in service providers serving Medicaid recipients in the surrounding counties. Dr. Lewis in Person County, however, is the only new practice to have opened in the last two years, and they

estimate that only 10% of their patients (18 patients a year) come from Caswell County. It seems unlikely that this new provider solely accounted for the falling rates, which have been declining for years. Since this prenatal needs assessment was not able to explain the variation in number of pregnant women served at CCHD, more assessment and tracking of prenatal care over time should be done to further explore this trend.

#### **III. Options for Restructuring CCHD Prenatal Services**

In addition to dealing with the declining number of CCHD prenatal patients, CCHD is also preparing for a significant change in the structure of their prenatal program. Due to the retirement of the UNC nurse practitioner this spring, it is likely that UNC Department of OB/GYN will no longer be sending any staff, including OB residents, to see prenatal patients at CCHD. The UNC nurse practitioner has coordinated the UNC/CCHD relationship for more than 25 years without her advocacy, residents are likely to be reassigned to hospital-based functions rather then traveling to and from Caswell County each month. The current UNC staff configuration will be ending in April 2008. While unfortunate, this staffing change gives CCHD the opportunity to assess its prenatal program and service to the Caswell community. Now maybe the time to redesign prenatal service delivery in a way that considers financial realities yet ensures that the prenatal needs of Caswell County families are being met.

As a result of this assessment, I identified nine possible options for providing prenatal care to CCHD patients (Table 8). These options are discussed briefly below, following in each case by its corresponding pros and cons. These options are offered to facilitate short-term planning to accommodate the immediate staffing change. A more extensive analysis evaluating each option and relative to long-term planning will be presented in a separate report to be completed Spring of 2008.

#### Table 8:

#### **Summary of Restructuring Options for CCHD Prenatal Services Program**

- 1 Partner with local OB/GYN practice which would provide a mid-level provider (nurse practitioner, physician assistant or midwife) to see patients at CCHD.
- 2 The CCHD full time nurse practitioner assume care of prenatal patients until labor.
- 3 Have the current or additional part-time nurse practitioners see patients until 36 week of pregnancy and then transfer them to private OB/GYN of their choice.
- 4 Hire an additional part-time nurse practitioner with prenatal care experience to see prenatal patients up until labor.
- 5 End prenatal medical care at the CCHD but continue psychosocial support services.
- **6** Refer all prenatal patients to Caswell Family Medical Center or Prospect Hill Community Health Center.
- 7 Convince UNC to continue the structure currently in place with a nurse practitioner and OB residents.
- 8 Develop a similar prenatal partnership with the UNC School of Nursing.
- **9** Establish a birthing center in Caswell County.

### 1) Partner with local OB/GYN practice which would provide a mid-level provider (nurse practitioner, physician assistant or midwife) to see patients at CCHD.

Establish a partnership with one of the private practice OB/GYN offices in the surrounding counties. The OB/GYN office would provide a mid-level provider (nurse practitioner, physician assistant or midwife) who could see prenatal patients at CCHD. Similar to the current set-up, the enhanced role maternity nurses would care for prenatal patients between visits from the medical provider. Patients would deliver with the partnership OB practice at the hospital where the OB is on staff. To increase sustainability of this partnership, an agreement could be made with the local hospital that this partnership would continue if the OB/GYN left his or closed practice.

**Pros:** This option would provide continuity of care between prenatal care and labor and delivery since patients would be delivering with the same providers from whom they receive prenatal care. This option also allows for face-to-face communication between the visiting provider and CCHD psychosocial support staff, and would be convenient. The enhanced role maternity nurses could

to provide the personal connection, care and prenatal education that those interviewed highlighted as strength of the current prenatal program. Under this option, patients would not have to travel to Chapel Hill to receive ultrasounds or for delivery.

Cons: Depending on its financial plan, this option could be costly for CCHD. A further disadvantage is that patients may not want to deliver at the hospital with which the OB practice was affiliated. This hospital may not be the closest hospital to patients and they may choose to go to the closest hospital rather than the assigned hospital, resulting in the OB practice not receiving the professional fee for the delivery. Patients would still have to travel to an out of county hospital to get ultrasounds. If the OB provider does not commit to a long-term financial partnership with CCHD, this option might be unsustainable. A partnership with a hospital, rather than an OB practice, might better insure continuity between OB practice transitions. The negotiation of a financial partnership between CCHD and a private OB practice may prove to be a challenge to establish and maintain.

#### 2) The CCHD full time nurse practitioner assume care of prenatal patients until labor.

The CCHD full time nurse practitioner, who currently cares for children, adults and pregnant women when they are sick with illnesses not related to the pregnancy, could also provide prenatal care for pregnant patients. The enhanced role maternity nurses would continue to care for prenatal patients at a specified interval. CCHD could continue to be an outlying clinic of the UNC Department of OB/GYN and patients could expect to deliver at UNC Hospitals.

**Pros:** This option is similar to the current structure and thus familiar to staff and patients. The psychosocial support services and prenatal medical services would have good opportunity to be well-coordinated. This option would increase continuity of care for infants and mothers since both infants

and mothers can be seen by the same nurse practitioner after the birth. If possible, CCHD could service more days and times than is offered by the currently twice a month schedule thus potentially increasing convenience for patient. High risk screening pathways is already in place.

Cons: This option would most likely not save CCHD much money. CCHD is currently spending approximately \$1,200 a year for the UNC OB resident. Under the proposed option, this money would be saved. There may be a possible increase in CCHD's malpractice insurance with this option. Since the current nurse practitioner does not have recent prenatal training, CCHD would need to invest in training. Adding prenatal patients to the nurse practitioner's current patient load may create backlogs in the other programs she covers. The current prenatal patient load may be too small for the nurse practitioner to gain the expertise needed to sustain skills. Patients would still be expected to deliver at UNC Hospitals. Other patients may not want to drive to Chapel Hill for labor and delivery. Identifying a physician to serve as the clinical consultant as registered with the Board of Medicine could also prove challenging.

3) Have the current (or additional part-time) nurse practitioner see patients until 36 weeks of pregnancy and then transfer them to private OB/GYN of their choice.

CCHD could continue to care for low-risk pregnant patients until 36 weeks of pregnancy. At 36 weeks, private OBs in a neighboring counties could assume prenatal care once a week and provide labor and delivery services for those patients. All high-risk women would be referred to UNC or another private provider when risks are identified. The enhanced role maternity nurses would continue to care for most prenatal patients when the clinical provider was not available.

**Pros:** The biggest advantage to this option is that patients get to choose that hospital where they will delivery while having the convenience of local prenatal care. Continuity of care would be enhanced through patients meeting with their OB provider and the OB becoming familiar with the patient's medical history prior to labor and delivery. CCHD psychosocial support services staff would continue to communicate with prenatal medical providers about the patient's care. This option would provide more continuity of care than the current structure because the prenatal patients would see the same nurse practitioner every appointment instead of seeing whoever the UNC OB resident was on duty who traveled that week to CCHD.

**Cons:** There would be discontinuity of care for patients between prenatal and delivery services. Chart documentation and other forms of communication with the OB provider will have to be extensive to compensate. There may be a possible increase in CCHD's malpractice insurance with this option.

# 4) Hire an additional part-time nurse practitioner with prenatal care experience to see prenatal patients up until labor.

A nurse practitioner could be hired part time to see prenatal patients twice a month. The hired nurse practitioner would already have prenatal care training. CCHD would continue to be an outlying clinic of UNC's Department of OB/GYN and patients would be expected to deliver at UNC Hospitals. Enhanced role maternity nurses would continue to care for the prenatal needs of patients when the clinical providers were unavailable.

**Pros:** This option would provide more continuity of care than the current structure because the prenatal patients would see the same nurse practitioner every appointment instead of seeing whoever the UNC OB resident was on duty who traveled that week to CCHD. This option is similar to the current structure. Hiring an additional part-time nurse practitioner with prenatal care experience would not

add additional patients to the current nurse practitioner's patient load and the present nurse practitioner would not have to be trained to undertake prenatal care.

Cons: The largest challenge to implementing this option is that it most likely will be more expensive than the current structure. In addition to paying the part-time nurse practitioner, CCHD would most likely have to pay for additional malpractice insurance for her. With this option as with most of the others, patients would not have a choice of hospital for delivery. Some patients may not want to drive to UNC Hospitals for labor and delivery.

#### 5) End prenatal medical care at the CCHD but continue psychosocial support services.

CCHD could stop offering prenatal medical care and refer all pregnant patients to other medical providers inside the county and in the surrounding area. However, CCHD could continue to offer psychosocial support services to pregnant mothers. These services would include Women Infant and Children Nutritional Program, Maternity Care Coordination, Maternity Outreach Worker, childbirth education classes, lactation support and post-partum nurse home visits. Uninsured self-pay patients could be referred to Prospect Hill Community Health Center and Caswell Family Medical Center for prenatal care. CCHD could set up a comprehensive system to monitor the prenatal care that pregnant women from Caswell receive.

**Pros:** CCHD would still be committing to providing psychosocial support services to vulnerable patients. Through these services, CCHD would still be able to monitor prenatal care for at least some populations. The cost of this option are low, since psychosocial support services do not cost as much to maintain and administer as prenatal medical care.

Cons: CCHD, the largest Caswell County prenatal provider for county residents, would cease to provide prenatal medical care, thereby further limiting prenatal care options in the county.

CCHD's prenatal medical care services provide a local convenient option for many pregnant women who lack reliable transportation. Without these services, some pregnant women will have to travel farther for prenatal care and go to multiple places to get comprehensive care. In this scenario, there is a high likelihood of little communication between psychosocial support providers and prenatal medical providers potentially leading to inefficiencies. Centralized care and communication between psychosocial and medical providers allows for ease in coordination of services.

## 6) Refer all prenatal patients to Caswell Family Medical Center or Prospect Hill Community Health Center.

All pregnant CCHD clients would be referred to the two other in-county prenatal providers. The Caswell Family Medical Center (CFMC) would see all prenatal clients until 36 weeks of pregnancy when they would be transferred to an OB of their choice. Pregnant women referred to Prospect Hill would be provided with prenatal care and would give birth at UNC Hospitals. Pregnant woman would still receive psychosocial services at CCHD.

**Pros:** Prospect Hill and CFMC are dedicated to serving the low-income and underserved clients and their services reflect this focus. These two medical facilities are within Caswell County and are convenient to many pregnant women. This would be one of the least expensive options for CCHD since CCHD would not be paying for any prenatal medical care. Patients being seen at CFMC would be able to chose which hospital and OB provider they would like for their delivery. Existing communication between Prospect Hill, CFMC and CCHD is already greater than with the private OB/GYNs in the surrounding counties and CCHD.

**Cons:** The family practice generalists at CFMC and Prospect Hill do not offer prenatal specialty expertise. The psychosocial support services would be less coordinated with prenatal medical care. There will not be continuity of care between prenatal care and labor and delivery.

### 7) Convince UNC to continue the structure currently in place with a nurse practitioner and OB residents.

Arguments might stress that CCHD, as a rural practice is desirable for residents training and Caswell is a medically underserved county with no OBs so UNC's service and outreach mission to the state is being fulfilled by this arrangement.

**Pros:** This system is familiar to patients and the Caswell community. The strengths of the current structure, such as the personal connections with staff and communication between psychosocial support staff and medical providers, would continue. The current structure is less expensive than many of the other options, excluding those options that would eliminate all CCHD prenatal medical services.

**Cons:** Such a campaign may prove unsuccessful. Even if the current set-up did continue, patients would still have to travel to UNC for ultrasounds and labor and delivery. Again continuity of care between prenatal and delivery services would be lacking since the prenatal provider will not be assisting in the delivery.

8) Develop a similar prenatal partnership with the UNC School of Nursing.

CCHD could approach UNC School of Nursing and propose becoming a training site for nurse practitioner or midwife students. A faculty member and nursing students could come to CCHD twice a month and perform the same duties as the current UNC OB residents and nurse

practitioner. CCHD would continue to be an UNC outlying clinic and patients would be expected to deliver at UNC Hospitals. Enhanced role maternity nurses could continue with their current duties.

**Pros:** This cost of this option is unknown. This option would continue a structure familiar to patients, staff and the Caswell community. The strengths of the current structure such as personal connections to CCHD staff and good communication between psychosocial support staff and medical providers, would presumably continue.

Cons: Patients would still have to travel to UNC for their ultrasounds and labor and delivery, as they do now. The lack of continuity of care between prenatal care and delivery would still be a problem. The current partnership with UNC Department of OB/GYN has worked well for over 25 years. The retiring UNC nurse practitioner has provided the stability, expertise and necessary communication link between UNC and CCHD staff. A partnership with UNC School of Nursing would not necessarily ensure the same consistency over the years that the retiring UNC nurse practitioner has provided. A quality partnership will take time to establish, and may never develop into the relationship that has existed for all these years.

#### 9) Establish a birthing center in Caswell County

Create a birthing center in Caswell County to serve Caswell residents and residents from the surrounding area. The center could be staffed with an OB/GYN and/or with midwives and nurse practitioners with OB/GYN back up. Births would occur locally at the birthing center. High-risk labors and deliveries could be transferred to a hospital in one of the surrounding counties.

**Pros:** A birthing center in the county would be convenient. A center could serve pregnant women of at all income levels. This is the only proposed option which would increase the prenatal care options for women with private insurance. This option would increase continuity of care because the same providers would see patients from prenatal care through labor and delivery. A birthing center could attract a large number of women desiring an out-of hospital and convenient birthing options.

Cons: This option is probably unrealistic due to the financial costs involved in establishing a birthing center or any new facility. Given that a birthing center would probably appeal to a small percentage of the pregnant women in Caswell County, there may be too few patients to financially sustain the center. In turn, the small number of patients and the challenges of rural obstetric work, make it difficult to attract an OB/GYN or midwife and the needed back-up coverage to Caswell County.

#### **IV. Summary**

Each of the nine options discussed above offers advantages and disadvantages to CCHD, their prenatal patients and the Caswell community. In addition to assessing the financial feasibility and utility of each option, every option needs to be evaluated on how it would ensure that pregnant women receive the highest quality care possible and that key barriers to receiving prenatal care are minimized. Restructuring forced by the UNC nurse practitioner's retirement provides CCHD the opportunity to evaluate their current program and create a sustainable prenatal program that serves the needs of low-income women in Caswell County.

### Section Four: Assessment Limitations

Although this prenatal needs assessment answered all four of its guiding questions and met many of the goals of the project, there are limitations to its methods and findings. The interviews were conducted using a convenience snowball sample and hence the sample was not representative of all of Caswell County. Interview participants referred other potential people to interview, making it likely that participants were from similar social networks.

The demographic diversity of the interviewed mothers was limited, with the interview pool being skewed toward low-income mothers who had recently used CCHD services. Eight out of twelve mothers interviewed were on Medicaid and prenatal care for 14 out of the 27 pregnancies occurred at CCHD. Efforts to recruit more affluent participants through childcare centers and flyers was met with limited success. Caswell is often considered a "bedroom community" for middle and upper middle class households. As such, it was difficult to access recent mothers with private insurance who worked outside of the county and only returned there at night. Only one out of twelve mothers interviewed were of Hispanic origin. Since I do not speak Spanish, I was not able to interview pregnant mothers who only spoke Spanish. To compensate, this assessment relied heavily on stakeholders and service providers to report on the Latina pregnant mothers' prenatal care experiences. However, this assessment does not adequately reflect the experiences of the Latina and the affluent social classes.

I was also not able to interview enough patients seen by private OB providers to draw any conclusions on the quality of care they provided or the patient's level of satisfaction with how well their prenatal needs were met. It is possible that a larger, more representative sample would have found a different level of satisfaction with prenatal services than found in this assessment.

Despite these limitations, this assessment provided a picture of the current prenatal services available to pregnant women in Caswell County and how well these were meeting prenatal needs. Although satisfaction was high, the assessment revealed areas of weakness and barriers for women in receiving quality prenatal care in Caswell. The findings provided here, though limited, provides those interested in or responsible for, Caswell County's governance and well-being with a "jumping off place" for thinking about and planning for prenatal services for the county's residents. With increased communication and collaboration between service providers and proactive planning, outreach and advertising of services, prenatal care in Caswell County can be improved.

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## Acknowledgements

Thank you to the 39 individuals and gave their time and were interviewed for this assessment. Your thoughts and experiences provided the essential insight into prenatal care for Caswell residents. Thank you to Caswell County Health Department staff for all your assistance in orientating me to Caswell County and providing me with workspace. Lastly, I would like to thank my advisors Jo Anne Earp and Merry-K Moos for their encouragement, guidance and support in this project.

## Appendix

## Appendix A

## **Demographic Breakdown of Mothers Interviewed for Assessment**

All women interviewed currently live in Caswell County, have given birth within the last four years, and were living in Caswell County during their last pregnancy. All but one mother had had multiple pregnancies. The interviewed mothers had 27 pregnancies over their lifetimes. All pregnancies were discussed in each interviews.

**Total Mothers Interviewed:** 12 **Age Range:** 18-40 years old **Mean Age:** 28 years old

#### **Marital Status:**

5 single mothers

5 married mothers

2 divorced mothers

## **Highest Educational Attainment:**

3 mothers had an Associates of Arts Degree.

3 mothers had some college education but no degree.

5 mothers had a high school diploma or GED.

1 mother had some high school education but no diploma.

## Demographic Areas of the County Where Mothers Lived<sup>11</sup>:

Yanceyville (3)

Blanch (2)

Prospect Hill (1)

Reidsville (1)

Pelham (1)

#### **Members of Household:**

Range: 2-10 people in household Mean: 4.6 people in household

#### **Number of Children Born to These Mothers:**

Range: 1-8 children

All but one mother had had multiple children

Mean Number: 3 children

## **Health Insurance:**

8 mothers were Medicaid recipients.

2 mothers had health insurance through their employer.

1 mother did not have any health insurance.

1 mother pays for private health insurance.

<sup>&</sup>lt;sup>11</sup> Four interviewed mothers did not answer this question.

#### Racial and Ethnic Breakdown:

6 mothers were African American or Black

6 mothers were white

1 mother were Hispanic

## **Annual Household Income**<sup>12</sup>:

2 mothers had an income of below \$10,000.

3 mothers had an income between \$10,000 and 19,999.

3 mothers had an income between \$20,000 and 29,999.

1 mother had an income between \$30,000 and 39,999.

1 mother had an income between \$40,000 and 49,999.

1 mother had an income over \$100,000.

#### **Place of Prenatal Care:**

The women who were interviewed had a total of 27 pregnancies. Of those pregnancies...

14 were seen at the Caswell County Health Department (CCHD) for prenatal care.

3 were seen at the Caswell Family Medical Center (CFMC) for prenatal care.

2 were seen at Family Tree OB/GYN in Reidsville (Rockingham County) for prenatal care.

1 was seen at UNC Hospitals for prenatal care.

1 was seen at Woman to Woman in Eden (Rockingham County) for prenatal care.

1 was seen at Healthcare for Woman in Danville, VA for prenatal care.

4 had home births.

1 did not receive any prenatal care.

#### **Place of Delivery:**

The women who were interviewed had a total of 27 pregnancies. Of those pregnancies...

11 gave birth at UNC-CH Hospital.

4 gave birth at Annie Penn Hospital in Rockingham County.

4 gave birth at Danville Regional Medical Center in Danville, VA.

3 gave birth at Person Memorial Hospital in Person County.

1 gave birth at Durham Regional Hospital in Durham County.

1 gave birth at Morehead Memorial Hospital in Rockingham County.

4 gave birth at home.

-

<sup>&</sup>lt;sup>12</sup> One interviewee did not complete this question

## Appendix B Relevant Statistics from 1992-2005 for Caswell County

## **Birth Rates for 2001-2005**

	Birth Rate <sup>13</sup>	White Birth Rate	Non- White Birth Rate	Low Birth Weight <sup>14</sup> (LBW)	White LBW	Non- White LBW	Teen Pregnancy	White Teen Pregnancy	Non-White Teen Pregnancy
Caswell	10.4	11.6	8.2	8.4	6.4	13.4	27.7	28.3	26.7
North Carolina	14.1	13.8	15.3	9.0	7.4	13.4	37.2	29.2	53.6

## **Birth Rates for 1992-1996**

	Birth Rate	White Birth Rate	Non-White Birth Rate	Low Birth Weight (LBW)	White LBW	Non-White LBW
Caswell	11.5	12.1	10.5	9.1	7.6	11.6
North Carolina	14.5	13.2	18.5	8.1	6.7	13.1

## Death Rates for 2001-2005

	Perinatal Death	White Perinatal	Non-White Perinatal	Fetal Death <sup>17</sup>	White Fetal	Non-White Fetal
Caswell	16.1	18.0	11.3	9.7	13.3	5.6
North Carolina	12.9	9.4	22.2	7.1	5.3	11.7

## **Death Rates for 1992-1996**

	Perinatal Death	White Perinatal	Non-White Perinatal	Fetal Death	White Fetal	Non-White Fetal
Caswell	17.9	14.1	24.4	6.5	5.1	8.9
North Carolina	15.2	11.1	24.3	8.5	6.2	13.5

## Death Rates for 2001-2005

	Neonatal Death <sup>18</sup>	White Neonatal	Non-White Neonatal	Infant Death 19	White Infant	Non-White Infant
Caswell	6.5	6.8	5.7	8.1	9.1	5.7
North Carolina	5.9	4.1	10.6	8.5	6.1	14.7

## **Death Rates for 1992-1996**

	Neonatal Death	White Neonatal	Non-White Neonatal	Infant Death	White Infant	Non-White Infant
Caswell	11.5	9	15.7	13.9	10.3	20.1
North Carolina	3.1	2.4	4.6	9.8	7.3	15.4

## **Source: North Carolina State Center for Health Statistics**

 $<sup>\</sup>overline{\text{Birth rate}} = \text{(Number of live births/total population) X 1,000}$ 

<sup>&</sup>lt;sup>14</sup> Low Birth Weight Rate = (Number of low birth weight live births / number of live births) X 100 <sup>15</sup> Teen Pregnancy= (Number of births to girls 15-17 / total population of girls 15-17) X 1,000

<sup>&</sup>lt;sup>16</sup> Perinatal death combines fetal deaths and neonatal deaths.

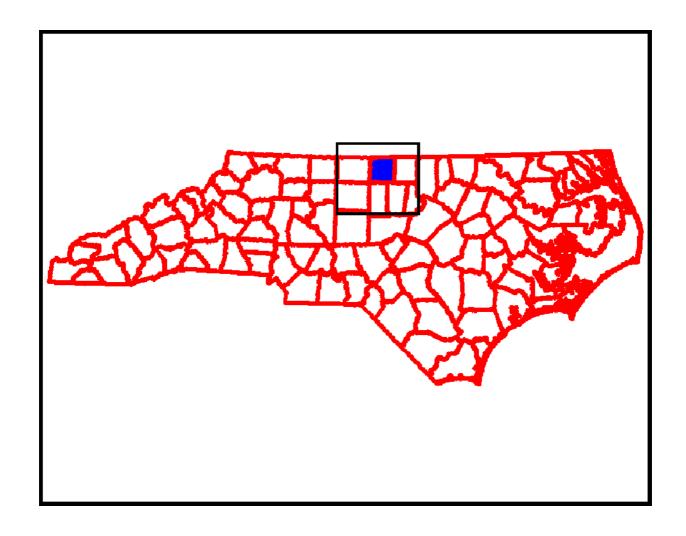
<sup>&</sup>lt;sup>17</sup> A fetal death is defined as death of an infant prior to its expulsion from its mother after 20 weeks of gestation where there is no signs of life and is not a result of a pregnancy termination.

<sup>&</sup>lt;sup>18</sup> Neonatal death is a death of an infant who is born alive but dies before he/she is 28 days of age.

<sup>&</sup>lt;sup>19</sup> Infant death is a death of an infant under one year of age.

Appendix C

Geographic Area of Prenatal Care and Hospital Deliveries for Caswell County



Appendix D Place of Delivery For All Caswell Residents Between 2003-2005

	Total	Overall	Prenatal Me	edicaid	Emergency 1	Medicaid	Non-Medicaid		
FACILITY	Number of Births	Percent	#	%	#	%	#	%	
UNC HOSP AT CHAPEL HILL	173	24.09	125	72.3	12	6.9	36	20.8	
OUT-OF-STATE DELIVERY	134	18.66	0*	0	0	0	134	100.0	
ALAMANCE REG MED CTR	129	17.97	44	34.1	3	2.3	82	63.6	
ANNIE PENN MEM HOSP	104	14.48	66	63.5	2	1.9	36	34.6	
WOMENS HOSP OF GREENSBORO	58	8.08	9	15.5	0	0	49	84.5	
PERSON CO MEMORIAL HOSP	39	5.43	27	69.2	0	0	12	30.8	
MOREHEAD MEMEMORIAL HOSP	28	3.90	12	42.9	1	3.6	15	53.6	
DURHAM REGIONAL HOSP	23	3.20	2	8.7	0	0	21	91.3	
DUKE UNIVERSITY HOSP	14	1.95	8	57.1	0	0	6	42.9	
HOME OR OTHER NON-INSTITUTION	6	0.84	0	0	0	0	6	100.0	
FORSYTH MEM HOSP	4	0.56	3	75.0	0	0	1	25.0	
CABARRUS MEM HOSP	1	0.14	0	0	0	0	1	100.00	
HIGH POINT REGIONAL HOSP	1	0.14	1	100.0	0	0	0	0	
CENTRAL CAROLINA HOSP	1	0.14	0	0	0	0	1	100.0	
MERCY HOSPITAL SOUTH	1	0.14	1	100.0	0	0	0	0	
PIEDMONT WOMENS HEALTH CTR	1	0.14	0	0	0	0	0	100.0	
SOUTHEASTERN REG MED CTR	1	0.14	1	100.0	0	0	0	0	

Source: North Carolina Center for Health Statistics
\* Location of delivery and payment breakdown could not be provided for out-of-state births.

# Appendix E

# **Wake County Prenatal Medical History Card**

Date	Lab	Result	_	Appoin	TMENTS T	о <b>R</b> емемвек		WCDOH HX#
	Gp/Type Antibody Hgb/Hct AEP		_	Date	Time	Place	35	WMC HX#
	Sickle Rubella RPR		_ _ _				Please Notify I	n Case of An Emergency:
	HepB HIV O'Sull PAP		_				Prenatal Cli	nic: Medical Problems 250-4696 Appointments
=	GBBS Chlam GC Other		_ _ _				CONTRACTOR OF	<sup>250-4701</sup> Human Services
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Date	Weeks Gest.	BP	Wt.		Urine KET		Fundal Height	FHT	Pres.	Edema	Provider	Comments	
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# Dan River Community Health Assessment

October, 2007

Prepared on behalf of MDC, Inc. Chapel Hill, NC

For the Danville Regional Foundation

MDC, Inc. Consulting Team

Dr. Randy Byington Mr. Charles Naney Ms. Roteshia Hamilton

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## Dan River Region Community Health Assessment Report October 2007

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## Introduction and Overview

## **Background**

A new regional foundation was established in 2005 with proceeds from the sale of the not-for-profit Danville Regional Medical Center to the for-profit hospital corporation, LifePoint. The new foundation Board selected three areas for long term investment: health, education and economic development. East Tennessee State University was asked to supervise and conduct the community health assessment by MDC, Inc. of Chapel Hill, NC.

## **Objectives**

The Foundation established three objectives for the proposal for the health assessment:

- 1. Identify Key Issues, Performance Gaps, and Trends. Data-based fact sheets will be completed on the health status of the Danville/Pittsylvania/Caswell area.
- 2. Identify Regional Institutions and Key People with Significant Capability to Address the Issues and Trends.
- 3. Develop Considerations and Recommendations for Action for the Foundation.

## **Methods**

An Assessment Committee of the Foundation's Board of Directors was consulted at the beginning of the process. An Assessment Team consisted of four members with public health backgrounds who spent extensive time in the community for three months. The assessment design used multiple methods to engage a broad range of participants from Danville, Pittsylvania, and Caswell counties. Their input provided breadth and depth to the health assessment findings, considerations, and recommendations.

- 1. <u>Secondary data</u>. Vital health statistics were collected and presented in the form of Data Sheets which compared the region to the two states (Virginia and North Carolina) and the US.
- 2. <u>Leader interviews</u>. Fifty-three individual interviews were conducted. The interview questions were pre-tested and approved by the Foundation Assessment Committee. A snowball sample was used to select interviewees, asking all participants to identify other leaders who were then interviewed. Interviews were conducted at the convenience of participants.
- Inter-organizational health provider focus groups. Three groups were conducted, including the hospital advisory board, one preexisting health coalition in Pittsylvania County, and health providers in Caswell County. Focus group questions centered on the history of cooperation and collaboration and perceptions of regional health status.
- 4. <u>Community meetings.</u> Six meetings were conducted with a diverse set of organizations that invited the Assessment Team to preexisting forums. The

meetings provided a means to gain supplemental insights about health concerns and assure a mix of interest groups. These included business interests, civic groups, and special interest groups.

## **Results**

There is great interest in the community in health and in the future investments of the Foundation. Almost 300 persons were involved in the assessment. There is almost unanimous opinion that the health of the region is poorer than surrounding areas. This was confirmed by mortality statistics for the two county-one city region. Though variation is noted between the Virginia and North Carolina statistical findings, no major differences were found about regional perceptions about health. Many of the same concerns were found among community leaders, health professionals, and those without jobs and insurance. The perceptions were similar in both Virginia and North Carolina.

Participants are aware of the long term and pervasive nature of the personal risks to health status, particularly related to the prevalence of obesity, tobacco use, and underuse of primary health care services including screenings. Participants acknowledged the influence of individual awareness, beliefs, and behaviors about health of the region, but many also expressed concerns, some deeply held, about access to and outcomes of health services. There are several recent developments that have expanded care for the uninsured but general awareness of the new capacity is limited. There is a deepseated concern about the growing prevalence of substance abuse. Perinatal health issues concern community members. Although there appears to be few multiorganizational plans established to address health care issues in the region, those coalition efforts that have been organized have been successful.

## **Conclusions**

There is general support for the Foundation to do something in the health care sector. Many understand health as a community as well as a personal issue. Several specific areas for potential intervention were identified across broad segments of the community: perinatal services, chronic diseases among adults, and promoting collaboration among health providers and with community groups. Regional participants are aware of the depth, pervasiveness, and long term nature of the region's major health issues. There is also awareness of the dual nature of health issues – outcomes are dependent upon not just available, accessible, and use of health services, but also influenced by individual knowledge, beliefs, and behaviors. The report provides a series of Considerations drawn from data collected using the assessment's methods and presents general Recommendations for future action.

## Methods and Process Notes

# Method 1: Fact Sheets of Key Health Issues and Trends from Secondary Data Collection and Analysis.

The Assessment Team reviewed secondary data, identified indicators for which the jurisdictions in the Dan River Region were significantly different than their states or nation, and prepared nine fact sheets with comparative charts. Vital statistics depicting nine targeted health conditions were collected and presented in the form of *Health* Status sheets. Disease specific morbidity and mortality estimates for the "Dan River Region" were calculated to investigate similarities and differences at the county, state, and national levels. Risk data was taken from national survey findings, selectively disseminated by state and local health departments. Age-adjusted all-cause death rates (1979-2000) were organized in place-based tables stratified by gender and race (see Attachment 2). To control for the changing age distribution, the new standard (2000 Census Population) was used in the direct adjustment technique. The data included death rates, morbidity rates, and risk factors. The Team discussed findings with representatives from both county health departments (Danville-Pittsylvania and Caswell). The resulting Fact Sheets were subsequently used at the Community Meetings and Focus Groups (noted below). Comparative health statistics were relatively unknown to the public. Additional charts based upon review of secondary data for the region can be found on pages 10-12. These additional charts display changes in mortality over time by race and gender. These have been used to compare the regional counties with national and states rates.

## **Method 2: Community Leaders Survey**

A sample of 53 community leaders was interviewed. A sampling repetition method of a snowball convenience sample was used to identify leaders, beginning with Foundation board members (each leader was requested to share the names of five other leaders). Using this method, 134 persons were identified, from which the 53 persons selected based upon greatest frequency of mention. (Note: leaders were defined as those in positions of leadership in the community and by their perceived ability to "get things done in and for their community.") Results of interviews were confidential and results are presented in aggregate format. The interview survey was pretested with Foundation board members and included personal and community demographic questions, perceived issues of healthcare utilization and financing, community health issues, and beliefs about the private, not-for-profit, and public sectors in personal and community health. Names of all leaders were used to create the "Rolodex" of names of persons to whom the Foundation can seek assistance in the future. A copy of the survey questions is found in Attachment 6.

## **Method 3: Community Health Organizations Focus Groups**

The intent of the focus groups was to engage a broad representation of health organizations to discuss the health of the Danville, Pittsylvania, and Caswell counties region. Three focus groups were conducted: one with an existing coalition of Danville-Pittsylvania County providers; one with invited Caswell County organizations, and the Danville Regional Hospital Advisory Board. Perceptions regarding general health systems issues were explored. Fact sheets about health indicators for the region were presented with focus group discussion leading to selection of a limited number of issues for more intensive discussion.

## **Method 4: Community Discussion Meetings**

Six community meetings were conducted throughout the region. The intent of the community meetings was to engage existing non-health affiliated community-based groups (e.g., churches, schools, civic clubs, etc.) to complement and diversify the Assessment input. From leader interviews and Foundation Board members, suggestions were made to representatives of community groups to extend invitations for Assessment Team members to attend their community meetings. The Assessment Team responded to invitations from a diverse set of community groups.

The meetings were not designed to generate or review proposals for action; instead the focus was to identify the community's health concerns. Fact sheets about health indicators for the region were presented. Community groups were invited to discuss these indicators and to identify medical and non-medical factors that influence the health of the region. A list of immediate and long term health issues and broad strategies that could improve these health concerns were generated. Ideas gathered in each community meeting contributed to the overall regional Health Assessment and are included in this report.

For each of the Focus Groups and Discussion Meetings, one Team member facilitated the group and another Team member recorded discussion using a portable computer. Team members used meeting notes in a debriefing process that resulted in a list of Considerations. Other Team members then provided supplemental evidence collected using other Assessment methods to support or contradict each Consideration. A second combined and rewritten set of Considerations was shared among Team members prior to development of specific Recommendations for the final report. A summary of each focus group and community meeting can be found in Attachment 1.

The mixed methods approach, using quantitative and qualitative information, was designed to identify issues and provide useful community description to help explain each issue.

## **Description of Community Participation**

The mixed methods adopted for the assessment was designed to promote flexibility resulting in invitations to conduct assessment methods with a diversity of persons who are representative of multiple groups in the city and two counties.

The characteristics of the 53 leaders with whom individual interviews were conducted include:

- 80% male, 20% female
- 72% white, 28% African American
- 40% lifetime, 20% less than 10 years of residence
- 20% health professionals
- Affiliated home as

Danville 56%Pittsylvania 32%Caswell 14%

The persons selected to interview and identified using the reputational method demonstrated that they have deep social networks. Leaders described many social connections, memberships and multiple leadership roles. Each leader was asked to name up to five organizations, clubs or other affiliations. As noted below, almost half of the leaders noted personal affiliations with five organizations.

One affiliations 100%
Two affiliations 92%
Three affiliations 76%
Four affiliations 60%
Five affiliations 44%

Leaders indicated a willingness to assist the Foundation. The Rolodex of community leaders and organizations, noted in Attachment 5, provides the Foundation with a ready means of communicating and marketing its purposes to broad segments of the community. The organizations that sponsored focus groups and community meetings listed in Table 1 provide additional vehicles to reach into the community. Summaries of the meetings are found in Attachment 1.

**Table 1: Inter-organizational Health Focus Groups and Community Meetings** 

Sponsoring Organization	Participants	Type of attendees
Caswell County Health Department	10	Health providers
Danville-Pittsylvania Community Health Coalition	20	Front line workers in health organizations
Danville Regional Hospital Advisory Board	10	Board members
Danville-Pittsylvania County Chamber of Commerce	13	Board members
Leadership from Rotary clubs	11	Club leaders from four regional groups
Cherrystone Baptist Association	125	African American pastors and church members
Danville Community College	18	Students in displaced worker training programs
Piedmont Community College	22	Community leaders and members of agencies
Latino community	50	Church members

## General Findings

- 1. There is a strong degree of agreement among participants and across the different assessment about findings.
- 2. Participants feel the Dan River Region is a good place to live. The region and its communities have many assets and favor the absence of many big city problems.
- 3. Participants recognize the region is rural, its residents are less affluent and less educated, and the region's health is poorer.
- 4. Mortality rates for Blacks are higher than for Whites. The region's rates mirror but also exceed most national racial health disparities for multiple health conditions and may reflect historical differences in access and delivery of health care for Blacks.
- 5. Health is seen as a direct outcome of access to (quality) health services. Access is related to health insurance coverage, typically through employment. Sustained employment in jobs with health insurance is increasingly related to level of personal education.
- 6. Lifestyle change(s) are required of everyone: young and old, rich and poor, White and Black.

- 7. Services, particularly education and screening, need to be more available throughout region.
- 8. Personal apathy about individual health and the under-use of health care is a dangerous threat in the region, resulting in patients "showing up at hospital *toes-up*" in the emergency room.
- 9. The public perceives that the healthcare system is changing. The hospital can no longer assume it has the full trust of people of the region. There is also a loss of people's personal physicians in the region.
- 10. "The community needs something to be proud of" regarding its health. The Foundation could help influence positive change.

## Specific Assessment Outputs

#### **Fact Sheets on Health Issues**

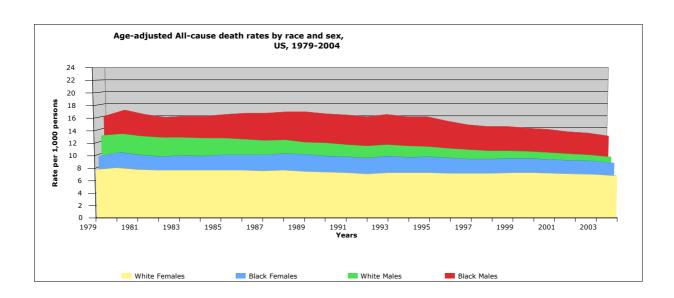
Attachment 2 presents a summation of secondary vital statistics data and other health data that compares the Dan River Region with the states of Virginia and North Carolina and the United States. A small number of indicators were selected by the Team that documented major statistical differences between the region and broader geographic areas. The charts are a visual reference supplemented with qualitative descriptive statements to form a Fact Sheet on each issue.

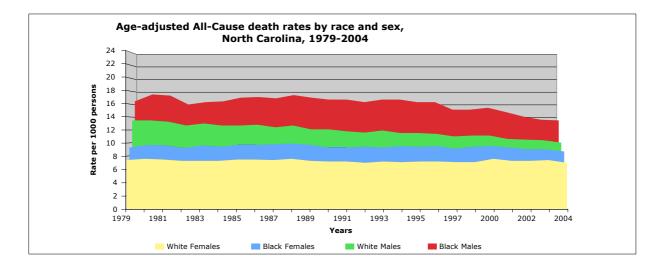
These results are clustered into two broad categories, perinatal (around birth) indicators, and adult diseases indicators. The Fact Sheets portray multiple views of clustered aspects of related problems. Four indicators demonstrate a worsening picture of perinatal issues. The high percentage of late or no prenatal care is a risk factor for the high low birth weight percentage. This in turn is a risk factor influencing the high rates of infant mortality in the populations we assessed. The high percentage of births to unwed mothers was noted by community members and leaders as a concern worthy of further investigation. Taken together, the data identify links that form a causal model explaining why the City of Danville has one of the state's highest infant mortality rates.

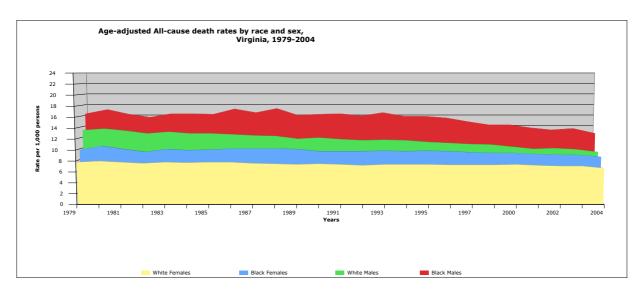
Likewise, coronary disease is linked as a risk factor and a result of stroke and diabetes. Participating health professionals noted the interrelatedness of risk factors (e.g., obesity, use of tobacco, etc.) and a complex of diagnoses that have high prevalence in the Dan River Region. Concerns were also noted about the trend of earlier age of diagnosis. A pattern of incidence (new cases) of lung and breast cancer are similar demonstrate higher rates in the City of Danville, lower in Pittsylvania and Caswell counties. Fewer discussions emerged about the etiology and population characteristics of these cancers.

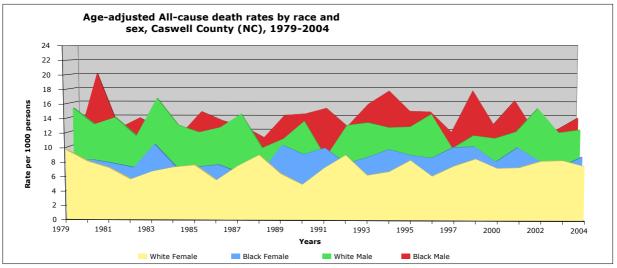
Below are tables constructed to demonstrate the long term changes in mortality in the United States, Virginia, North Carolina and Danville, Pittsylvania and Caswell counties. The extended time frame (1979-2004) allows for a historical comparison. Mortality rates are segmented by gender (male-female) and race (White and Black) to visually display major disquieting trends in mortality for white males in Pittsylvania County, white females in Caswell County, continuing disparities among black males and increasing rates among black females across the region.

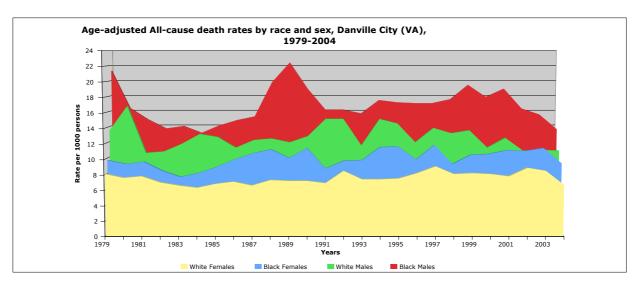
## Age-Adjusted All-Cause Mortality by Race and Gender Charts, 1979-2004

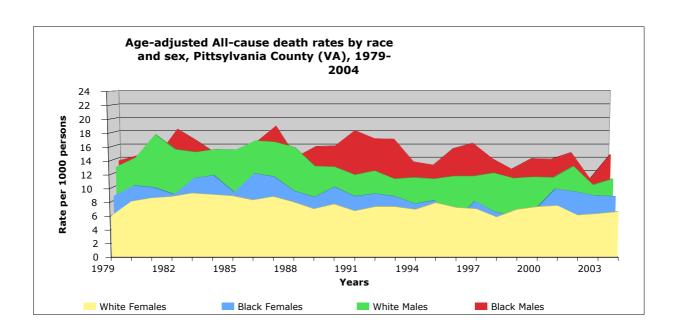












## Regional S.W.O.T. Analysis

In each leadership interview through use of supplemental input sheets with focus group and community meeting participants, a companion environmental analysis was conducted to identify community and community health assets and issues. The results are described in Attachment 3 and a summary of characteristic found in the table below.

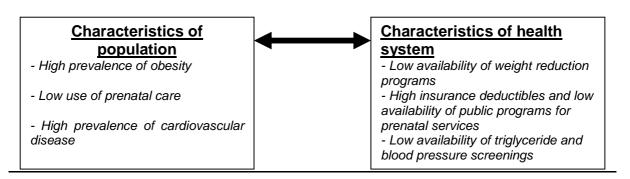
Strengths	Weaknesses
Danville Regional Medical Center	Dichotomy of needs. Community members
Recent improvements in access to facilities providing physical activity	appear to focus on either treatment or prevention.
Resources of Foundation available to improve	Lack of access to primary healthcare.
the region's healthcare	Lack of employment and associated health insurance benefits
	Few existing coalitions that have experience addressing health issues
Opportunities	Threats
A network of community leaders and organizations that could provide	Public perception of Danville Regional Medical Center
partnership opportunities for the Foundation	Leakage of patients to other healthcare providers
	Apathy regarding health issues
	Strong ties to behaviors that put the population at risk for health issues i.e. <i>rural diet</i>
	Perceived increase in crime and drug abuse

This Regional S.W.O.T. analysis uses a traditional reporting approach to list perceived strengths, weaknesses, opportunities, and threats. Results were summarized by clustering responses into discrete themes. Strengths and weaknesses represent perceptions of internal community capabilities. Strengths are perceived inherent characteristics, competencies, resources and capabilities seen as distinctive to the

region. Weaknesses represent inherent characteristics and gaps in individual, group or community performance toward some ideal state (sense of community health). Opportunities describe favorable situations identified by participants to enhance the region. Threats are unfavorable situations that could damage the region. The Assessment Team purposely provided no specific definitions as part of the methodology, resulting in mixed perceptions of the community, its health, and health system.

## **List of Community Health Issues**

Many health issues were identified through the assessment. A listing can be found in this report as Attachment 4. This list is a summarized compilation of issues identified through the multiple assessment methods, from secondary data reviews, leadership interviews, inter-organizational focus groups, and community meetings. The issues are separated into two broad categories, using an adapted understanding of a traditional health policy model (Anderson and Aday, 1978). It recognizes that in order to address any health issue attention must be paid to both the characteristics of the populaiton at risk and the characteristics of the health care system. The interrelationships of these characteristics form the dual focus necessary to impact the community health issue.



## The Rolodex of Community Interest

The attached Rolodex of Dan River Region Leaders responds to a specific objective of the Assessment proposal. The Foundation requested that the assessment identify regional institutions and key people with significant capability to address the issues and trends. The final list includes names from three sources. First, a listing with contact information is provided for the fifty-three persons who were interviewed. This list is supplemented by an additional 81 names of other leaders identified by those who were interviewed. Leaders were defined as persons in positions of leadership and/or persons who were leaders by their perceived ability to "get things done in and for the community." Finally, 19 additional names were identified from sheets distributed and returned at focus groups and community meetings. The respondents indicated willingness to help the Foundation in the future. The Rolodex is Attachment 5.

## **Considerations and Recommendations**

## **Consideration Statements**

Considerations are general statements drawn from the multiple assessment methods. They are presented to provide the Foundation with thoughts for reflection upon which to build future initiatives and investments. Considerations are framed thematically with support and sometimes contradiction from different sources. Each consideration noted below includes references from data, interviews, and meetings.

#### ▶ Lifestyle

- Regional leaders believe in early intervention and "getting to the kids" about life-long behaviors like poor diets and lack of exercise.
- Bad personal choices like smoking, drug abuse, insufficient exercise and obesity affect long term outcomes but are not necessarily recognized as threats to health.
- Some participants report many stressors in their life that may be perceived as a sense of apathy toward their health. Health providers report difficulty in engaging those persons for whom health education, health screening and behavior change would be of greatest benefit.

## ► Employment

- The loss of employment is recognized as the primary source of insufficient health insurance coverage resulting in a large population of people who either refuse to seek or are denied the health care services they need to avoid unnecessary morbidity and mortality.
- The increase in out-of-area ownership of community's business assets appears to be adversely effecting local decisions about health insurance plan benefits, provider networks, and use of health care.
- There are people who feel "left behind" in the local community, including racial and ethnic minorities, and adults and children without the economic security, education, and workforce skills necessary to obtain steady employment.
- There is a reported over-reliance on the hospital emergency room, perhaps related to an equally disquieting shortage of access to regular primary care providers and services.

## ▶ Use and under-use of health care services

- Many structural issues influence the use of health care in the region. Most
  of the region's population lives in rural areas that are distant from sources
  of care and with insufficient transportation services.
- There are incongruities between providers' office hours and patients' work schedules that need to be reconciled or supplemented with viable alternatives.

- Many groups reported that their inability to pay for chronic health maintenance prescriptions negatively influenced their overall functioning as productive citizens.
- Some health services are not adequately distributed. A greater mix of services is desired by residents of Caswell and northern Pittsylvania counties.
- Navigating the health care system is confusing. The delivery of care has become more complex and understanding where and how to seek care is not always clear. Participants report that communicating with health professionals about their illnesses is difficult, regardless of educational background.
- Some are made to feel unwelcome by the health care system. This sense of being "pushed away" from sources of care is most common among Hispanics, African Americans and those without health insurance. Common awareness of the currently available gateways for health services for the underserved is lacking.

### Leadership

- The region is entering a "new day," and to be successful, the circle of leaders needs to expand beyond current "power brokers". Many participants understand that greater involvement in community affairs by a larger number of people would strengthen health initiatives.
- There are limited pathways to identify and develop leaders. Leadership Southside of the Chamber is a good regionally focused development model. Too few minorities and women are seen to be civic leaders. Commitment to sustain involvement is reported as time consuming and competing with other life priorities.

## Regional scope

- The state line is not a direct barrier to healthcare delivery but it does affect use of health insurance plans, provider malpractice and licensure policies, segmented health planning efforts, and sharing of resources among community outreach programs.
- Those with the means to do so are sometimes opting to take their healthcare business outside of the region. Specifically, participants reported leaving for some specialty care. A smaller contingency were reported to be leaving for free or low cost care or care that provides interpretation services in Spanish.

## ▶ Collaboration

- There is a sense that collaboration within the region seems to be improving, particularly between Danville City and Pittsylvania County.
- Few inter-organizational health coalitions exist, but the ones that function are successful. One coalition (Danville-Pittsylvania Community Health Coalition) has managed several successful community-based interventions. Two school related collaborations (Healthy Kids in Caswell and Dr. Chip in Danville) planned and intervened with singular targeted health issues.

- Faith based networks appear available and willing to help with community based health issues. Although not necessarily seen as a traditional part of their mission, many church leaders of different faiths expressed a willingness to engage in community health initiatives. Coalitions of churches are seen to offer another strong avenue for collaboration.
- Community members recognize the need for regional leadership to help to improve health. Participants identified the need for champions to help organize "Someone needs to be the leader to bring this (community health) all together..."

The following Considerations were generated to demonstrate the regional understanding of the perceived overlap of health with education and workforce issues:

- ▶ Job loss and the poor regional economy are leading to a loss of health insurance.
- ► Improving education and creating new jobs will lead to better quality of life for some and leave others behind.
- ► There is interest in more health education, adult education, and English language education across the region.
- ► There is community consensus about a growing drug problem that is impacting regional employment pool and health and safety of the region.
- ▶ Public infrastructure in the region is mixed. Recreational facilities are good but difficulties with distance and rural public transportation make accessing facilities difficult for some.

# Attachment 1: Focus Group and Community Meeting Summaries

## Inter-organizational Health Focus Groups

Caswell County The group was conducted at the Caswell County Health Department. Thirteen persons attended including three primary care providers from the local community health center, health department and a hospital primary care practice. School nurses were also present. Members actively participated in the focus group questions and about all returned SWOT analysis and questions sheets. Providers feel somewhat disaffected from Danville although evidence was continuously presented about medical trade that was referred to Danville for care. All cited ruralness, lack of community response to health education and obesity as primary issues. The session lasted 90 minutes. The group discussed the diabetes fact sheet.

## **Danville-Pittsylvania County Community Health Council**

This group has existed since 1999 when it formed to provide an effective community-based educational response to the region's notably high syphilis rate. The coalition is uniquely diverse and involves a large number of health provider and health related organizations including the hospital. Twenty persons attended at the specially called luncheon meeting at Cherrystone Association in Ringgold. Most attendees were direct service providers and must daily link those in need to health and related services. Traditional lifestyle issues were identified as risks, and mental and dental healthcare shortages were cited as issues that need to be addressed. The coalition discussed the infant mortality issue. The meeting lasted 75 minutes.

## **Danville Regional Memorial Hospital Board of Directors**

Members of the Board of Directors of the Hospital, now serving as an Advisory Board to the LifePoint owners, met in board session with the Assessment Team. Ten board members were present. Additionally, a full complement of hospital administration and LifePoint executives from Nashville attended. The role of the hospital concerning medical care and the community's health was discussed. Only a few inter-organizational collaborations were identified. The fact sheet selected to elaborate was coronary disease, reflected in the high mortality rates for cardiovascular disease and diabetes. The session lasted 50 minutes.

## **Community Meetings**

## **Caswell County meeting hosted by Piedmont Community College**

Representatives from a broad cross section of organizations attended this meeting. While the twenty-two attendees represented nine community agencies, the attendees were generally over the age of 50. The group's ethnicity was primarily Caucasian and included four African American attendees. Fifteen attendees returned SWOT analysis and question sheets. Those attending appeared to be a part of three social networks

in the Caswell County area, the community college, the senior center and the Caswell County Medical Center. The group addressed diabetes. The meeting lasted 65 minutes.

## **Chamber of Commerce Community Meeting**

This group represented board members and one staff person of the combined Danville-Pittsylvania county Chamber of Commerce. The assessment team session was added at end of a regular board meeting. Twelve members attended. Few SWOT analysis and question sheets were returned. Members represented small business interests and continuously cited both business and broader community perspectives. A county-wide picture emerged, acknowledging that the northern part of the county is more rural and feels a lack of access to health services and transportation issue were discussed. Lifestyle issues of the young and care for the elderly were important findings. The group discussed heart disease. The meeting lasted 40 minutes.

## **Cherrystone Baptist Association**

There was a large turnout for this meeting. The majority of the group appeared to be African American, and predominantly older than 50 years-of-age. The gender distribution appeared to be normative. According to Rev Clark, the participants were invited through the use of a well-balanced network extending throughout: Danville, Pittsylvania, and Caswell Counties. Targeted community members where known to have knowledge of Cherrystone's mission and the health needs of their local congregations. I also assume that most of the participants had regular access to email, considering the short notice in which they were invited and subsequently RSVP. The meeting began with a prayer offered by the organizer, Rev. Delaware Clark, and the presentation began after the meal was served. Following a brief introduction, the larger body was split into three smaller groups with a facilitator and an MDC, Inc. appointed documentarian. Each group was asked four questions, and then Fact Sheets were distributed to facilitate the concluding discussion. Data from the meeting was discussed at MDC, Inc. the following morning with all three facilitators and documentarians present. The following list of considerations was illuminated.

## **Displaced Workers Hosted by Danville Community College**

The meeting with the displaced workers group was hosted by Danville Community College (DCC). The Participant sample was self-selected from larger population of 400 DCC students whose NAFTA benefits included 2 years of associate-level training. It appeared that approximately 60% of the participants were African American and 40% Caucasian. The gender distribution was equally balanced. Most of the participants stated that their primary motivation for attending was to seek information from assessment team about health insurance access. Although there was not enough time to discuss Fact Sheets, the group did talk at length about access to healthcare in the displaced worker community, specifically identifying High Blood pressure, Diabetes, and Adolescent AD/Bipolar disorder as conditions for which they have been unable to afford necessary treatment once diagnosis was given.

## **Latino Community Meeting**

A meeting was conducted after church services at Sacred Heart Catholic Church in Danville. Fifty adults of almost 500 church attendees stayed to participate for sixty minutes. The meeting was organized by the person recognized as the only Latino health promoter in the region (retired school teacher employed by church). Participants were young families, who predominantly identified Mexico as their country of origin. Issues of access to health services dominated the discussion for this growing population group which numbers an estimated 3,000 persons excluding the migrant farm workers who come annually to the region through the Federal labor program.

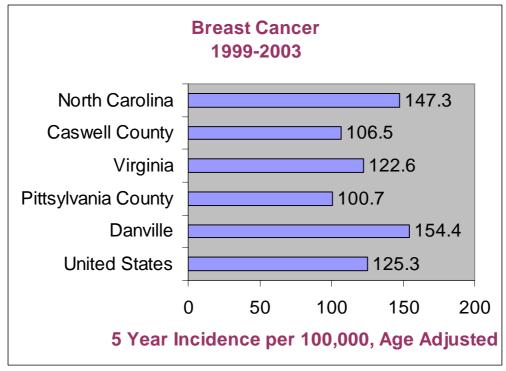
#### **Rotary Clubs**

The group was made up of members of two Rotary Clubs from the Danville/Pittsylvania area and one from Caswell County. Nine Rotarians attended this dinner meeting held at the Institute. The group represented diverse business interests in the region. This meeting provided more insight into the relationship between Danville/Pittsylvania County and Caswell County. While seven of the eleven attending submitted SWOT analyses, only three indicated a willingness to partner with the Foundation to improve the health of the Dan River region. The Rotarians discussed both coronary disease and births to unwed mothers.

# Attachment 2 Fact Sheets on Health Issues BREAST CANCER

While age adjusted incidence rates for Breast Cancer are declining nationally, in Virginia, and in North Carolina, the rates for Danville and Caswell County are increasing.

The Breast Cancer incidence rates for new cases in Danville virtually doubled between 1999 and 2003. The rates in Pittsylvania County followed national trends by declining during the same time period.



Risk factors associated with Breast Cancer include gender, aging, genetics/family history of breast cancer, and race. The following are lifestyle related risk factors:

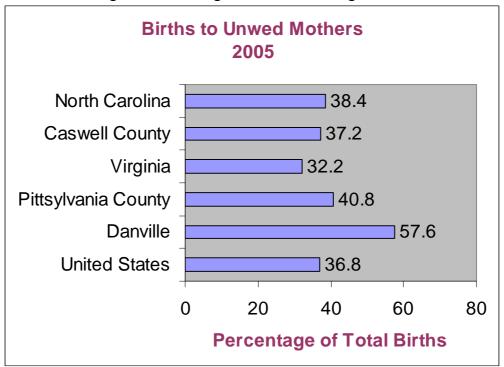
- 1. not having children
- 2. oral contraceptive use
- 3. post-menopausal hormone replacement therapy
- 4. alcohol use
- 5. high fat diet

Sources: North Carolina State Data Center, Virginia Cancer Atlas, American Cancer Society

## **BIRTHS TO UNWED MOTHERS**

Births to Unwed Mothers in the Danville/Pittsylvania region are considerably higher than those of Virginia and the U.S. While still higher than the U.S., Caswell County's rates are slightly lower than those found in North Carolina.

Births to unwed mothers across the U.S. have increased approximately 10%, the rates in Pittsylvania and Caswell counties have increased approximately 20% from 2001-2005. The rate in Danville has remained constant but 78% higher than Virginia and 57% higher than the U.S.



Risk factors associated to children born to unwed mothers include low birth weight and increased infant mortality.

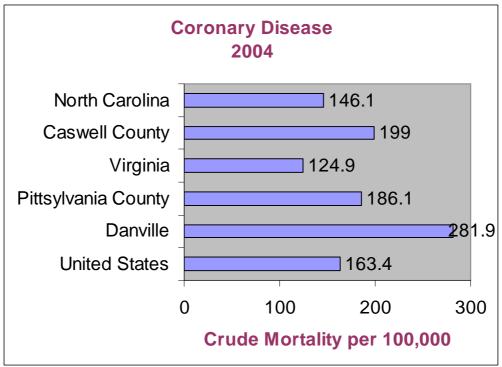
Additional factors: Data indicates unwed mothers do not seek prenatal care until late in their pregnancy. Studies also suggest that unwed mothers have financial stresses.

Sources: North Carolina Department of Health, Virginia Department of Health, CDC

## **CORONARY DISEASE**

While mortality rates per 100,000 from Coronary Disease have declined in Danville/Pittsylvania/Caswell region mortality rates exceed those of Virginia, North Carolina and the U.S.

The mortality rate for Coronary Disease for Danville declined from 2001 to 2004 to 281.9 deaths per 100,000; it remains above national and state rates. While also declining during the same period, the rate for Pittsylvania County is 186.1 and the rate for Caswell County is 199.



Risk factors associated with Coronary Disease include:

- 1. tobacco smoke
- 2. low physical activity level
- 3. high blood pressure
- 4. obesity
- 5. Stress

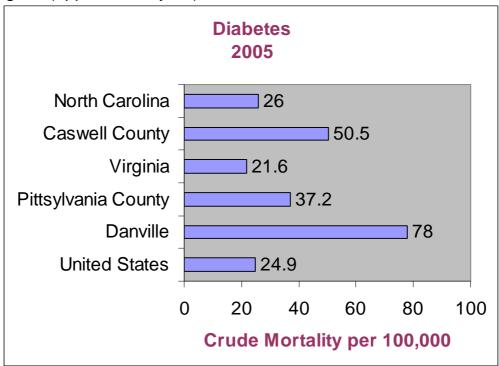
Additional Facts: Because of their increased risk of diabetes, African Americans, Hispanic Americans and Native Americans all have higher rates of coronary disease.

Sources: www.wonder.cdc.gov, American Heart Association

#### **DIABETES**

While mortality rates per 100,000 from Diabetes have remained constant in Virginia, North Carolina and the U.S since 2001, the mortality rates for the Danville/Pittsylvania/Caswell region increased 50-100% during the same period.

The mortality rate for Diabetes for Danville increased from 39.8 to 78.0 deaths per 100,000 from 2001 to 2005. The rates for Pittsylvania County increased from 25.9 to 37.2 during the same period. In Caswell County the mortality rate increased from 33.7 to 50.5 during the same period. Mortality rates in the region were well above the rate for the U.S., North Carolina, and Virginia (approximately 25).



Risk factors associated with Diabetes include:

- 1. obesity
- 2. low physical activity level
- 3. poor diet

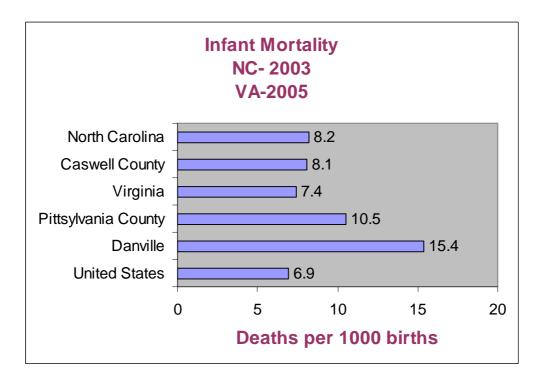
Additional Facts: African Americans, Hispanic Americans and Native Americans all have higher rates of diabetes.

Sources: <a href="http://www.schs.state.nc.us/SCHS/deaths/dms/2001-2005/caswell.pdf">http://www.schs.state.nc.us/SCHS/deaths/dms/2001-2005/caswell.pdf</a> <a href="http://www.vdh.state.va.us/">http://www.schs.state.nc.us/SCHS/deaths/dms/2005/northcarolina.pdf</a>, <a href="Medline Plus">Medline Plus</a>

## **INFANT MORTALITY**

The death rate among infants in the Danville/Pittsylvania/Caswell region is higher than that of Virginia, or the United States.

The rate of infant mortality in the U.S. has remained constant at approximately 7 deaths per 1000 births, however the infant mortality rate during 2005 in Danville was 15.4/1000 births, in Pittsylvania County 10.5/1000 births, and in Caswell County 8.1/1000 births.



Risk factors associated with increased infant mortality rates include:

- 1. lack of available of prenatal care
- 2. failure to use available healthcare resources
- 3. late prenatal care
- 4. lack of health insurance.

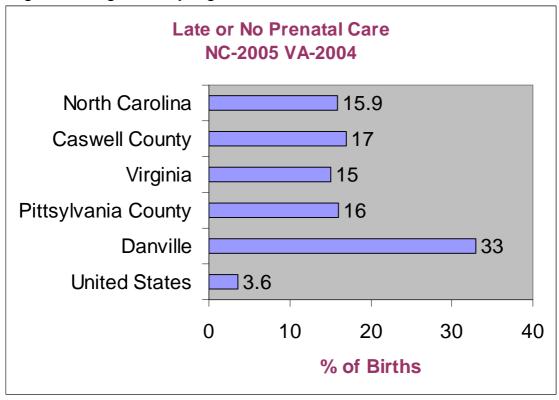
Additional Facts: While infant mortality statistics are not available by ethnicity for the Danville/Pittsylvania/Caswell area, nationally the infant morality rate for African-Americans is double that of the general population (14 deaths per 1000 births versus 7 deaths per 1000)

Sources: Danville-Pittsylvania Department of Health, North Carolina State Data Center

## LATE OR NO PRENATAL CARE

Late or no prenatal care in the Danville/Pittsylvania/Caswell region is approximately 4-10 times higher than that of the U.S. and also higher than Virginia or North Carolina.

The percentages of mothers who received no prenatal care or no prenatal care before the third trimester has remained constant in the U.S. at 3.6%, however the percentage of mothers who received late or no prenatal care in Danville was nearly 10 times the national average. Late or no prenatal care percentages in Pittsylvania and Caswell counties were above the state averages and significantly higher than the national rate.



Risk factors associated with late or no prenatal care include:

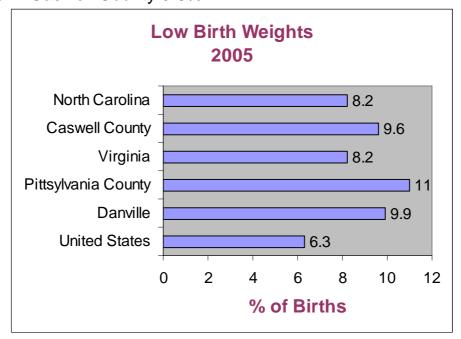
- 1. lack of available of prenatal care
- 2. lack of use of available health resources.
- 3. age of mother at time of baby's birth
- 4. lack of health insurance.

Sources: Danville-Pittsylvania Department of Health, North Carolina State Data Center, CDC.gov Vital Statistics Reports Vol. 55 No.1

## **LOW BIRTH WEIGHT**

Low birth weight among infants in the Danville/Pittsylvania/Caswell region is higher than that of Virginia, North Carolina or the United States.

The percentages of births categorized as low birth weight in the U.S. has remained constant at approximately 6%, however the percentage of low birth weigh babies in 2005 in Danville was 9.9%, in Pittsylvania County 11%, and in Caswell County 9.6%.



Risk factors associated with low birth weights include:

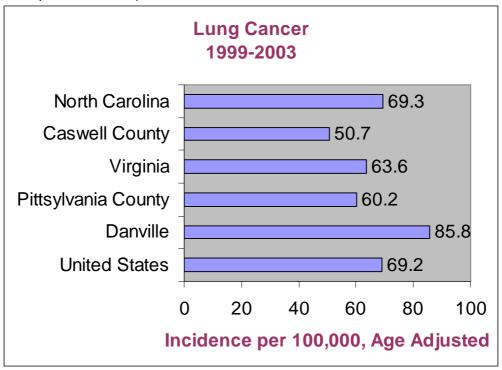
- 1. lack of available prenatal care
- 2. lack of use of available health resources
- 3. late prenatal care
- 4. cigarette smoking among expectant mothers
- 5. alcohol use among expectant mothers
- 6. age of mother at time of baby's birth
- 7. lack of health insurance.

Additional Facts: From 2001-2005, the percentage births categorized as low birth weight in Pittsylvania County has increased from 7.4% to 11.0%. Sources: Danville-Pittsylvania Department of Health, North Carolina State Data Center, CDC.gov Vital Statistics Reports Vol. 55 No.1

## **LUNG CANCER**

Despite smoking rates that are similar to those found in Virginia, the incidence rates for Lung Cancer in the Danville region are considerably higher. Smoking rates are declining nationally, in Virginia, and in North Carolina, the rates for Danville are increasing and the rates for Pittsylvania and Caswell Counties have remained essentially constant from 1999-2003.

The Lung Cancer rates for Danville increased 20% 1999 to 2003 (71.5-85.8 incidences per 100,000).



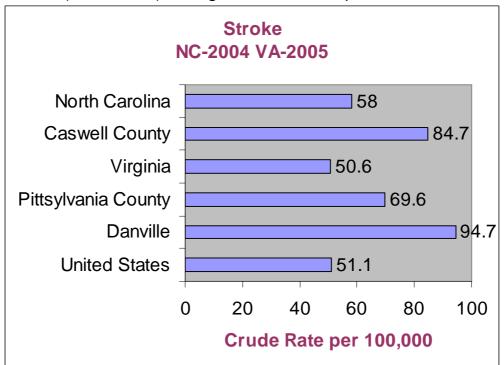
Risk factors associated with Lung Cancer include genetics/family history of lung cancer. The following are lifestyle related risk factors: tobacco smoking, asbestos, radon, cancer causing agents in the workplace, marijuana, recurrent inflammation, occupational exposure to certain minerals, Vitamin A deficiency or excess, air pollution.

Sources: Behavioral Risk Factor Surveillance System, Virginia Cancer Registry, Health-Alliance.com, North Carolina Department of Health

## STROKE

While incidence of Strokes are declining in Virginia, North Carolina and in the United States the incidence is increasing in the Danville/Pittsylvania/Caswell region and incidence rates exceed those of Virginia, North Carolina and the U.S.

The incidence rate for Strokes for Danville increased from 84.7 to 94.6 from 2000 to 2005 and remained above national and state rates. The rate for Pittsylvania County also increased during the same period (58.3-69.6) While still above state and national rates the rate for Caswell County declined from (110.6-84.7) during the 2000-2004 period..



Risk factors associated with Strokes include: tobacco smoke, low physical activity level, high blood pressure, obesity, and excessive alcohol intake.

Additional Facts: Because of their increased risk of high blood pressure, African Americans and Hispanic Americans have higher rates of Stroke.

Sources: www.wonder.cdc.gov, StrokeCenter

### Attachment 3

# Danville/Pittsylvania/Caswell Region Health Needs Assessment SWOT Analysis

#### Strengths:

While the community's perception of Danville Regional Medical Center is certainly a threat, the medical center is an asset and strength for the Dan River Region. DRMC has been a fine facility in the past and there is no reason to believe it could not be in the future. Community members were both aware of and appreciative of the efforts of community leaders regarding improving access to opportunities for physical activity, specifically the River Trail and local community centers were mentioned often. The resources entrusted to the Foundation are community strength.

#### Weaknesses:

The Foundation faces the difficult task of balancing the community's current healthcare needs with needs that will improve the healthcare of the region for future generations. Community residents are concentrated around two centers of need: those who are in reality desperate for current access to healthcare (best exemplified by a woman who said her hypertension had gone untreated for nearly 2 years because she could not afford the medication) and those who currently have access/gateway to treatment options and are focused on improving their long term health status.

The community has limited experience working together to bring focus to/improve a specific health issue. The community coalition addressing the recent STD outbreak is one very good example of a successful community response to an identified health problem.

#### **Opportunities:**

While community members offered suggestions for specific projects, opportunities exist for the Foundation to partner with existing networks of community leaders and community organizations to improve the overall health of the region. There are several faith-based coalitions/networks in the region that appear to work well when addressing common goals.

#### Threats:

This assessment identified several long-term threats to the health of residents of the Dan River Region.

While DRMC is a community asset, the reputation of the hospital in the eyes of the community has suffered. DRMC is experiencing *leakage* of patients for several reasons. Community members believe that DRMC and its network of physicians are neither a part of the preferred provider network for Blue Cross/Blue Shield of North Carolina nor a part of the preferred provider network for United Healthcare. Additionally community members elect to leave the immediate Danville/Pittsylvania/Caswell region for care because by personal choice/preference. Attendees at community/focus group used terms such as "pushed away and unwelcome" to describe their interactions with

providers. Members of the Latino community prefer to seek care where interpreters are available.

The community members identified several behavioral factors that they believed were threats to the long term health of their community. Among these factors were behaviors that are steeped in the community's heritage (rural diet, smoking) and emerging behavioral factors such as drug abuse.

# Attachment 4 List of Community Health Issues

Personal health status issues	Community services and health
	systems issues
Rural diet	Lack of affordable health insurance
Tobacco use	Incorrect diagnosis
Obesity, both childhood and adult	Lack of access o primary can specialty
	medical care
Lack of risk reduction behaviors	Personal and public transportation
Decline in prevalence in traditional family	Cost of health care and prescriptions
Results of textile and tobacco cultures	Lack of education about good health and
	good diets and appropriate exercise
Environmental factors	Lack of economic incentives or payments
	for care coordination services.
Choosing not to use heath services or	Insufficient health screening opportunities
not knowing when to go	
Stress and economic factors can bring	Perceived quality of care issues and
on poor health	turnover of personnel at hospital
Racial differences in mortality for certain	Lack of targeted efforts to address
causes of death	healthcare disparities and medical
	availability
Perinatal issues such as high low birth	Care for younger persons
weight babies and infant mortality	
Diabetes Mellitus	There are not enough civic and social
	organizations and leaders in the region.
Lack of awareness of value of health	There is a pronounced shortage of mental
screenings	health providers and services.
Self medication issues.	Large geographic span of Pittsylvania
	County with limited public transit system
Health illiteracy as a symptom of overall	Recent loss of physicians and new
high rates of functional illiteracy.	referral patterns for inpatient care for local
	patients
Low econ9omic status leads to underuse	Philanthropic history of faith based and
of health care services and delayed	"giving" community
diagnosis and care.	
High prevalence of births to unwed and	I have seen many depressed places in
teen mothers and related social and	my life including the Delta and Metro DC,
family rearing issues	but I have never seen a place where skin
	color, economic depression, and low self
	esteem are so interconnected.
Unemployment and low disposable	Increasing attention of regional churches
income leads to depression and	to health issues
psychological and physical health issues.	

Health providers perceive apathy	Unsuccessful efforts to involve and
regarding use of healthcare and	educate regional population about
awareness of helath care issues	personal health issues
throughout region	
.Chronic sinus problems depending on	.Shortages (waiting times) for services
the seasonNorthern and Southern	like renal dialysis care
pollen overlap in Danville	
Inability of displaces workers to find	High cost of medications compared to
sources of health care or affordable	regional disposable incomes
health insurance	
Seemingly high rates of cancers (e.g.,	Inability of residents to find and access
breast)	general nutrition counseling

### Attachment 6 Leadership Interview Questions Community Health Assessment

- 1. Where do you live? How long have lived in the region? Have you also lived and worked elsewhere? What type of work did/do you do?
- 2. What civic and social organizations do you belong to? Have you ever represented Danville/Pittsylvania/Caswell counties outside of the region?
- 3. When compared with Lynchburg/Greensboro/Raleigh-Durham, would you say that your community's health is poorer, the same or better here in Danville/Pittsylvania/Caswell counties? Why?
- 4. The Danville Regional Foundation was established from the proceeds of the sale of the hospital. There appears to be a great deal of controversy about this in the community. Would you like to briefly share anything thoughts.
- 5. What do consider the most significant personal health issues faced by the citizens of Danville/Pittsylvania/Caswell counties?
- 6. How would you rate the quality of life (the overall health, welfare, and education) for residents of Danville/Pittsylvania/Caswell counties or your community? What are the most important factors that influence quality of life in your community? (What factors influence the health of the community and its' residents?)
- 7. For example some have suggested that a health mall would improve the quality of life in the community, could you comment on this concept.
- 8. Are there people in your community for whom the quality of life is different? Please explain.
- 9. What do you consider to be the positive things about Danville/Pittsylvania/Caswell counties?
- 10. What are some things that could be improved in Danville/Pittsylvania/Caswell counties?
- 11. What organizations and groups should be included in the Foundation's efforts to promote healthy people, healthy communities? Why?
- 12. What is the biggest health threat to the people in Danville/Pittsylvania/Caswell counties?

13. Please identify the names of five other persons who you consider to be leaders who we might contact to interview? These can be people who hold formal positions of leadership or people who are known for "getting things done in and for their communities."

### Appendix D - Caswell County School Health Advisory Council

#### **Emily Beard**

Bartlett-Yancey High School - Assistant Principal

#### **Tammy Chaney**

Caswell County Department of Social Services

#### Ted Davis, RS

Caswell County Health Department - Environmental Health Supervisor

#### Shirley Deal, RN

Caswell Family Medical Center - CEO

#### Jennifer Eastwood, MPH - Chairperson

 $Caswell\ County\ Health\ Department-Health\ Educator$ 

#### **Carol Foster**

 $Office\ of\ Oral\ Health-Dental\ Hygienist$ 

#### **Donna Hudson**

Caswell County Schools - Assistant Superintendent

#### Fernandez Johnson

Stoney Creek Elementary School - Principal

#### Jennifer Locklear

Caswell County Schools - Director of Elementary Education

#### **Kimberly Mims**

Caswell County Schools - Director of Child Nutrition

#### **Robert Palmer**

Oakwood Elementary Schools - Physical Education Teacher

#### Kathy Patterson, FNP

Yanceyville Primary Care - Nurse Practitioner

#### Sonya Patterson, MEd

Caswell County Cooperative Extension Services - Family & Consumer Science Agent

#### **Betty Sartin**

Caswell County Board of Education – Member

#### Kim Shelton, RN

Caswell County Schools - Nurse

#### Lisa Swann, RN

Caswell County Schools - Nurse

# 2007 Community Health Assessment Survey Results

Written Surveys
Online Surveys

792

106

Total Surveys Completed 898

	# of	
Question	responses	%
1. How do you pay for your health care?		
Cash or Check	122	15%
Medicaid	141	17%
Private Insurance through employer	412	50%
Medicare	94	11%
Private insurance purchased privately	41	5%
Other	46	6%
Total Responses to Question	831	

2. In a typical month, how much do you spend out-of-pocket for visits to a doctor's office or other

health care provider? (Not pharmacy or dental)

Less than \$20	398	40%
\$20 - \$49	259	30%
\$50 - \$74	88	10%
\$75 - \$99	46	5%
\$100 or greater	67	8%

Total Responses to Question 863

3. If you have been without health care coverage at any time during the last 12 months, what is the main reason you are or were without it? (Check all that apply)

ani reason you are or were without it: (Oncok an that appry)		
I have not been without	564	74%
Employer stopped offering coverage	7	1%
Had it through parents, but became ineligible	8	1%
Couldn't afford premiums for private insurance	72	9%
Lost or changed jobs	51	7%
Couldn't afford premiums for insurance through employer	29	4%
Couldn't get coverage because of pre-existing conditions	12	2%
Not eligible for Medicaid or other medical assistance	52	7%
Other	23	3%

Total Responses to Question 762

#### 4. Do you have insurance to cover the cost (or some cost) of prescription medication?

 	, pp	
Yes	720	84%
No	133	16%

### # of Question responses %

5. In a typical month, how much do you spend out-of-pocket for prescriptions?

Less than \$20	349	41%
\$20 - \$49	233	27%
\$50 - \$74	102	12%
\$75 - \$99	68	8%
\$100 or greater	96	11%

Total Responses to Question 848

# 6. About how long has it been since you last visited a doctor for a routine checkup? (Not sick or emergency visits)

W/in the past year	662	76%
W/in the past 2 years	103	12%
W/in the past 5 years	57	7%
5 or more years ago	47	5%

Total Responses to Question 869

7. Was there a time during the last 12 months when you thought you needed to see a doctor, but did not? If so, what is the main reason you did not? (Check only one)

There was no such time	472	59%
I had no transportation	31	4%
The office is too far away	11	1%
It takes too long to get an appt. or wait to be seen	78	10%
I could not afford to get medical care	114	14%
I had no child care	7	1%
The office was not open when I could get there	23	3%
Other	68	8%

Total Responses to Question

# 8. At any time during the last 12 months have you thought you needed to see a dentist but did not? If so, what is the main reason you did not? (Check only one)

804

There was no such time	455	55%
I had no transportation	24	3%
The office is too far away	20	2%
It takes too long to get an appt. or wait to be seen	62	8%
I could not afford to get dental care	176	21%
I had no child care	3	0%
The office was not open when I could get there	7	1%
Other	78	9%

Total Responses to Question 825

#### 9. About how long has it been since you last visited a dentist for any reason?

W/in the past year	560	64%
W/in the past 2 years	138	16%
W/in the past 5 years	92	11%
5 or more years ago	84	10%

	# of	
Question	responses	%
10. Where do you go most often when you are sick or nee	<u>-</u>	
Provider in Caswell	302	36%
Urgent Care Center	34	4%
Provider outside of Caswell	460	54%
Hospital ER	50	6%
Total Responses to Question	846	070
•		
11. Do you feel there are enough health care providers in	<b>Caswell County?</b>	
Yes	203	25%
No	621	75%
Total Responses to Question	824	
12. What is your water source?	I	
Well	746	86%
Public/Community Source	118	14%
Total Responses to Question	866	
13. Have you noticed any discoloration or odor to your wa		
Yes, discoloration	91	10%
Yes, odor	69	8%
Yes, both	46	5%
103, 5001		
No	675	77%
·		
No Total Responses to Question	675 <b>881</b>	77%
No  Total Responses to Question  4. Do you personally know anyone whose well water is/v	675 881 vas contaminated	77%
Total Responses to Question  4. Do you personally know anyone whose well water is/v  Yes	675 <b>881</b> vas contaminated	77% ? 20%
Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes No	675 881 was contaminated 175 696	77%
Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes	675 <b>881</b> vas contaminated	77% ? 20%
No  Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes  No  Total Responses to Question	675 881 was contaminated 175 696 871	77% ? 20%
Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes  No  Total Responses to Question  15. Do you believe there is a need for a county-wide water	675 881 was contaminated 175 696 871 r system?	77%  ? 20% 80%
Total Responses to Question  4. Do you personally know anyone whose well water is/v  Yes  No  Total Responses to Question  5. Do you believe there is a need for a county-wide water  Yes	675 881 vas contaminated 175 696 871 r system?	77%  ? 20% 80%
Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes  No  Total Responses to Question  15. Do you believe there is a need for a county-wide water  Yes  No	675 881 vas contaminated 175 696 871 r system? 390 460	77%  ? 20% 80%
Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes No  Total Responses to Question  15. Do you believe there is a need for a county-wide water  Yes	675 881 vas contaminated 175 696 871 r system?	77%  ? 20% 80%
Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes  No  Total Responses to Question  15. Do you believe there is a need for a county-wide water  Yes  No  Total Responses to Question	675 881 was contaminated 175 696 871 r system? 390 460 850	77%  ? 20% 80%
Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes No  Total Responses to Question  15. Do you believe there is a need for a county-wide water  Yes No  Total Responses to Question  16. If a county-wide water source were available would you	675 881 was contaminated 175 696 871 r system? 390 460 850	77%  20% 80%  46% 54%
Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes  No  Total Responses to Question  15. Do you believe there is a need for a county-wide water  Yes  No  Total Responses to Question  16. If a county-wide water source were available would you yes	675 881 was contaminated 175 696 871 r system? 390 460 850 bu use it?	77%  ? 20% 80%  46% 54%
Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes  No  Total Responses to Question  15. Do you believe there is a need for a county-wide water  Yes  No  Total Responses to Question  16. If a county-wide water source were available would you yes  No	675 881 vas contaminated 175 696 871 r system? 390 460 850 ou use it? 443 392	77%  20% 80%  46% 54%
Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes  No  Total Responses to Question  15. Do you believe there is a need for a county-wide water  Yes  No  Total Responses to Question  16. If a county-wide water source were available would you yes	675 881 was contaminated 175 696 871 r system? 390 460 850 bu use it?	77%  ? 20% 80%  46% 54%
No  Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes  No  Total Responses to Question  15. Do you believe there is a need for a county-wide water  Yes  No  Total Responses to Question  16. If a county-wide water source were available would you yes  No  Total Responses to Question	675 881 vas contaminated 175 696 871 r system? 390 460 850 ou use it? 443 392 835	77%  20% 80%  46% 54%
Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes  No  Total Responses to Question  15. Do you believe there is a need for a county-wide water  Yes  No  Total Responses to Question  16. If a county-wide water source were available would you yes  No  Total Responses to Question  17. Do you have your septic tank pumped regularly (Reco	675 881  vas contaminated 175 696 871  r system? 390 460 850  ou use it? 443 392 835  ommended every 3	77% ? 20% 80% 46% 54% 53% 47%
Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes  No  Total Responses to Question  15. Do you believe there is a need for a county-wide water  Yes  No  Total Responses to Question  16. If a county-wide water source were available would you yes  No  Total Responses to Question  17. Do you have your septic tank pumped regularly (Recongle)	675 881 vas contaminated 175 696 871 r system? 390 460 850 ou use it? 443 392 835 ommended every 3 453	77%  20% 80%  46% 54%  53% 47%  8-5 years) 54%
Total Responses to Question  14. Do you personally know anyone whose well water is/v  Yes  No  Total Responses to Question  15. Do you believe there is a need for a county-wide water  Yes  No  Total Responses to Question  16. If a county-wide water source were available would you yes  No  Total Responses to Question  17. Do you have your septic tank pumped regularly (Reco	675 881  vas contaminated 175 696 871  r system? 390 460 850  ou use it? 443 392 835  ommended every 3	77% ? 20% 80% 46% 54% 53% 47%

	# of	
Question	responses	%
18. Has your septic system ever malfunctioned?		
Occasional	170	21%
Never	432	52%
All the time	9	1%
Don't know	217	26%
Total Responses to Question	828	
·		
19 Do you consider yourself to be overweight?		

#### 19. Do you consider yourself to be overweight?

T. (1.1.D	050	
No	439	51%
Yes	420	49%

Total Responses to Question 859

# 20. In the past 12 months, has a doctor or other health care professional given you advice about your weight?

Yes, lose weight	251	29%
Yes, maintain current	59	7%
Yes, gain weight	23	3%
No	535	62%

Total Responses to Question 869

#### 21. Are you currently trying to lose weight?

No	409	47%
Yes, I am eating differently	188	21%
Yes, I am exercising more	74	8%
Yes, I am eating differently and exercising more	204	23%

Total Responses to Question 875

#### 22. Do you believe obesity is a problem in Caswell County?

Yes	692	81%
No	159	19%

Total Responses to Question 851

### 23. What types of physical activity do you engage in on a regular basis? (Check all that apply)

Walking	688	86%
Bicycling	83	10%
Sports (Basketball, Softball, etc)	149	19%
Swimming	69	9%
Jogging or Running	120	15%
Aerobics	91	11%
Golf	21	3%
Weight Training	118	15%
Other	89	11%

#### # of Question % responses

24. During a typical week, how many days do you engage in physical activity?

0 - 1 days	173	20%
1 - 3 days	327	38%
3 - 6 days	209	24%
Everyday	156	18%

**Total Responses to Question** 865

#### 25. When you engage in physical activity, how many minutes do you get?

Less than 30	293	34%
30 - 60 minutes	392	45%
60 - 90 minutes	102	12%
More than 90	77	9%

**Total Responses to Question** 864

26. Would you be more physically active if the following were available?

	9	
Greenways or Walking Trails	431	50%
Bike lanes & paths	208	24%
Sidewalks	190	22%
Pools	307	36%
Aerobics	181	21%
Golf	18	2%
Other	49	6%
I would not be more physically active	155	18%

**Total Responses to Question** 

#### 27. Would you be more likely to eat better if "healthy" options were clearly marked on menus at area restaurants?

854

Always	222	26%
Sometimes	494	57%
Rarely	84	10%
Never	65	8%

**Total Responses to Question** 865

#### 28. Would you be more likely to make healthier food selections if "healthy" options were clearly marked at the grocery store?

Always	251	29%
Sometimes	478	55%
Rarely	77	9%
Never	59	7%

	# of	
Question	responses	%
n the past 12 months have you used any of the follow	wing tobacco prod	ucts? (Chec
Digarettes	183	21%
Cigars	22	3%
pe Tobacco	7	1%
nuff	14	2%
Chewing Tobacco	23	3%
Other	6	1%
do not use tobacco products	626	73%
Total Responses to Question f you are currently, or have ever, used tobacco produces.	853 ucts, at what age o	lid you begir
Jnder 15	81	10%
5 - 18	164	19%
9 - 24	86	10%
25 or older	14	2%
do not use tobacco products	501	59%
Total Responses to Question	846	3373
you are a tobacco user, which of the following wou		
upport Group	24	3%
cotine Replacement Therapy	81	10%
dividual Counseling	29	4%
ave already quit	124	16%
am not ready to quit	78	10%
ot a tobacco user	490	61%
Total Responses to Question	800	
Do you believe tobacco use is a health concern in Ca	iswell County?	
es .	659	77%
es D	659 197	77% 23%
∕es No Total Responses to Question	659 197 <b>856</b>	23%
res No Total Responses to Question Are you concerned by secondhand smoke? If so, wh	659 197 <b>856</b> here? (Check all th	23% at apply)
Total Responses to Question  Are you concerned by secondhand smoke? If so, where your concerned by secondhand smoke?	659 197 <b>856</b> ere? (Check all th	23% at apply) 20%
Total Responses to Question  Are you concerned by secondhand smoke? If so, whees, at work es, at home	659 197 <b>856</b> ere? (Check all th	23% at apply) 20% 20%
Total Responses to Question  Total Responses to Question  Are you concerned by secondhand smoke? If so, whees, at work  Ses, at home Ses, in restaurants	659 197 <b>856</b> here? (Check all th 175 170 461	23% at apply) 20% 20% 53%
Total Responses to Question  Are you concerned by secondhand smoke? If so, where, at work les, at home les, in restaurants	659 197 <b>856</b> ere? (Check all th	23% at apply) 20% 20%
Are you concerned by secondhand smoke? If so, where yes, at work Yes, at home Yes, in restaurants No, I am not concerned	659 197 856 here? (Check all th 175 170 461 289 868	23% at apply) 20% 20% 53% 33%
Total Responses to Question  Are you concerned by secondhand smoke? If so, where, at work les, at home les, in restaurants lo, I am not concerned  Total Responses to Question  Do you believe there should be regulations against s	659 197 856 here? (Check all th 175 170 461 289 868	23% at apply) 20% 20% 53% 33%
Total Responses to Question  Are you concerned by secondhand smoke? If so, where you concerned by secondhand smoke? If so, where you concerned you believe there should be regulations against seconds.	659 197 856 ere? (Check all th 175 170 461 289 868 moking in public p	23% at apply) 20% 20% 53% 33% blaces?
Total Responses to Question  Are you concerned by secondhand smoke? If so, where yes, at work  Yes, at home  Yes, in restaurants  No, I am not concerned  Total Responses to Question  Do you believe there should be regulations against serves	659 197 856 sere? (Check all th 175 170 461 289 868 moking in public p	23%  at apply) 20% 20% 53% 33%  blaces? 75%
Total Responses to Question  Are you concerned by secondhand smoke? If so, where yes, at work  Yes, at work  Yes, at home  Yes, in restaurants  No, I am not concerned  Total Responses to Question  Do you believe there should be regulations against serves  No  Total Responses to Question  Does your family have an emergency plan in case of	659 197 856 ere? (Check all th 175 170 461 289 868 moking in public p 647 216 863 a disaster?	23%  at apply)  20% 20% 53% 33%  blaces?  75% 25%
Total Responses to Question  Are you concerned by secondhand smoke? If so, whees, at work es, at home es, in restaurants o, I am not concerned  Total Responses to Question  Do you believe there should be regulations against ses o otal Responses to Question	659 197 856 nere? (Check all th 175 170 461 289 868 moking in public p 647 216 863	23%  at apply) 20% 20% 53% 33%  blaces? 75%

# # of Question responses %

36. If a disaster caused you to be without electricity in your home, how many days supply of water do you have stored for each member of your family?

I do not have any water stored	378	43%
1 - 2 days	229	26%
3 - 7 days	166	19%
More than 1 week	91	11%

Total Responses to Question 870

37. Do you know where your closest emergency shelter is located?

, , , , , , , , , , , , , , , , , , , ,		
Yes	314	36%
No	550	63%

Total Responses to Question 864

38. How many days supply of non-perishable food items do you have stored for each member of your family in case of a disaster?

I do not have any food stored	186	21%
1 - 2 days	192	22%
3 - 7 days	306	35%
More than 1 week	186	21%

Total Reponses to Question 870

39. Have you heard about the possibility of a Pandemic Flu?

Yes, & I understand the threat	429	50%
Yes, but I don't understand	186	22%
No	245	28%

Total Responses to Question 860

#### 40. Which of the following items do you have on hand in case of an emergency? (check all that apply)

Flashlight & extra batteries	779	92%
Sanitation & hygiene products	652	77%
Portable, battery-operated radio or TV & extra batteries	527	63%
Pet food & supplies	391	46%
Items for infants & children	108	13%
Whistle	123	15%
Matches in waterproof container	239	28%
Special Needs items	436	52%
Copies of important documents in a waterproof container	299	24%
Cash and coins	396	47%
Extra clothing & blankets	579	68%
First Aid Kit and manual	435	52%

Total Responses to Question 843

# 41. In a typical month, how many days have you consumed more than one alcoholic drink per day for women or up to two alcoholic drinks per day for men?

omen or up to the allocations arithme per duly for more		
0	669	79%
1 - 2 days	115	14%
3 - 6 days	45	5%
Everyday	19	2%

Note: Typo made responses invalid except "Everyday" response

**Total Responses to Question** 

848

#### # of Question % responses 42. If you currently use, or have ever used, alcohol at what age did you begin to use? Under 15 51 6% 15 - 18 179 21% 19 - 24 197 23% 25 or older 44 5% I have never used 371 44% **Total Responses to Question** 842 43. In the past 12 months have you used illegal drugs? Yes 30 4%

96%

816

846

44. If you currently use, or have ever used, illegal drugs at what age did you begin to use?

**Total Responses to Question** 

No

in it you can come acc, or many acc	a, mogai arage at miat age ara	yea negin te ac
Under 15	33	4%
15 - 18	61	8%
19 - 24	37	5%
25 or older	8	1%
I have never used	603	81%

Total Responses to Question 742

45. Have you ever been encouraged by a doctor or other health care provider to use alcohol or illegal drugs for medical purposes?

Yes	34	4%
No	800	96%

Total Responses to Question 834

46. Have you ever been told by a doctor or other health professional that you had any of the following conditions? (check all that apply)

onanions: (oncor an mat appry)		
High Blood Pressure	246	44%
High Cholesterol	193	34%
Arthritis	154	27%
Mental Health Conditions	128	23%
Asthma	108	19%
Diabetes	76	13%
Other	53	9%
Cancer	50	9%
Heart Disease	38	7%
Sexually Transmitted Infection other than HIV	27	5%
Stroke	16	3%
Substance Abuse	6	1%
HIV/AIDS	5	1%

Question	# of responses	%
47. Are you satisfied with health care in Caswell County?		
Very satisfied	56	7%
Satisfied	196	24%
Somewhat satisfied	351	43%
Dissatisfied	140	17%
Very dissatisfied	68	8%
Total Pagnances to Question	011	

Total Responses to Question 811

# 48. Please rank 1-5 what you believe are the FIVE most important health problems or conditions facing Caswell County.

Condition or Problem	Score
Cancer	945
Obesity/Overweight	859
Tobacco Use	779
Cost of doctor or health care visits	748
Cost of prescriptions	742
Substance Abuse	647
Teen Pregnancy	586
High Blood Pressure	527
Access to health care	521
Diabetes	498
Violence	463
Child neglect or abuse	461
Heart Disease or Stroke	371
HIV/AIDS	366
Sexually Transmitted Infections	295
2nd hand smoke	208
High Cholesterol	206
Lack of clean water sources	174
Mental Health	151
Asthma or respiratory conditions	135
Failing Septic Systems	50
Rabies or West Nile Virus	25
Other	12

Responses were weighted to show importance

Total Responses to Question

750

# 49. Please rank 1-5 what you believe are the FIVE most important unhealthy behaviors facing Caswell County.

Behavior	Score
Drug Abuse	1919
Alcohol Abuse	1714
Unsafe Sex	1445
Poor diet or eating habits	1376
Lack of physical activity	1344
Failure to see Dr. regularly	1217
Violence	1109
Other	49

Answers weighed to show importance

**Total Responses to Question** 

780

	# of		
Question	responses	%	
50. How would you rate your own personal health?			
Very healthy	115	14%	
Healthy	427	51%	
Somewhat Healthy	258	31%	
Unhealthy	35	4%	
Very unhealthy	8	1%	
Total Responses to Question	843		

51. Do you agree that Caswell County is a healthy place to live?

Strongly agree	79	10%
Agree	570	71%
Disagree	119	15%
Strongly disagree	30	4%

Total Responses to Question 798

52. Do you agree that Caswell county is a good place to raise children?

Strongly agree	123	15%
Agree	582	69%
Disagree	101	12%
Strongly disagree	32	4%

Total Responses to Question 838

53. Do you agree that there are enough child care facilities in Caswell county?

Strongly agree	33	4%
Agree	325	40%
Disagree	364	44%
Strongly disagree	96	12%

Total Responses to Question 818

54. Do you agree that there are enough activities for children and youth (0-20) in Caswell County?

The body agree that there are enough detrined for entire	non ana youth	(0 <b>2</b> 0) 040110
Strongly agree	23	3%
Agree	203	24%
Disagree	378	45%
Strongly disagree	237	28%

Total Responses to Question 841

55. Please tell us how many people live in your household for each of the following age groups.

Age	Total	Avg/response
0 - 5 years old	240	0.302
5 - 13 years old	660	0.831
13 - 18 years old	378	0.476
18 - 25 years old	152	0.191
25 - 65 years old	1163	1.460
Older than 65	190	0.239

	# of	
Question	responses	%
6. Do you agree that there are enough activities for adult	ts (21 - 64) in C	aswell County?
Strongly agree	24	3%
Agree	168	20%
Disagree	468	46%
Strongly disagree	180	21%
Total Passances to Question	940	

Total Responses to Question

57. Do you agree that Caswell County is a good place to grow old?

Strongly agree	109	13%
Agree	551	66%
Disagree	132	16%
Strongly disagree	42	5%

Total Responses to Question 834

#### 58. Do you agree that there are enough activities for senior adults (older than 65) in Caswell County?

Strongly agree	42	5%
Agree	317	39%
Disagree	347	43%
Strongly disagree	109	13%

Total Responses to Question 815

#### 59. Do you agree that there are enough RESIDENTIAL adult care facilities in Caswell County?

Strongly agree	29	4%
Agree	241	30%
Disagree	434	54%
Strongly disagree	104	13%

Total Responses to Question 808

#### 60. If adult day care facilities were available for senior adults in Caswell County would you use them?

Yes	226	27%
No	401	49%
I don't know	199	24%

Total Responses to Question 826

#### 61. In a typical month, how often do you use county provided recreation facilities?

Never	484	58%
1 - 5 times	246	29%
5 - 10 times	57	7%
More than 10 times	49	6%

	# of		
Question	responses	%	
62 In the past year, what current recreation facility	ies have you and your fa	mily used?	

62. In the past year	r, what current recreation	facilities have	you and yo	our family used?

	<u>, , , , , , , , , , , , , , , , , , , </u>	
Walking Trail	222	27%
Tennis Courts	63	8%
Athletic Fields	190	23%
S.R. Farmer Lake	69	8%
Gymnasium	134	16%
Picnic Shelter	129	16%
Playground	183	22%
Other	19	2%
None	316	39%

**Total Responses to Question** 815

#### 63. Do you feel Caswell Co. currently offers sufficient recreation facilities?

Yes	206	25%
No	393	48%
I don't know	178	21%

**Total Responses to Question** 817

### 64. Do you feel that Caswell Co. recreation facilities are adequately maintained?

Yes	323	39%
No	178	21%
I don't know	332	40%

**Total Responses to Question** 838

#### 65. What currently offered programs DO you and your family participate in?

Youth Sports	249	31%	
Summer Camps	78	10%	
Senior Games	29	4%	
Adult Sports	33	4%	
Special Olympics	31	4%	
Other	46	6%	
None	437	55%	

**Total Responses to Question** 799

#### 66. What programs that are NOT currently offered WOULD you and your family participate in?

	<u>, , , , , , , , , , , , , , , , , , , </u>	<u> </u>
Youth Sports	87	11%
After-school activities	128	17%
Arts/crafts	195	25%
Adult Sports	95	12%
Fitness Classes	354	46%
Other	57	7%
None	208	27%

	# of		
Question	responses	%	

67. Please rank 1-3 which currently unavailable recreation facilities would have the greatest impact on you and your family?

Facility	Score
Walking/hiking trail	1273
Air conditioned gymnasium	835
Outdoor basketball court	577
Soccer/football fields	574
Other	128

#### Total Responses to Question 699

#### 68. How do you find out about recreation activities?

Newspaper	433	53%
Radio	95	12%
School Flyers	304	37%
Internet	66	8%
Email	33	4%
Word of Mouth	401	49%
Other	32	4%

#### Total Responses to Question 811

#### 69. What is your age?

17 or younger	135	16%
18 - 25	51	5%
26 - 39	259	30%
40 - 54	235	28%
55 - 64	81	10%
65 or older	99	12%

#### Total Responses to Question 850

#### 70. What is your gender?

Female	627	75%
Male	209	25%

### Total Responses to Question 836

#### 71. How do you classify your race?

in the first de year endeemy years tueer		
African American/Black	303	36%
Asian/Pacific Islander	4	0%
Native American	15	2%
Caucasian/White	485	57%
Hispanic/Latino	17	2%
Other	22	3%

Total Responses to Question 846

	# of	
Question	responses	%
72. What is your current marital status?	•	
Married	414	53%
Widow/Widower	51	7%
Single	309	40%
Total Responses to Question	774	
•		
73. What is your highest level of education?		
Less than high school	146	18%
High school diploma or GED	227	28%
Some College	165	20%
College degree or higher	283	34%
Total Reponses to Question	821	
74. What was your household income last year?		
Less than \$20,000	187	25%
\$20,000 - \$39,999	176	23%
\$40,000 - \$59,999	152	20%
\$60,000 - \$79,999	124	17%
Over \$80,000	112	15%
Total Responses to Question	751	
75. In what community of Caswell County do you live?		
Town of Milton	47	6%
Town of Yanceyville	68	9%
Pelham Township	104	13%
Dan River Township	66	9%
Milton Township	64	8%
Locust Hill Township	44	6%
Yanceyville Township	127	16%
Leasburg Township	39	5%
Stoney Creek Township	92	12%
Anderson Township	82	11%
High Towers Township	42	5%
Do not live in Caswell	46	6%
Total Responses to Question	775	

# Appendix F - Caswell County Resource List

Township	Organization Type	Name	Address	City / State / Zip	Contact
	Church	Bush Arbor Primitive Baptist Church			
	Church	Pleasant View Assembly Of God			
	Church	Shady Oak Baptist Church			
	Church	Stateline Baptist Church			
	Health Professionals	NC Board Of Nursing	3724 National Dr. Glenwood Place Office Complex Camden Building	Raleigh, NC 27612	
	Health Professionals	NC Medical Board	PO Box 2007	Raleigh, NC	
Anderson	Church	Banes Chapel Baptist Church		,	Joyce Miller, RN - Member
Anderson	Church	Burton's Chapel Missionary Baptist Church	5277 Burton Chapel Rd	Mebane, NC 27302	Maurice Boswell - Pastor
Anderson	Church	Graves Chapel Missionary Baptist Church	PO Box 665	Yanceyville, NC 27379	Kenneth Walker - Pastor
Anderson	Church	Kimes Chapel Missionary Baptist Church	2027 NC Hwy 119 N	Mebane, NC 27302	Jesse Alston - Pastor
Anderson	Church	Oakview Presbyterian		,	Bob Gillman
Anderson	Family Care Home	Dogwood Family Care #2	3592 Marshall Graves Road	Yanceyville, NC 27379	Deborah Blackwell
Anderson	Family Care Home	Jefferson Care Home	181 Staley Boswell Road	Yanceyville, NC 27379	Elgin Jefferson
Anderson	Family Care Home	Jefferson's Family Care #4	495 Staley Boswell Road	Yanceyville, NC 27379	Elgin Jefferson
Anderson	Family Care Home	New Beginnings Family Care Home	591 Marshall Graves Rd	Yanceyville, NC 27379	Annie Long
Anderson	Family Care Home	Poole's Rest Home	201 Mary Jane Bigelow Road	Yanceyville, NC 27379	Grace Poole
Anderson	Family Care Home	Rudd Ridge Family Care Home	643 Rudd Ridge Rd	Yanceyville, NC 27379	Barbara Ribelin
Anderson	Fire	Anderson Volunteer Fire Department	10850 NC Hwy 119s	Burlington, NC 27215	Harvey Rudd - Chief
Dan River	Boy Scouts	Troop #4372 Shady Grove United Methodist Church		Providence, NC 27315	
Dan River	Business	86 Convenient Mart	7631 NC Hwy 86 N	Providence, NC 27315	Ronnie Carroll
Dan River	Business	Harry Bray Insurance Company	6929 Old NC Hwy 86 N	Providence, NC 27315	Harry Bray - Owner
Dan River	Business	Jimmy & Hope Restaurant & Carry Out	6883 Old NC Hwy 86 N	Providence, NC 27315	Jimmy Koger
Dan River	Child Care	Amanda's Home Child Care	2360 Park Springs Rd	Providence, NC 27315	Amanda Pettiford - Director
Dan River	Child Care	Pride And Joy Educational Home Day Care	1735 Slade Rd	Blanch, NC 27212	Olivia Poteat
Dan River	Child Care	Taylor's Day Care	1622 Walter's Mill Rd	Providence, NC 27315	Mary Taylor
Dan River	Church	Blanch Baptist Church	5931 Blanch Rd	Blanch, NC 27312	
Dan River	Church	Community Baptist Church	3078 Old NC Hwy 86 N	Providence, NC 27315	
Dan River	Church	Ebenezer Missionary Baptist Church	2901 Bertha Wilson Rd PO Box 116	Providence, NC 27315	Beatrice Williamson - Member/Chap Member
Dan River	Church	Gatewood Baptist Church	182 Gatewood Rd	Providence, NC 27315	<u>*</u>
Dan River	Church	God's Blessing Center Church	8305 NC Hwy 62 N	Blanch, NC 27212	Cynthia Richmond - Member/Chap Member

Township	Organization Type	Name	Address	City / State / Zip	Contact
Dan River	Church	Grace Independent Baptist Church	9922 Hwy 86 N	Cedar Grove, NC	
Dan River	Church	Hamer Missionary Baptist Church	4425 NC Hwy 62 N	Blanch, NC 27212	Cephus Lea - Pastor
Dan River	Church	Hickory Grove United Methodist Church	9983 NC 700	Pelham, NC 27311	•
Dan River	Church	High Rock Missionary Baptist Church	3330 High Rock School Rd	Blanch, NC 27212	Sarah Lea - Secretary
Dan River	Church	Park Springs Christian Center	600 Park Springs Lake Rd	Providence, NC 27315	j
Dan River	Church	Purley United Methodist Church	4011 Old NC Hwy 86 N	Yanceyville, NC 27379	Benton Thompson - Member
Dan River	Church	River Zion Missionary Baptist Church	5637 Blanch Rd	Blanch, NC 27312	Ervin Farmer - Deacon
Dan River	Church	Sassafras Grove Baptist Church	3254 Old NC Hwy 86 N	Yanceyville, NC 27379	
Dan River	Church	Yanceyville Christian Brotherhood	2738 NC Hwy 62n	Blanch, NC 27312	
Dan River	Faith	Cedar Grove Association - Health & Human Services Ministry	1188 Bertha Wilson Rd	Blanch, NC 27212	Dr. Barbara Taylor - President
Dan River	Family Care Home	Mitchell Family Care Home	7727 Blanch Rd	Blanch, NC 27212	Clarissa Mitchell
Dan River	Family Care Home	Taylor's Family Care #1	1188 Bertha Wilson Road	Blanch, NC 27312	Alma Taylor
Dan River	Family Care Home	Taylor's Family Care #2	1138 Bertha Wilson Road	Blanch, NC 27312	Alma Taylor
Dan River	Fire	Providence Fire & Rescue	6655 Old Hwy 86 N	Providence, NC 27315	Glen Boswell - Chief
Dan River	Group Homes For Developmentally Disabled Adults	Ralph Scott Group Homes, Inc./Hamer Group Home	4138 NC Hwy 62n	Blanch, NC 27212	Ralph Scott Group Homes, Inc
Dan River	Health Professionals		1188 Bertha Wilson Rd	Blanch, NC 27212	Alma Taylor – RN
Dan River	Health Professionals		127 N. Hill Rd	Yanceyville, NC 27379	Beatrice Williamson - LPN
Dan River	Health Professionals	Dr. Barbara Taylor	983 Bertha Wilson Rd	Blanch, NC 27212	Dr. Barbara Taylor - Podiatrist
Dan River	Schools	North Elementary School	10390 NC Hwy 86 N	Providence, NC 27315	Tina Clayton - Principal
Dan River	Schools	North Elementary School - PTO	10390 Hwy 86 N	Providence, NC 27315	
Hightower	Schools	South Elementary School	8925 US Hwy 86 S	Mebane, NC 27303	Ray Reagan - Principal
Hightowers	Boy Scouts	Troop #4321 American Legion Post 447	15925 NC Hwy 86s	Prospect Hill, NC 27314	
Hightowers	Church	Allen's Chapel Missionary Baptist Church	5630 Ridgeville Rd	Prospect Hill, NC 27314	James Brown - Pastor
Hightowers	Church	Lea Bethel Baptist Church	1820 Ridgeville Rd	Prospect Hill, NC 27314	
Hightowers	Church	Warren's Chapel Missionary Baptist Church	11469 NC Hwy 86 N PO Box 65	Prospect Hill, NC 27314	James Brown - Pastor
Hightowers	Family Care Home	Parker Family Care	10123 Wade Dead End Road	Cedar Grove, NC 27313	David Parker -
Leasburg	Business	4 Points Grill & Tavern	3842 US Hwy 158e	Yanceyville, NC 27379	
Leasburg	Business	Leasburg Grocery		Leasburg, NC 27291	
Leasburg	Church	Beulah Baptist Church	Hwy 158	,	
Leasburg	Church	Beulah Missionary Baptist Church	3027 NC Hwy 119n	Leasburg, NC 27291	Jerry Wilson - Pastor
Leasburg	Church	Faith Baptist Church	6431 NC Hwy 119	,	Timothy Hall - Pastor
Leasburg	Church	Griers Presbyterian	569 Griers Church Rd	Leasburg, NC 27291	
Leasburg	Church	Leasburg United Methodist	7550 US Hwy 158e	Leasburg, NC 27291	Laura Stern - Pastor
Leasburg	Church	New Hope Missionary Baptist Church	PO Box 174	Leasburg, NC 27291	John Watlington - Pastor

Township	Organization Type	Name	Address	City / State / Zip	Contact
Leasburg	Church	Old Lea Bethel Baptist Church		Leasburg, NC 27291	Phillip Wade - Member
Leasburg	Church	Olive Hill Missionary Baptist Church	PO Box 234	Leasburg, NC 27291	Wesley Richmond, Jr Pastor
Leasburg	Church	Pleasant Grove Baptist Church	85 Pleasant Grove Church Rd	Yanceyville, NC 27379	
Leasburg	Church	Pleasant Grove Presbyterian	Corner Of 158 & 86	,	
Leasburg	Church	St. James Baptist	Solomon Lea Rd	,	
Leasburg	Church	The Holy Tabernacle Of Jesus Christ	9487 Ridgeville Rd		
Leasburg	Church	The New Hope Baptist Church			Linda Royster - Pastor
Leasburg	Civic Organization	Girl Scouts			Lisa Rimmer
Leasburg	Civic Organization	Leasburg Ruritan Club			
Leasburg	Civic Organization	Solomon Lea Home Extension Group	1200 Leasburg Rd	Roxboro, NC 27572	Karen Yeatts
Leasburg	Fire	Leasburg Fire Department	5783 NC Hwy 119n	Leasburg, NC 27291	Ricky Briggs
Leasburg	Fire	Leasburg Volunteer Fire Department	8015 US Hwy 158e	Leasburg, NC 27291	Gaither Clayton - Chief
Leasburg	Health Professionals		5743 US Hwy 158e	Leasburg, NC 27291	Beverly Hargis - RN
Leasburg	Health Professionals		6492 US Hwy 158e	Leasburg, NC 27291	Shirley Deal - RN
Leasburg	Health Professionals		7240 US Hwy 158e	Leasburg, NC 27291	Karr-Lynn Johnson - RN
Leasburg	Health Professionals		8141 Ridgeville Rd	Leasburg, NC 27291	Jennifer Cox - RN
Leasburg	Health Professionals				Kelly Cobb - FNP/RN
Leasburg	People Of Influence		3871 NC Hwy 119n	Leasburg, NC 27291	Leon Richmond
Leasburg	People Of Influence		6492 US Hwy 158e	Leasburg, NC 27291	Shirley Deal
Leasburg	People Of Influence		5743 US Hwy 158e	Leasburg, NC 27291	Beverly Hargis
Leasburg	People Of Influence			Leasburg, NC 27291	Emily Brann
Leasburg	Physical Activity	Leasburg United Methodist	7550 US Hwy 158e	Leasburg, NC 27291	Laura Stern - Pastor
Locust Hill	Church	Bethesda Presbyterian Church	216 Bethesda Church	Ruffin, NC 27326	
			Cemetery Rd	,	
Locust Hill	Church	Mineral Springs Missionary Baptist Church	774 Mineral Springs Rd	Pelham, NC 27311	Freddie Seabrooks - Pastor
Locust Hill	Church	New Ephesus Missionary Baptist Church	8939 US Hwy 158 W	Ruffin, NC 27326	William Lea, Sr - Pastor
Locust Hill	Family Care Home	Beverly Rucker Family Care Home #6	6882 N C Hwy. 150	Reidsville, NC 27320	Beverly Rucker
Locust Hill	Family Care Home	Beverly Rucker Family Care Home #7	6856 NC Hwy 150	Reidsville, NC 27320	Beverly Rucker
Locust Hill	Family Care Home	Beverly Rucker Family Care Home #8	6878 NC Hwy 150	Reidsville, NC 27320	Beverly Rucker
Locust Hill	Family Care Home	Beverly Rucker Family Care Home #9	6912 NC Hwy 150	Reidsville, NC 27320	Beverly Rucker
Locust Hill	Family Care Home	G. Anthony Rucker Rest Home	1196 Hodges Dairy Rd	Yanceyville, NC 27379	Beverly Rucker
Locust Hill	Family Care Home	Shomari Family Care Home	3879 Hodges Dairy Road	Yanceyville, NC 27379	Annie Long
Locust Hill	People Of Influence	j	,	1,	Wally Ewalt
Milton	Business	Aunt Millies	249 Broad St.	Milton, NC 27305	Gwen
Milton	Business	Jeanette's	Broad St	Milton, NC 27305	
Milton	Business	Mickey's BBQ	14766 NC Hwy 119n	Semora, NC 27343	
Milton	Business	Milton Tire Service	Broad St	Milton, NC 27305	Patsy Yarbrough
Milton	Child Care	J&J Kiddie Kare	635 Doll Branch Rd PO Box 211	Milton, NC 27305	Lucy Holland - Director
Milton	Child Care	Mary Lou Oliver Home Day Care	16393 NC Hwy 119n	Semora, NC 27343	Mary Lou Oliver
Milton	Church	Bible Way Church	123 Doll Branch Rd	Milton, NC 27305	Breedlove - Pastor

Township	Organization Type	Name	Address	City / State / Zip	Contact
Milton	Church	Connally United Methodist			John Upton - Pastor
Milton	Church	High Street Missionary Baptist Church	PO Box 665	Milton, NC 27305	Shirley Wilson - Secretary
Milton	Church	Lebanon Christian Church	Cunningham Rd	Semora, NC 27343	
Milton	Church	Macedonia Ame Church	4164 Yarborough Mill Rd.	Milton, NC 27305	
Milton	Church	Milton Baptist Church	44 Bridge St. N	Milton, NC 27305	Clyde Everett - Pastor
Milton	Church	Milton Presbyterian Church	Hwy 57	Milton, NC 27305	Larry Jeffries
Milton	Church	Milton United Methodist	Fairway Dr.	Milton, NC 27305	John Upton - Pastor
Milton	Church	Mt. Olive Baptist Church	NC Hwy 119 N	Semora, NC 27343	P.D. Medley - Pastor
Milton	Church	New Haven Missionary Baptist Church	16 New Haven Church Rd	Milton, NC 27305	Marvin Nimmons - Pastor
Milton	Church	New Zion Baptist Church	364 Old Satterfield Rd	Milton, NC 27305	Jacqueline Smith - Pastor
Milton	Church	Oak Level AME Church	722 Snatchburg Rd	Milton, NC 27305	•
Milton	Church	Prayer Of Faith Ministries	3668 NC Hwy 57 N	Milton, NC 37305	
Milton	Church	Red House Presbyterian	NC Hwy 119 N	Semora, NC 27343	Jack Pointer, Jr - Pastor
Milton	Church	Semora Baptist Church	14450 NC Hwy 119n	Semora, NC 27343	Joe Grubbs - Pastor
Milton	Church	Semora United Methodist Church	NC Hwy 119 N	Semora, NC 27343	John Upton - Pastor
Milton	Church	Shiloh Baptist Church	1760 Yarborough Mill Rd	Milton, NC 27305	Ronnie Wyatt - Pastor
Milton	Church	Welcome Baptist Church			
Milton	Civic Organization	Milton Women's Club	Corner 57 & 62	Milton, NC 27305	Katherine Mcgee
Milton	Civic Organization	Semora Ruritan Club	Semora Community Building NC Hwy 119 N	Semora, NC 27343	Jack Pointer, Jr.
Milton	Civic Organization	Thomas Day Restoration Project	Hwy 57	Milton, NC 27305	Marian Thomas
Milton	Elected Official	County Commissioners	PO Box 968	Yanceyville, NC 27379	Hester Vernon - Commissioner
Milton	Elected Official	County Commissioners	3343 Yarbrough Mill Rd	Milton, NC 27305	Jeremiah Jeffries - Vice Chair
Milton	Elected Official	County Commissioners	137 Kim's Dr	Milton, NC 27305	Larry Gene Hamlett - Commissioner
Milton	Elected Official	Town Of Milton	PO Box 248	Milton, NC 27305	Walter Lea Thomas, IV - Mayor
Milton	Family Care Home	Corbett S Family Care #2	382 Hudson Road	Milton, NC 27305	Mae Corbett
Milton	Family Care Home	Corbett's Family Care #1	362 Hudson Road	Milton, NC 27305	Mae Corbett
Milton	Family Care Home	D & H Family Care Home #1	1111 Yarborough Mill Rd	Milton, NC 27305	Gladys Poteat
Milton	Family Care Home	D & H Family Care Home #2	1143 Yarborough Mill Rd	Milton, NC 27305	Gladys Poteat
Milton	Fire	Milton Volunteer Fire Department	Hwy 57	Milton, NC 27305	Paul Myers - Chief
Milton	Fire	Semora First Responders	4997 Hwy 57	Semora, NC 27343	W.G. Blackard - Chief
Milton	Fire	Semora Volunteer Fire Department	4997 Hwy 57	Semora, NC 27343	W.G. Blackard - Chief
Milton	Health Professionals	•	36 Jack Pointer Rd	Semora, NC 27434	Laura Blackard - Nurse
Milton	Health Professionals		277 Sunset Dr.	Milton, NC 27305	Judy Vernon - Nurse
Pelham	Business	Carolina Virginia Animal Hospital	46 Shady Grove Rd	Providence, NC 27311	Mitchell Foster
Pelham	Business	Cathy's Hairstyles	102 Rock Quarry Rd	Pelham, NC 27311	Cathy Gammon
Pelham	Business	Evan's Wells Drilling	4408 Shady Grove Rd	Providence, NC 27315	Mike Evans
Pelham	Business	Mt. Cross Welding	155 Gatewood Rd. Ext	Providence, NC 27315	James Parsons, Jr
Pelham	Business	Sam's Convenience Store	4720 Shady Grove Rd	Providence, NC 27311	
Pelham	Business	STX Machine & Fabrication	32 Rock Quarry Rd	Pelham, NC 27311	

Township	Organization Type	Name	Address	City / State / Zip	Contact
Pelham	Child Care	Lively Pebbles	2347 Chandler's Mill Rd	Pelham, NC 27311	Shirley Gentry - Director
Pelham	Church	Bethel United Methodist	6258 Park Springs Rd	Pelham, NC 27311	
Pelham	Church	Bluestone Missionary Baptist Church	9892 NC Hwy 700	Pelham, NC 27311	Tommy Gunter - Chairman Of Deacons
Pelham	Church	Church Of Christ	278 Whippoorwill Lane	Pelham, NC 27311	
Pelham	Church	Corbett Memorial Baptist Church	1694 Mineral Springs Rd	Pelham, NC 27311	
Pelham	Church	Gwynn's Chapel Missionary Baptist Church	242 Gwynn's Chapel Rd	Pelham, NC 27311	Charles Glenn, II - Pastor
Pelham	Church	Lively Stones Church	2347 Chandler's Mill R	Pelham, NC 27311	
Pelham	Church	Park Springs Pentecostal Holiness Church	Park Springs Rd	Pelham, NC 27311	
Pelham	Church	Pelham United Methodist Church	594 Red Marshall Rd	Pelham, NC 27311	Betty Gentry - Member
Pelham	Church	Red Hill Missionary Baptist Church	6038 Park Springs Rd	Pelham, NC 27311	Pat Pickard - Member
Pelham	Church	Shady Grove Missionary Baptist Church	PO Box 104	Pelham, NC 27311	Roderick Fitz - Pastor
Pelham	Church	Shady Grove United Methodist Church	1705 Shady Grove Rd	Providence, NC 27315	
Pelham	Church	Sheldon Baptist Church	2486 Old US Hwy 29	Pelham, NC 27311	
Pelham	Church	Smith Chapel Missionary Baptist Church	94 Smith Chapel Rd	Pelham, NC 27311	Joyce Huff - Secretary
Pelham	Church	True Gospel Baptist Church	Newnam Rd	Pelham, NC 27311	
Pelham	Church	United Holiness Church	139 Smith Chapel Rd	Pelham, NC 27311	
Pelham	Civic Organization	Pelham Community Center	161 Community Center Dr.	Pelham, NC 27311	Patsy Layne
Pelham	Civic Organization	Pelham Senior Citizens Group - Congregate Meal Site	161 Community Center Dr.	Pelham, NC 27311	Brenda Hodges
Pelham	Civic Organization	Shady Grove Extension Community Association	188 Walters Mil Rd	Providence, NC 27315	Marion Cooper - President
Pelham	Elected Official	County Commissioners	3404 Shady Grove Rd	Providence, NC 27315	George Ward - Chairman Of Board Of Commissioners
Pelham	Elected Official	Court	7425 Park Springs Rd	Pelham, NC 27311	John Satterfield - Clerk Of Court
Pelham	Elected Official	District Court	PO Box 94	Pelham, NC 27311	Mike Gentry - Judge
Pelham	Family Care Home	Carrie's Family Care Home	1654 Allison's Rd.	Pelham, NC 27311	Annie Long
Pelham	Family Care Home	L And L Family Care Home	3023 Chandler Mill Rd	Pelham, NC 27311	Levant Hairston
Pelham	Fire	Casville Volunteer Fire Department	300 Henderson Rd	Pelham, NC 27311	John Hooks - Chief
Pelham	Fire	Pelham Volunteer Fire Department	Pelham Loop Rd	Pelham, NC 27311	David Gray
Pelham	Health Professionals		1398 Lovelace Rd	Pelham, NC 37311	Teresa Pruitt - RN
Pelham	Health Professionals		2663 Allison Rd	Pelham, NC 37311	James Gusler - EMS Director
Pelham	People Of Influence		136 Shady Grove Rd	Providence, NC 27315	Ed Carter
Pelham	People Of Influence		130 Shady Grove Rd	Providence, NC 27315	David Wrenn
Pelham	People Of Influence		7375 Park Springs Rd	Pelham, NC 27311	Gordon Satterfield
Pelham	Physical Activity	Pelham Community Center	161 Community Center Dr.	Pelham, NC 27311	Patsy Layne
Pelham	Physical Activity	Piedmont Triad Visitor's Center	700 NC Hwy 700	Pelham, NC 27311	Joyce Garrett
Prospect Hill	Child Care	WW Newman Migrant Head Start	PO Box 129	Prospect Hill, NC 27379	Angela Wilson - Director

Township	Organization Type	Name	Address	City / State / Zip	Contact
Prospect Hill	Fire	Prospect Hill Volunteer Fire Department	11621 NC Hwy 86s	Prospect Hill, NC 27314	Johnny Wright - Chief
Prospect Hill	Medical Facilities	Prospect Hill Community Health Center	140 Main St	Prospect Hill, NC 27314	Zulay Clark
Stoney Creek					Vance Wrenn
Stoney Creek	Business	Pagetown Exxon			Patty Gwynn
Stoney Creek	Child Care	Page's Day Care Home	2223 Pagetown Rd	Elon, NC 27244	Sandra Page
Stoney Creek	Church	Brown's Chapel Missionary Baptist Church	461 Brown's Chapel Rd	Gibsonville, NC 27249	Thurman Pinnix, Sr - Pastor
Stoney Creek	Church	Camp Springs Baptist Church			
Stoney Creek	Church	Concord Christian Church			
Stoney Creek	Church	Jones Cross Road Missionary Baptist Church	3651 Stoney Creek School Rd	Reidsville, NC 27329	Howard Woods - Pastor
Stoney Creek	Church	Trinity Chapel Missionary Baptist Church	1355 Wagon Wheel Rd	Reidsville, NC 27320	Clarie Mclaughlin - Secretary
Stoney Creek	Civic Organization	Cherry Grove Ruritan			
Stoney Creek	Civic Organization	Southern Caswell Ruritan			
Stoney Creek	Elected Official	County Commissioners	1245 Milesville Rd	Elon, NC	Kenneth Travis - Commissioner
Stoney Creek	Family Care Home	Blackwell's Rest Home	3782 Cherry Grove Road	Elon College, NC 27244	Faiger Blackwell
Stoney Creek	Family Care Home	Dogwood Forest Home #2	3814 Cherry Grove Road	Elon College, NC 27244	Mildred Blackwell
Stoney Creek	Family Care Home	Graves Family Care	2896 Stoney Creek School Road	Reidsville, NC 27320	Robin Graves
Stoney Creek	Family Care Home	Terry Care Home	2446 Cherry Grove Rd	Yanceyville, NC 27379	Lawanda Ray
Stoney Creek	Family Care Home	The Ronald David Home	3814 Cherry Grove Road	Elon College, NC 27244	Faiger Blackwell
Stoney Creek	Fire	Cherry Grove Fire Department	7074 Cherry Grove Rd	Elon, NC 27244	Eddie Dodson - Chief
Stoney Creek	Health Professionals	i	1173 Bethesda Church Rd	NC	Shirley Sartin - Labtech
Stoney Creek	Health Professionals		Wagon Wheel Rd	NC	Nicole Smith - Labtech
Stoney Creek	People Of Influence				Cy Vernon
Stoney Creek	People Of Influence				Shannon White - Editor
Yanceyville	Boy Scouts	Troop #4345 Carolina Pinnacle Studios	336 Main St.	Yanceyville, NC 27379	
Yanceyville	Boy Scouts	Troop #4390 Community Baptist Church	3050 Old NC Hwy 86 N	Yanceyville, NC 27379	
Yanceyville	Boy Scouts	Cherokee Scout Reservation	3296 Boy Scout Camp Rd	Yanceyville, NC 27379	
Yanceyville	Business	Advance Auto Parts	1900 NC Hwy 86 N	Yanceyville, NC 27379	Kevin Tatum - Manager
Yanceyville	Business	American National Bank & Trust Co.	173 Main St.	Yanceyville, NC 27379	Kathy Jeffries
Yanceyville	Business	B&B Plumbing And Home Improvement	176 Main St.	Yanceyville, NC 27379	Steve Barker - Owner
Yanceyville	Business	Briggs BBQ	989 Main St.	Yanceyville, NC 27379	
Yanceyville	Business	Caswell Tire	1430 Main St	Yanceyville, NC 27379	Gordon Satterfield - Owner
Yanceyville	Business	Caswell Veterinary Service	134 Julia St	Yanceyville, NC 27379	Donald Fuller - DVM

Township	Organization Type	Name	Address	City / State / Zip	Contact
Yanceyville	Business	Evelyn's Take Out	22 Main St.	Yanceyville, NC 27379	Evelyn
Yanceyville	Business	Farm Bureau Of Caswell County	1508 Main St.	Yanceyville, NC 27379	Ray Shaffner - Manager
Yanceyville	Business	Fidelity Bank	202 Court Square	Yanceyville, NC 27379	Jennifer Daniel
Yanceyville	Business	Fulton Funeral Home	219 Dillard School Rd	Yanceyville, NC 27379	John Fulton
Yanceyville	Business	Great Wall Chinese Food	1986 NC Hwy 86 N	Yanceyville, NC 27379	
Yanceyville	Business	Harrelson's Funeral Home	143 Third Ave.	Yanceyville, NC 27379	Claude Harrelson
Yanceyville	Business	Marley Funeral Home	877 Main St.	Yanceyville, NC 27379	Don Marley
Yanceyville	Business	McDonald's	2035 NC Hwy 86 N	Yanceyville, NC 27379	
Yanceyville	Business	Nationwide Insurance Co.	120 Cole St	Yanceyville, NC 27379	Skip Rowland
Yanceyville	Business	North Village Pharmacy	1493 Main St.	Yanceyville, NC 27379	Vernon Massengill
Yanceyville	Business	Radio Shack	1088 NC Hwy 86 N	Yanceyville, NC 27379	
Yanceyville	Business	State Employees Credit Union	980 NC Hwy 86 N	Yanceyville, NC 27379	
Yanceyville	Business	Subway	1975 NC Hwy 86 N	Yanceyville, NC 27379	
Yanceyville	Business	Thomas Bros. Oil & Gas, Inc		Yanceyville, NC 27379	Mark Thomas
Yanceyville	Business	Venice's Italian Restaurante & Pizzaria	1748 NC Hwy 86 N	Yanceyville, NC 27379	Nathan
Yanceyville	Business	Vernon Farm & Garden	1580 Main St	Yanceyville, NC 27379	C. Hester Vernon - Owner
Yanceyville	Business	Yancey House Restaurant	699 US Hwy 158 W	Yanceyville, NC 27379	Mike Willis
Yanceyville	Child Care	Caswell Community Head Start	225 N. 3rd St	Yanceyville, NC 27379	Deana Murphy - Director
Yanceyville	Child Care	Early Head Start	PO Box 789	Yanceyville, NC 27379	Angela Wizard - Director
Yanceyville	Child Care	Kids R US Child Care	PO Box 867	Yanceyville, NC 27379	Caroline Slade
Yanceyville	Child Care	Massey Day Care	PO Box 266	Yanceyville, NC 27379	Christine Massey
Yanceyville	Child Care	Noah's Education Ark	640 Old NC Hwy 86 N	Yanceyville, NC 27379	Tara Mansfield - Director
Yanceyville	Child Care	Rainbow Educational Day Care	PO Box 82 - Firetower Rd	Yanceyville, NC 27379	Kimberly Harris - Director
Yanceyville	Church	Blackwell Missionary Baptist Church	Hwy 158 PO Box 57	Yanceyville, NC 27379	Everett Dickerson - Pastor
Yanceyville	Church	Church On The Square		Yanceyville, NC 27379	
Yanceyville	Church	First Baptist Church	378 Church St. W	Yanceyville, NC 27379	
Yanceyville	Church	Pearson Chapel AME Church	2222 NC Hwy 62n	Yanceyville, NC 27379	
Yanceyville	Church	Prospect United Methodist Church	1900 US Hwy 158 W	Yanceyville, NC 27379	
Yanceyville	Church	Providence Missionary Baptist Church	185 Webster Rd	Yanceyville, NC 27379	Paul Robinson - Pastor
Yanceyville	Church	Solid Rock True Holiness Church	PO Box 753	Yanceyville, NC 27379	Totten
Yanceyville	Church	St. Luke's Episcopal Church	237 Parkway Dr	Yanceyville, NC 27379	
Yanceyville	Church	Yanceyville Methodist Church		,	
Yanceyville	Church	Yanceyville Missionary Baptist Church	PO Box 837	Yanceyville, NC 27379	Arthur Grier, II - Pastor
Yanceyville	Church	Zion's Gate Apostolic Church	118 Pine Dr. E	Yanceyville, NC 27379	
Yanceyville	Civic Organization	Caswell County Kiwanis		Yanceyville, NC 27379	Barry Smith - Chairman
Yanceyville	Civic Organization	Caswell County Rotary		Yanceyville, NC 27379	Wally Ewalt
Yanceyville	Civic Organization	Extension And Community Association (ECA) Homemakers	126 Court Square	Yanceyville, NC 27379	Marion Cooper
Yanceyville	Elected Official	County Commissioners	1220 Marshal Graves Rd	Yanceyville, NC 27379	Nathaniel Hall - Commissioner
Yanceyville	Elected Official	Town Of Yanceyville	200 E Church St.	Yanceyville, NC 27379	Dan Printz - Mayor
Yanceyville	Elected Officials	Caswell County	139 Church St. E	Yanceyville, NC 27379	Delores Dameron - Deputy Register Of Deeds

Township	Organization Type	Name	Address	City / State / Zip	Contact
Yanceyville	Elected Officials	County Commissioners	PO Box 896	Yanceyville, NC 27379	William Carter -
-		_			Commissioner
Yanceyville	Elected Officials	County Commissioners	PO Box 968	Yanceyville, NC 27379	C. Hester Vernon -
-		-		-	Commissioner
Yanceyville	Elected Officials	NC General Assembly Representative	PO Box 51729	Durham, NC 0	Bill Faison - Representative
Yanceyville	Faith	Caswell Parrish		,	
Yanceyville	Faith	Cedar Grove Association	4011 US Hwy 158w PO Box 1215	Yanceyville, NC 27379	Everett Dickerson - Moderator
Yanceyville	Family Care Home	Dogwood Family Care #1	94 N Hwy 62 South	Yanceyville, NC 27379	Deborah Blackwell
Yanceyville	Family Care Home	Double S & H Family Care	158 E. Main Street	Yanceyville, NC 27379	Susan Hall
Yanceyville	Family Care Home	Jones Family Home #4	278 Main Street	Yanceyville, NC 27379	Natalie Jones
Yanceyville	Fire	Yanceyville Volunteer Fire Department	136 Fire Dept. Dr.	Yanceyville, NC 27379	Vernon Massengill - Chief
Yanceyville	Group Homes	Ralph Scott Group Homes, Inc./Seventh Avenue Group Home	164 Seventh Street	Yanceyville, NC 27379	Ralph Scott Group Homes, Inc
Yanceyville	Media	Caswell Messenger	Main St	Yanceyville, NC 27379	Shannon White - Editor
Yanceyville	Media	WYNC - Radio	545 Fire Tower Rd	Yanceyville, NC 27379	Harry Myers
Yanceyville	Medical Facilities	Alamance-Caswell Mental Health	339 Wall St	Yanceyville, NC 27379	Valerie Russell
Yanceyville	Medical Facilities	Carolina Dialysis	1723 NC Hwy 86 N	Yanceyville, NC 27379	Pat Pickard - RN
Yanceyville	Medical Facilities	Caswell County Health Department	189 County Park Rd	Yanceyville, NC 27379	Dr. Fred Moore - Health Director
Yanceyville	Medical Facilities	Caswell Family Medical Center	439 US Hwy 158w	Yanceyville, NC 27379	Shirley Deal - Executive Director
Yanceyville	Medical Facilities	Yanceyville Primary Care	1076 Court Plaza	Yanceyville, NC 27379	Kathy Patterson - FNP
Yanceyville	Medical Facilities	Bayada Nurses	1223 Main St	Yanceyville, NC 27379	Felicia Echols - Manager
Yanceyville	Medical Facilities	Fairway Home Care	137 Main St	Yanceyville, NC 27379	
Yanceyville	Medical Facilities	Patty Vision Center	495 US Hwy 158w	Yanceyville, NC 27379	Diane Oakley
Yanceyville	Medical Facilities	Brian Center	1086 Main Street	Yanceyville, NC 27379	Jeff Carpenter - Director
Yanceyville	Other	U.S. Postal Service	Main St	Yanceyville, NC 27379	Dinah Marshall - Post Master
Yanceyville	People Of Influence	Caswell County Government	PO Box 98	Yanceyville, NC 27379	Kevin Howard - County Mngr
Yanceyville	People Of Influence	North Village Pharmacy	1493 Main St.	Yanceyville, NC 27379	Vernon Massengill
Yanceyville	Pharmacy	North Village Pharmacy	Main Street	Yanceyville, NC 27379	Vernon Massengill
Yanceyville	Pharmacy	Yanceyville Drug Store	Court Square	Yanceyville, NC 27379	
Yanceyville	Physical Activity	Caswell County Parks & Recreation Department	County Park Rd	Yanceyville, NC 27379	Jason Barrow - Director
Yanceyville	Schools	Bartlett Yancey High School	466 E. Main St	Yanceyville, NC 27379	Dr. Gary Cone - Principal
Yanceyville	Schools	Caswell County Schools	353 County Home Rd	Yanceyville, NC 27379	Dr. Doug Barker -
					Superintendent
Yanceyville	Schools	NL Dillard Middle School	255 Hatchett Rd	Yanceyville, NC 27379	W. Frank Scott - Principal
Yanceyville	Schools	Oakwood Elementary School	274 Oakwood Dr	Yanceyville, NC 27379	Jerome Wilson - Principal
Yanceyville	Schools	Piedmont Community College	331 Piedmont Dr.	Yanceyville, NC 27379	Susan Scaggs
Yanceyville	Schools	Stoney Creek Elementary School	1803 Stoney Creek School Rd	Reidsville, NC 27320	Fernandez Johnson - Principal

## Appendix G - CHA Community Action Plan 2007

# **COMMUNITY ACTION PLAN**

Division of Public Health
NC Department of Health & Human Services

AGENCY: Caswell County Health Department
PREPARED BY: Jennifer Eastwood, MPH
PHONE: (336) 694-4129
E-MAIL: jeastwood@caswellnc.us

FOR PERIOD COVERING: 1/1/2008

TO 12/31/201

### **HEALTHY CAROLINIANS 2010 NC HEALTH OBJECTIVE**

By December 31, 2012, there will be no increase in the percentage of NC adults, youth, and children who are classified as overweight or obese.

#### LOCAL COMMUNITY OBJECTIVE #: 1

Does your Community Objective propose a (check all that apply  ☐ Policy Change ☐ Environmental Change? ☐ Individual Change ☐ Education/Awareness ☐ Other:	By December 31, 2009, Caswell County will create an Obesity Coalition. This coalition will develop a plan for lowering the incidence of overweight and obesity.

STEPS	TARGET POPULATION	SETTING	COMMUNITY PARTNERS THEIR ROLES & RESPONSIBILITIES	EVALUATION and PROGRESS TO DATE
By April 2008, Obesity Coalition is formed and has first meeting.				
	General Population	Community	CCHD – Create invitation list.	Invitation List
By February 2008, use resources identified in CHA to create invitation list for Obesity Coalition.				
By February 2008, determine logistics for first meeting (date, time, location)	General Population	Community	CCHD – Determine logistics	
By March 2008, send invitations to community partners.	General Population	Community	CCHD – Send invitations	
By April 2008, Obesity Coalition meets for first time.	General Population	Community	CCHD – facilitate meeting Community Partners – attend meeting	Sign-in sheet; minutes of first meeting.

STEPS	TARGET POPULATION	SETTING	COMMUNITY PARTNERS THEIR ROLES & RESPONSIBILITIES	EVALUATION and PROGRESS TO DATE
By April 2008, Obesity Coalition determines future meeting schedule, goals, and objectives for coalition.	General Population	Community	Coalition - determine coalition logistics	Minutes of first meeting
By December 31, 2008, Obesity Coalition will develop a long-term countywide plan to decrease the incidence of overweight and obesity in Caswell County.				
By June 2008, Obesity Coalition will conduct any further research and data collection needed to determine the true magnitude of overweight/obesity in Caswell county	General Population	Community	Coalition – conduct research; collect data	
By August 2008, Obesity Coalition use analyzed data to develop a long-term plan to combat obesity in Caswell County. This plan should be across all age groups and should be county-wide.	General Population	Community	Coalition – develop plan	Draft of plan
By December 2008, Obesity Coalition will release obesity plan to County Commissioners, Board of Education, Board of Health, and any other governing bodies.	General Population	Community	Coalition – present plan to governing bodies	Minutes from governing body meetings
By December 2008, Obesity Coalition will release obesity plan to public.	General Population	Media	Coalition – send press release to Caswell Messenger and WYNC Caswell Messenger – publish report on obesity plan WYNC – include report of obesity plan in its news report.	Published news article

# **HEALTHY CAROLINIANS 2010 NC HEALTH OBJECTIVE**

By 2010, reduce the diabetes death rate.

#### LOCAL COMMUNITY OBJECTIVE #: 2

	2001200111111102020111211
Does your Community Objective propose a (check all that apply Policy Change	By December 31, 2011, decrease the number of Diabetes-related deaths in Caswell County.
⊠ Education/Awareness	
Other:	

STEPS	TARGET POPULATION	SETTING	COMMUNITY PARTNERS THEIR ROLES & RESPONSIBILITIES	EVALUATION and PROGRESS TO DATE
By January 2009, obtain grant funding for Diabetes program.	General Population	Community	CCHD – seek grant funding opportunities and coordinate application process.	Completed application.
By March 2009, hire Diabetes Educator.	General Population	Community	CCHD – hire & orient Diabetes Educator	
By April 2009, Diabetes Educator will implement Diabetes Program that will include increased screening initiatives, support groups, and clinical pathway program for those diagnosed with diabetes.	General Population	Community	Diabetes Educator – implement program.	

### **HEALTHY CAROLINIANS 2010 NC HEALTH OBJECTIVE**

- 1. Increase the span of healthy life of the citizens of North Carolina;
- 2. Remove health disparities among the disadvantaged;
- 3. Promote access to preventive health services;
- 4. Protect the public's health;
- 5. Foster positive and supportive living and working conditions in our communities; and
- 6. Support individuals to develop the capacities and skills to achieve healthy living.

#### LOCAL COMMUNITY OBJECTIVE #: 3

Does your Community Objective propose a (check all that apply Policy Change Partnership.  By December 2009, Caswell County will form a Healthy Carolinians Partnership.  Partnership.  Individual Change  Education/Awareness		Eccine commentation obtained in a
	(check all that apply  ☐ Policy Change ☐ Environmental Change? ☐ Individual Change	
Education/Awareness		
Other:	Other:	

STEPS	TARGET POPULATION	SETTING	COMMUNITY PARTNERS THEIR ROLES & RESPONSIBILITIES	EVALUATION and PROGRESS TO DATE
By December 2008, convene the Healthy				
Carolinians Partnership.				
By October 2008, contact HC Regional Consultant for guidance to begin HCP process.	General Population	Community	CCHD – contact regional consultant	
By October 2008, use resources identified in CHA to create invitation list for the Healthy Carolinians Partnership.	General Population	Community	CCHD – Create invitation list.	Invitation List
By October 2008, determine logistics for first meeting (date, time, location)	General Population	Community	CCHD – Determine logistics	
By November 2008, send invitations to community partners.	General Population	Community	CCHD – Send invitations	
By December 2008, HCP meets for first time.	General Population	Community	CCHD – facilitate meeting Community Partners – attend meeting	Sign-in sheet; minutes of first meeting.
By December 2008, Obesity Coalition determines future meeting schedule, goals, and objectives for coalition.	General Population	Community	Coalition - determine coalition logistics	Minutes of first meeting
By March 2009, Healthy Carolinians Partnership				
develops organizational structure, mission, vision,				
goals and by-laws.				
By March 2009, elect officers and form committees.	General Population	Community	HCP to nominate and elect candidates for officers.	Minutes of meetings

STEPS	TARGET	SETTING	COMMUNITY PARTNERS	EVALUATION
	POPULATION		THEIR ROLES & RESPONSIBILITIES	and PROGRESS
				TO DATE
By March 2009, HCP determines mission, vision, goals,	General Population	Community	HCP Chairperson to facilitate creation of mission, vision,	
and by-laws.			goals, and by-laws.	
By June 2009, apply for 501c3 status.				
By April 2009, obtain information on application process.	General Population	Community	HCP Chair – obtain materials and facilitate process	
By May 2009, have application drafted and present to	General Population	Community	HCP Chair – coordinate application process	
HCP for approval			HCP members – approve application	
By December 2009, create HCP Action Plan	General Population	Community	HCP Chair – facilitate action plan process	

### Appendix H - Caswell County Community Action Plan - Health Promotions

Agency Name: Caswell County Health Department

Contact Name: Jennifer Eastwood
Telephone: (336) 694-4129 111
Email Address: jeastwood@caswellnc.us

Objective Number: 1

Description: By June 2008, Caswell County Parks and Recreation Department will adopt a

policy to offer healthy options at its concessions.

Environmental or Policy Objective: YES

Assessment Tools: Partner Input
Risk Factors: Nutrition

Overweight/Obesity

Settings: Community
Target Populations: School-age youth
General population

Estimated Population Size: 600

State Health Objectives: By December 31, 2012, increase yearly the number of policies, practices and incentives

to promote healthy eating and physical activity wherever North Carolinians live, learn,

work, play and pray.

By December 31, 2012, there will be no increase in the percentage of North Carolina

adults, youth and children who are classified as overweight or obese

By December 31, 2012, the percentage of North Carolina adults, youth and children who typically consume more than one 12-ounce serving of sugar-sweetened beverages per

day will not exceed 50 percent.

Step Number: 1

Description: By August 2007, HP Coordinator will meet with Parks & Recreation Director to discuss

current concessions policies and practices.

Partner / Position → Role: Caswell County Health Department / Health Educator/HP Coordinator → Will assist in

the review of these policies and practices and make suggestions for change.

Caswell County Parks & Recreation Department / Director  $\rightarrow$  Director will provide any

current policies and review practices for providing concessions at sport events.

Step Number: 2

Description: By September, Director and HP Coordinator will present current policies/practices for

concessions and anticipated changes to the Caswell County Recreation Commission.

information to Commission

Caswell County Parks & Recreation Department / Director → Present information to

Commission

Caswell County Recreation Commission / Members → Review presented information

and offer further guidance for changes.

Step Number: 3

Description: By September 2007, Recreation Commission will appoint sub-committee to develop a

new concession policy for healthy concessions

Partner / Position → Role: Caswell County Health Department / Health Educator/HP Coordinator → Suggest

members of sub-committee

Caswell County Parks & Recreation Department / Director → Suggest members of sub-

committee

Caswell County Recreation Commission / Chairperson → Appoint sub-committee Caswell County Recreation Commission / Members → Serve on sub-committee

Step Number:	4
Description:	By December 2007, Recreation Commission will approve Healthy Concessions Policy.
Partner / Position → Role:	Caswell County Recreation Commission / Members → Approve Policy
	Health Concessions Subcommittee / Members → Present policy.
Step Number:	5
Description:	By December, Recreation Commission Chairperson will present Healthy Concessions Policy to County Commissioners for informational purposes.
Partner / Position → Role:	Caswell County Government / Commissioners → Endorse plan.
	Caswell County Parks & Recreation Department / Director → Present Healthy Concessions Policy to Commissioners
	Caswell County Recreation Commission / Chairperson → Offer support from Recreation Commission
Step Number:	6
Description:	By March 2008, hold training with concessions workers to inform them of changes.
Partner / Position → Role:	Caswell County Health Department / Health Educator/HP Coordinator $\rightarrow$ Assist Director as needed. Attend training meeting.
	Caswell County Parks & Recreation Department / Director → Arrange meeting of concessions volunteers & present new policy.
Step Number:	7
Description:	By January 2008, create signs to encourage patrons to purchase healthy choices at concession stands.
Partner / Position → Role:	Caswell County Health Department / Health Educator/HP Coordinator $\rightarrow$ Help develop signs.
	Caswell County Parks & Recreation Department / Director → Help develop signs.
Step Number:	8
Description:	By March 2008, send press release to local newspaper informing public of new policy and what they can expect at Parks & Recreation activities.
Partner / Position → Role:	Caswell County Parks & Recreation Department / Director → Approve press release
	Caswell Messenger / Editor/Reporter → Caswell Messenger/Editor/Reporter
	Caswell County Health Department / Health Educator/HP Coordinator → Write press release.
Ston Number	9
Step Number: Description:	By March 2008, order healthy concession supplies (fruit, water, etc)
Partner / Position → Role:	Caswell County Health Department / Health Educator/HP Coordinator → Advise as necessary, offer limited funding.
	Caswell County Parks & Recreation Department / Director → Order supplies.
Step Number:	10
Description:	By May 2008, kick-off Healthy Concessions with first baseball, t-ball, softball games of the season. Give incentives to those who choose healthy items.
Partner / Position → Role:	Caswell County Health Department / Health Educator/HP Coordinator → Help plan kick- off event and order prizes to be given to those who make healthy choices.
	Caswell County Parks & Recreation Department / Director → Plan kick-off event.  Caswell Messenger / Editor/Reporter → Cover kick-off event.

**Objective Number:** 

**Description:** By June 2008, Caswell County will adopt a plan to build a trail system in the

county and funding to begin construction will be secured.

**Environmental or Policy Objective:** 

**Assessment Tools:** Partner Input Risk Factors: Physical activity Nutrition

Overweight/Obesity

Settings: Community **Target Populations:** Older adults School-age youth General population

**Estimated Population Size:** 

State Health Objectives: By December 31, 2012, increase yearly the number of policies, practices and incentives

to promote healthy eating and physical activity wherever North Carolinians live, learn,

work, play and pray.

By December 31, 2012, increase yearly the number of facilities/environments to promote healthy eating and physical activity where North Carolinians live, learn, work, play and

By December 31, 2012, there will be no increase in the percentage of North Carolina

adults, youth and children who are classified as overweight or obese

By December 31, 2012, at least 46 percent of adults will get recommended amounts of physical activity each week and fewer than 15 percent will report no leisure time physical

activity.

By December 31, 2012, at least 52 percent of youth and children will participate in at

least 60 minutes of physical activity every day.

Step Number:

Description: By December 2007, find grant funding to provide for consultants to lead planning

Partner / Position → Role: Caswell County Government / Commissioners → Approve grant application and approve

receipt of money

Caswell County Parks & Recreation Department / Director → Provide information for

grant applications

Caswell County Recreation Commission / Members → Provide information and approval

for grant applications

Piedmont Triad Council of Governments / Regional Planner → Provide information and

technical assistance for grant application

Caswell County Health Department / Health Educator/HP Coordinator → Coordinate

grant application

Step Number:

Description: By December 2007, partner with Piedmont Triad Council on Governments (PTCOG) to

lead planning process.

Partner / Position → Role: Caswell County Health Department / Health Educator/HP Coordinator → Provide

information and assistance to PTCOG

Caswell County Parks & Recreation Department / Director → Provide information and

assistance to PTCOG

Caswell County Recreation Commission / Members → Provide information and

assistance to PTCOG.

PTCOG / Regional Planner → Lead agency...conduct assessments, plan document

preparation, and all necessary meetings.

Step Number: 3

Description: By March 2008, conduct needs assessment and public meetings to determine

components of plan.

Partner / Position → Role: Caswell County Health Department / Health Educator/HP Coordinator → Help conduct

assessment as necessary. Attend public meetings

Caswell County Parks & Recreation Department / Director  $\rightarrow$  Help conduct assessment

as necessary. Attend public meetings.

Caswell County Recreation Commission / Chairperson  $\rightarrow$  Help conduct assessment as

necessary. Attend public meetings.

Caswell County Recreation Commission / Members → Help conduct assessment as

necessary. Attend public meetings.

Caswell Messenger / Editor/Reporter → Publish announcements of meetings and survey

information

PTCOG / Regional Planner → Lead Agency - Coordinate assessments and public

meetings.

Step Number: 4

Description: By June 2008, present finalized Parks & Recreation Plan to County Commissioners for

approval

Partner / Position → Role: Caswell County Government / Commissioners → Approve plan.

Caswell County Parks & Recreation Department / Director → Present plan to

Commissioners.

Caswell County Recreation Commission / Members → Recommend approval to

Commissioners.

PTCOG / Regional Planner → Assist Director present to the Commissioners. Answer

questions and provide support.

Tuesday, November 27, 2007 4

**Objective Number:** 

**Description:** By June 2009, a 2-mile trail will be constructed around the senior center. Year 1: The trail

plan will be completed and funding secured.

Environmental or Policy Objective:

**Assessment Tools:** Partner Input

Community Interest

**Risk Factors:** Physical activity

Overweight/Obesity

Settings: Community **Target Populations:** Older adults

Preschool School-age youth General population

**Estimated Population Size:** 

State Health Objectives: By December 31, 2012, increase yearly the number of policies, practices and incentives

to promote healthy eating and physical activity wherever North Carolinians live, learn,

work, play and pray.

By December 31, 2012, increase yearly the number of facilities/environments to promote healthy eating and physical activity where North Carolinians live, learn, work, play and

By December 31, 2012, there will be no increase in the percentage of North Carolina

adults, youth and children who are classified as overweight or obese

By December 31, 2012, at least 46 percent of adults will get recommended amounts of physical activity each week and fewer than 15 percent will report no leisure time physical

By December 31, 2012, at least 52 percent of youth and children will participate in at

least 60 minutes of physical activity every day.

Step Number:

Description: By August 2007, Piedmont Triad Council on Governments (PTCOG) will establish a

steering committee to plan and develop a trail around the new Senior Center.

Partner / Position → Role: Caswell County Health Department / Health Educator / HP Coordinator → Serve on

Steering Committee

Caswell County Parks & Recreation Department / Director → Serve on Steering

Committee

Caswell County Recreation Commission / Chairperson → Serve on Steering Committee

Caswell County Senior Center / Director → Serve on Steering Committee

Caswell County Trails Committee / Chairperson → Serve on Steering Committee

Department of Transportation / Administrator / Planner → Serve on Steering Committee

Oakwood Elementary School / Principal → Serve on Steering Committee

PTCOG / Regional Planner → Lead agency for the facilitation of trail development Rainbow Day Care Center / Director → Serve on Steering Committee

Town of Yanceyville / Town Manager or Designee → Serve on Steering Committee

Step Number:

Description: By September 2007, PTCOG will facilitate public meeting to determine needs and vision

for Senior Center

Partner / Position → Role: Caswell County Health Department / Health Educator / HP Coordinator → Assist PTCOG

to plan meeting

Caswell County Parks & Recreation Department / Director → Assist PTCOG to plan

meeting

Caswell County Senior Center / Director → Assist PTCOG to plan meeting; advertise

meeting to seniors

PTCOG / Regional Planner → Lead agency – coordinate and facilitate meeting

Step Number: 3

Description: By October 2007, PTCOG will conduct site assessments and mapping of senior center

site and trail

Partner / Position → Role: PTCOG / Regional Planner → Conduct site assessment and map probably trail route

Step Number: 4

Description: By November 2007, PTCOG will draft and develop a plan for trail around Senior Center

site on County owned land

Partner / Position → Role: PTCOG / Regional Planner → Design and draft trail plan

Steering Committee for Senior Trail / Members → Offer technical assistance

Step Number: 5

Description: By January 2008, Caswell County Commissioners and Yanceyville Town Council will

approve trail design

Partner / Position → Role: Caswell County Government / Commissioners → Approve Trail Plan

Caswell County Parks & Recreation Department / Director → Present plan to

Commissioners

Caswell County Senior Center / Director → Present Plan to Commissioners

PTCOG / Regional Planner → Present Plan to Commissioners

Town of Yanceyville / Town Manager or Designee → Approve Trail Plan

Step Number: 6

Description: By June 2008, county will secure funds necessary to build trail

Partner / Position → Role: Caswell County Government / Commissioners → Approve grant applications and receipt

of funds

Caswell County Health Department / Health Educator / HP Coordinator → Coordinate

grant applications

Caswell County Parks & Recreation Department / Director → Assist partners in grant

writing process. Present grant applications to county government as necessary

PTCOG / Regional Planner → Assist partners in grant writing process

Caswell County Senior Center / Director → Assist partners in grant writing process.

Present grant applications to county government as necessary

Objective Number: 4

Description: By June 2008, Caswell County will establish a Healthy Carolinians Task Force to

include an Eat Smart Move More (ESMM) Committee.

Environmental or Policy Objective: YES

Assessment Tools: Community Health Assessment

Partner Input

Replication of successful program

Risk Factors: Physical activity

Nutrition Tobacco

Overweight/Obesity

Other

Settings: Community

Target Populations: General population

Estimated Population Size: 23608

State Health Objectives: By December 31, 2012, increase yearly the number of policies, practices and incentives

to promote healthy eating and physical activity wherever North Carolinians live, learn,

work, play and pray.

By December 31, 2012, increase yearly the number of facilities/environments to promote healthy eating and physical activity where North Carolinians live, learn, work, play and

oray.

By December 31, 2012, there will be no increase in the percentage of North Carolina

adults, youth and children who are classified as overweight or obese

By December 31, 2012, 25 percent fewer North Carolina children ages 2 – 17 will eat

fast food three or more times per week.

By December 31, 2012, at least 70 percent of North Carolinians will prepare and eat their

main meal at home at least five times per week.

By December 31, 2012, the percentage of North Carolina adults, youth and children who typically consume more than one 12-ounce serving of sugar-sweetened beverages per

day will not exceed 50 percent.

By December 31, 2012, at least 46 percent of adults will get recommended amounts of physical activity each week and fewer than 15 percent will report no leisure time physical

activity.

By December 31, 2012, at least 52 percent of youth and children will participate in at

least 60 minutes of physical activity every day.

By June 30 2010, reduce the prevalence of tobacco use among NC adults

By June 30 2010, increase the proportion of young people in middle school and high

school who have never smoked.

By June 30 2010, decrease the proportion of middle school and high school students

using tobacco products.

By June 30 2010, decrease the proportion of middle school and high school students

who currently smoke.

By June 30, 2010 increase the proportion of adults who do not currently smoke.

Step Number:

Description: By July 2007, contact Healthy Carolinians to begin process of establishing HC Task

Force in Caswell County.

Partner / Position → Role: Caswell County Health Department / Health Educator/HP Coordinator → Contact HC

Consultant

Healthy Carolinians / Consultant → Provide assistance for creation of HC Task Force.

Step Number: 2

Description: By December 2007, hold first meeting of HC Task Force, review CHAP Action Plan and

set up sub-committees.

Partner / Position → Role: African-American Churches / Lay Health Ministry Teams → Attend meeting

Caswell County Cooperative Extension Services / 4-H Extension Agent → Attend

meeting

Caswell County Cooperative Extension Services / EFNEP Extension Agent → Attend

meeting

Caswell County Cooperative Extension Services / FCS Extension Agent → Attend

meeting

Caswell County Government / Commissioners → Attend meeting

Caswell County Health Department / Health Educator/HP Coordinator  $\rightarrow$  Coordinate with

HP Consultant to hold first meeting. Coordinate publicity and send out invitations. Caswell County Parks & Recreation Department / Director → Attend meeting

Caswell County Parks & Recreation Department / Director -> Attend meeting

Caswell County Recreation Commission / Chairperson → Attend meeting Caswell County Schools / Administration → Attend meeting

Caswell County Schools / School nurses → Attend meeting
Caswell County Senior Center / Director → Attend meeting

Caswell County Trails Committee / Chairperson → Attend meeting

Caswell Messenger / Editor/Reporter → Publicize meeting. Attend meeting
Cedar Grove Association / Health & Human Services Ministry President → Attend

meeting

Healthy Carolinians / Consultant  $\rightarrow$  Offer guidance to HP Coordinator for the planning of

meeting. Facilitate first meeting.

Town of Yanceyville / Town Manager or Designee → Attend meeting

Step Number:

Description: By

By January 2008, establish Eat Smart Move More subcommittee.

Partner / Position → Role: Caswell County Health Department / Health Educator/HP Coordinator → Serve on

subcommittee

Caswell County Parks & Recreation Department / Director → Serve on subcommittee

Caswell County Trails Committee / Chairperson → Serve on subcommittee

Step Number:

Description: By Ma

By May 2008, submit certification application to Office of Healthy Carolinians.

Partner / Position → Role: Caswell County Health Department / Health Educator/HP Coordinator → Coordinate

application

Caswell County Healthy Carolinians Task Force / Chairperson → Submit application

Step Number: 5

Description:

bn: By June 2008, seek grant funding for partnership coordinator position.

Partner / Position → Role: Caswell County Government / Commissioners → Approve grant application submission

and receipt of all funds awarded

Caswell County Health Department / Health Educator/HP Coordinator → Coordinate grant applications

Caswell County Healthy Carolinians Task Force / Chairperson → Assist in completion of

grant applications

grant applications

Healthy Carolinians / Consultant → Offer technical support as needed.

Step Number:

Description:

By April 2008, ESMM subcommittee will develop an action plan to begin implementation

on July 1, 2008.

Partner / Position → Role: Caswell County Health Department / Health Educator/HP Coordinator → Assist in writing

of action plan

Caswell County Healthy Carolinians Task Force / Chairperson → Present action plan to

HC Task Force

HC ESMM Subcommittee / Members → Develop Action plan

Objective Number: 5

Description: By June 2008, 3 churches will adopt healthy cooking policies for all church-

sponsored events.

Environmental or Policy Objective: YES

Assessment Tools: Community Health Assessment

Partner Input Community Interest

Community inter

Risk Factors: Nutrition

Overweight/Obesity
Faith community

Target Populations: African American

Low Socio/Economic Status

Estimated Population Size: 600

Settings:

State Health Objectives: By December 31, 2012, increase yearly the number of policies, practices and incentives

to promote healthy eating and physical activity wherever North Carolinians live, learn,

work, play and pray.

By December 31, 2012, there will be no increase in the percentage of North Carolina

adults, youth and children who are classified as overweight or obese

By December 31, 2012, 14 percent North Carolina adults, youth and children will

consume five or more servings of fruits and vegetables each day.

By December 31, 2012, the percentage of North Carolina adults, youth and children who typically consume more than one 12-ounce serving of sugar-sweetened beverages per

day will not exceed 50 percent.

Step Number:

Description: By August 2007, contact Cedar Grove Association (Association of Missionary Baptist

Churches) to plan Healthy Cooking training for kitchen committees.

Partner / Position → Role: African-American Churches / Lay Health Ministry Teams → Help plan event

Caswell County Health Department / Health Educator/HP Coordinator → Coordinate

event; secure chef; create invitations and compile invitation list

Cedar Grove Association / Health & Human Services Ministry President → Help plan

event

Step Number:

Description: By September 2007, send invitations to churches.

Partner / Position → Role: Caswell County Health Department / Health Educator/HP Coordinator → Create

invitations and send to churches

Cedar Grove Association / Health & Human Services Ministry President  $\rightarrow$  Approve and

endorse training.

Step Number: 3

Description: By September 2007, invite media to cover training.

releases and PSAs

Caswell Messenger / Editor/Reporter → Publish announcements inviting churches to

attend; cover event

Cedar Grove Association / Health & Human Services Ministry President ightarrow Coordinate

with Media

WYNC Radio Station / DJ → Announce training on radio; cover event.

Step Number: 4

Description: By October 2007, hold Healthy Cooking training for church kitchen committees and Lay

**Health Ministry Teams** 

Partner / Position → Role: African-American Churches / Lay Health Ministry Teams → Attend training with members

of kitchen committee members

Caswell County Health Department / Health Educator/HP Coordinator → Set-up for

training

Cedar Grove Association / Health & Human Services Ministry President → Set-up for

training

Step Number:

Description: By August 2007, work with Lay Health Ministry Teams to identify changes to policies and

practices regarding church-sponsored meals.

Partner / Position → Role: African-American Churches / Lay Health Ministry Teams → Assess current policies and practices for church-sponsored meals; develop plan for revising policies and practices.

practices for church-sponsored meals; develop plan for revising policies and practices.

Caswell County Health Department / Health Educator/HP Coordinator → Offer technical assistance to Lay Health Ministry Teams to assess current policies and practices for

church-sponsored meals.

Step Number:

Description: By December 2007, Lay Health Ministry Teams and Kitchen Committees will work

together to revise practices and policies for church-sponsored meals.

Partner / Position → Role: African-American Churches / Lay Health Ministry Teams → Create plan for healthy

options at church-sponsored meals.

Caswell County Health Department / Health Educator/HP Coordinator → Facilitate

meetings as necessary and offer technical support.

Step Number:

Description: By February 2008, LHMT chairpersons will present plan to administrative body of church

for approval.

Partner / Position → Role: African-American Churches / Lay Health Ministry Teams → Present proposed plan to

administrative body of church for approval.

Caswell County Health Department / Health Educator/HP Coordinator → Offer technical

assistance and support when needed.

Step Number: 8

Description: By March 2008, church approves healthy practices and policies for church-sponsored

meals.

African-American Churches / Lay Health Ministry Teams → Present plan and answer

questions as needed

Step Number:

Description: By March 2008, publicize changes in practice and policies to church body and to church

association.

Partner / Position → Role: African-American Churches / Lay Health Ministry Teams → Announce changes in church

newsletter and/or bulletins. Submit announcements to Association for publication in its

newsletter and to the Caswell Messenger for publication.

Caswell Messenger / Editor/Reporter → Publicize change in churches

Cedar Grove Association / Health & Human Services Ministry President  $\rightarrow$  Run

announcements in newsletter