

# Transportation and Health

*Our transportation system should provide a secure travel environment, protect all users, use all available methods to reduce deaths and injuries from crashes, promote cleaner air and water quality, provide access to essential destinations, encourage healthy physical activity, and have the capability to maintain operations during emergencies.*

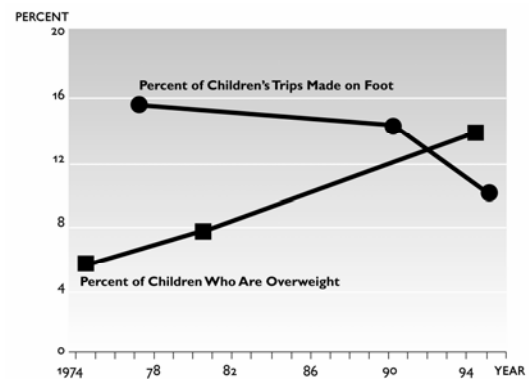
## **– New Transportation Charter**

The transportation system in communities affects health and safety, often engineering out opportunities for physical activity while increasing exposure to hazardous high-speed traffic and automobile pollution. Car-oriented design and lack of transportation choice forces car-dependency, increasing traffic congestion and the amount of sedentary time people spend behind the wheel. The health of children and people of color is disproportionately affected.

Rates of obesity in children are increasing to epidemic levels due to lack of exercise and poor nutrition; however, those who are engaged in healthy outdoors activities such as team sports are at higher risk of developing asthma. In addition, a leading cause of childhood death is from car crashes while bicycling and walking. Yet transportation funding is most often spent making streets faster for cars, rather than safer for children.

## **Increased Dependence on Driving – and Less Walking and Biking – Means More Health Problems**

Considered one of the biggest public health challenges of our time, obesity has been declared an epidemic by the Centers for Disease Control (CDC). It is the nation's fastest rising public health problem, especially in children. One in seven (5 million) children is obese, and the majority of American adults (61%) are overweight or obese. Rates of obesity are highest among African-American, Latino, and low-income households.



The CDC has pointed to our built environment and the transportation infrastructure as one of the causes of this epidemic. About 40% of U.S. adults were sedentary in 1997, engaging in no leisure time physical activities of any kind, and the number of trips people take on foot has dropped by 42% in the last 20 years.

Inactivity and obesity are contributing to rising rates of many chronic diseases, including high blood pressure, coronary heart disease, osteoporosis, cancer, and stroke. Diabetes is obesity's twin epidemic, with rates increased 50% over the past decade. Type II diabetes, once called adult-onset diabetes, is becoming increasingly common in children.

The personal cost of obesity is reduced quality of life and physical disabilities for millions of Americans. Health care costs are rising along with rates of diseases caused by physical inactivity and poor nutrition, currently estimated at \$617 billion per year.

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## ***Transportation, Air Pollution, and Asthma***

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About one in twenty Americans, or nearly 15 million people, suffer from asthma. Asthma ranks among the most common chronic conditions in the United States, causing over 1.5 million emergency department visits, about 500,000 hospitalizations, and over 5,500 deaths per year. The prevalence of asthma has been increasing since the early 1980s for all age, sex, and racial groups.

Over 113 million Americans live in cities with polluted air. It has long been known that poor air quality triggers asthma attacks, but recent research shows that poor air quality may actually be causing asthma. Findings released by the University of Southern California in February, 2002 indicated that healthy children with prolonged exposure to smog (ozone, nitrogen dioxide, and small particulates) developed new cases of asthma. The most active children, those playing team sports outside, were three times more likely to develop asthma than their counterparts in areas with cleaner air. Motor vehicles are responsible for one-third to one-half of the smog in most metro areas.

Asthma is the number one reason children visit the emergency room and miss school. A study in Atlanta during the 1996 Olympics documented a significant drop in children's asthma emissions when single-occupancy vehicle use decreased due to the Games.

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## ***Safety***

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About 41,000 Americans are killed every year on our nation's roadways, a casualty rate that has not changed significantly for a decade. Traffic crashes are the leading cause of death among people from age one to 34. About 13 percent of traffic fatalities are pedestrians or cyclists, even though less than 6 percent of all trips are made on foot or by bicycle. Less than one percent of federal transportation funds are used for either facilities or safety for these two travel modes.

Few safety efforts have focused on ensuring that streets are safe and convenient for all road users. The overriding goal of traffic engineering is to improve roadway "level of service", so that more vehicles may travel at higher speeds, with pedestrian safety as a secondary issue. Engineering solutions make roadways wider, straighter, and flanked by wide clear-zones. This has the effect of enabling higher travel speeds, and signaling to drivers that it is safe to drive faster. Safety programs tend to be aimed at pedestrians and bicyclists, who often get blamed when victims in car crashes.

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## ***Increased Walking and Biking can Improve Health***

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Creating safer places to walk and bicycle could have a profound impact on health in the United States. More than one-quarter of all trips are still one mile or less; At least 123 million car trips made each day in the United States were short enough to have been made on foot. The CDC estimates that if all physically inactive Americans became active, we would save \$77 billion in annual medical costs. In addition, walking and bicycling produce no toxic emissions.