

"The top three killers in the United States are cardiovascular diseases, cancer, and lung disease. All three of these are worsened by air pollution exposure . . . Bad air takes away peoples' health, their money, their recreation, their options and their loved ones. We cannot quantify those losses." – Doctor Clay Ballentine, M.D., Before the Senate Subcommittee on Health, September 2002

We know that:

- The Asheville area has been known as having a high incident of asthma in children and adults.
- Our area has had a history of low level of physical activity by the general population and a high rate of obesity. According to the CDC Behavioral Risk Factor Surveillance System for 2005 North Carolina's general population is rated at 25% having a Body Mass Index of 30% which equates to a 5'4" person being 30 pounds over weight.
- We know that in 2005, 36% of all students in Buncombe County had a weight concern. This means we could fill 8 of the county schools with over weight children.
- We know that individuals who are over weight have a higher risk of debilitating diseases like Type II diabetes, high blood pressure, sleep apnea
- Western North Carolina residents pay more for health care and health insurance because we have a high rate of uninsured individuals who live here.
- 20- 25% of the morning commute traffic is caused by parents driving their children to school because they view it to be unsafe for them to walk or bicycle to school thus adding more traffic to the morning and evening commute.
- Children need at least 60 minutes of physical activity on most days of the week to develop healthy bodies.

For the past three years the School Health Advisory Council has been authorized to collect Body Mass Index (BMI) information for all students grades K-5 in an effort to determine the extent of overweight in our community and to track the progress being made in addressing this health issue. A child at a healthy weight has a BMI between the 5th and 85th percentile. The 5th percentile is considered underweight and 85th and above percentile is considered at risk for overweight. A percentile at or above 95th percentile is considered overweight. In 2006 the data collected shows that children in grades K-5 in Asheville and Buncombe School systems who were at risk were 1,987 or 16.40% and those overweight totaled 2,335 or 19.20% for a total of 4,322 or 35.6% combined. It is also important to note that as children age their risk and overweight condition has a tendency to increase. In the fall of 2006 while 35% of kindergarten students had a weight concern 42.7% of 5th graders had a weight concern.

In a 2003 study performed by UNC at Chapel Hill of 122,829 students from 499 NC middle schools found that a significant number, 17%, of the students surveyed, (21,184) who were not diagnosed with Asthma were suffering asthma-like symptoms with in that year. Of those surveyed 20% missed ½ day or more of school per month because of wheezing and 32% had sleep disturbances in the last 4 weeks. Students experiencing sleep disturbances are not going to be up to their best when they are in school.

From the Journal of American Medical Association, a 2001 report by The Center for Disease Control during the Olympic Games in Atlanta in 1996. During the games the city just about banned single occupant cars in downtown Atlanta to prevent gridlock. The results found that morning rush hour traffic volumes decreased by more than 23%, this decreased peak ozone by 28% during the Olympics' 17 days. Asthma-related acute care events for kids decreased by 41.5% during the games. This tells us that reducing traffic does improve the air quality.

An EPA report which used data from schools in Florida, found that schools placed in neighborhoods near residential areas with a good street and sidewalk network have more students arriving by bicycle and on foot and that the air quality is measurably better at those locations.

Motor vehicle emissions represent 31% of total carbon dioxide, 81 of carbon monoxide, and 49 % of nitrogen oxides released in the U.S. (The Green Commuter, a publication of the Clean Air Council). A short, four-mile round trip by bicycle keeps about 15 pounds of pollutants out of the air we breathe. (WorldWatch Institute).

According to the Nationwide Personal Transportation Survey, 25% of all trips are made within a mile of the home, 40 % of all trips are within two miles of the home, and 50% of the working population commutes five mile or less to work. More than 82% of trips five miles or less are made by personal motor vehicle.

Most of the pollution created by automobile emissions happens in the first few minutes of operation (60%). This means that short trips are the most polluting of all. According to the chief scientist at Environmental Defense, Michael Oppenheimer, "If you reduce carbon dioxide, you'd begin to get rid of most of the stuff that causes these everyday respiratory problems. You'd start to get rid of the nitrogen oxides, which lead to the generation of smog. You'd start to get rid of sulfur dioxide, which leads not only to acid rain but to the tiny particles that people breathe, and which cause respiratory and cardiovascular problems."

A survey performed by Rodale Press found that many Americans would like to ride a bicycle to work rather than drive with 40% saying that if safe facilities were available they would do so.

According to the Omnibus Household Survey performed October 2000 by the Bureau of Transportation Statistics 41.3 million Americans (20.0%) used a bicycle for transportation. The bicycle was the second most preferred form of transportation after the automobile, ahead of public transportation.

In 2003 the NC Division of Bicycle and Pedestrian Transportation of the NC DOT hired the Institute of Transportation Research of NCSU to conduct an Economic Impact Study of the bicycle improvements made to the Outer Banks of NC. The findings showed that the economic benefits far out weigh the cost to put in the facilities. The income was 9 times the expense and that was figured on a conservative impact of visitors spending about \$50.00 a day. Bicycle tourist are well educated, earn higher incomes, are more active than most and bring more dollars into the area because they found the facilities added to their experience. They ended up staying at least 5 days longer than the average tourist. Those tourist who answered the questionnaire explained that their experience was enhanced because they were able to leave their car parked and enjoyed the surroundings by bicycle instead. The fact that many of the places they wanted to go were connected by the bicycling facilities made the difference.

There are a number of studies which show how property values increase for those pieces of property that were adjacent biking trails. In America Lives 1995, the third most requested feature by home buyers were walking & biking trails. In Seattle, Washington the homes that were closer to trails sold for 6% higher rates than others. (Moore & Ball) In the Boulder

Greenbelt area it was found that homes decreased in property value from \$4.20 - \$10.20 per square foot with each foot away from the trail. (PFK Consulting 1994)

Businesses are looking at relocating to the Asheville area and are looking for life style benefits for their employees. We have many of the outdoor amenities these businesses are looking for, however a few years ago we lost a bid from a company because their employees would not be able to easily commute to work via the bicycle. The above mentioned studies explain why a business may chose not to relocate here.

In the Asheville/Buncombe County area we presently have seven bicycle stores employing from 3 – 20 employees per store. In Western North Carolina there are 15 bicycle stores. The average store brings in an average of \$600,000.00 annually in sales. There are several large endurance bicycle events happening each year which bring participants into the area from all over the Eastern United States. These folks stay for the weekend, eat out and enjoy the Asheville night life. There are four official bicycle club/teams each having 100 – 200 members. There are numerous other small racing teams. At least 4 individuals are licensed coaches who are making a living doing this work and we now have two training organizations who employ individuals to coach and train cyclists. Bicycle touring organizations bring cyclists to the Asheville area for week long tours. Many individuals bicycle tour along the Blue Ridge Parkway stopping in Asheville along their way. Asheville has been written up in many national bicycling magazines as one of the top areas to ride mountain bikes. During the spring and fall the Asheville stores see an increase in out-of-towners coming in to their stores. The maps and tour books are regular sellers. Asheville is known as a destination already for bicyclists. If bicycle facilities connected our treasurers and points of interest we could capitalize on this and increase our economic benefit via bicycling without putting an adverse strain on our already strained roadways.

Bike Plan Overview

There are about 50 miles of changes that are proposed to be made to improve conditions for cyclists our city streets. Some items are inexpensive and can happen quickly by re-striping roads to make room for a paved shoulder, through lane diets (which would narrow lanes), road diets (change a 4 lane to a 3 lane road to accommodate a bike lane), take out on street parking, include a climbing lane on an up hill side of a road. Other items are more costly and would involve purchasing right of way to pave shoulders or include a bike lane.