

The positive consequences of bicycling and walking as healthy modes of transportation, or as purely recreational activities, span across many aspects of our lives. They can be expressed in terms of the health of environment (and resulting health of all living things), as well as the health of individuals who are more physically active. A transportation system that is conducive to bicycling and walking can reap many benefits in terms of reduced traffic congestion and improved quality of life. Economic rewards both to the individual and to society are also realized through reduced health care costs and reduced dependency on auto ownership (and the resulting insurance and maintenance costs). There are also other economic benefits of bicycling and walking that are more difficult to measure, such as the increased economic vitality of communities that have emphasized bicycle and pedestrian mobility.

Health Benefits:

The health benefits of regular physical activity are far-reaching: reduced risk of coronary heart disease, stroke, and other chronic diseases; lower health care costs; and improved quality of life for people of all ages. Regular exercise provides a myriad of health benefits for senior adults including a stronger heart, a positive mental outlook and an increased chance of remaining indefinitely independent – a benefit that will become increasingly important as our population ages in the coming years.

Physical activity need not be unduly strenuous for an individual to reap significant health benefits. Even small increases in light to moderate activity, equivalent to walking for about 30 minutes a day, will produce measurable benefits among those who are least active.



Health Facts:

- 60% of Americans lead completely sedentary lifestyles, and 40% are clinically overweight (1998 report of the American Medical Association)
- Research conducted in 1999 by the Centers for Disease Control found that "obesity and overweight are linked to the nation's number one killer--heart disease--as well as diabetes and other chronic conditions." The report also states that one reason for Americans' sedentary lifestyle is that "walking and cycling have been replaced by automobile travel for all but the shortest distances." (October 27, 1999 issue of the JAMA)

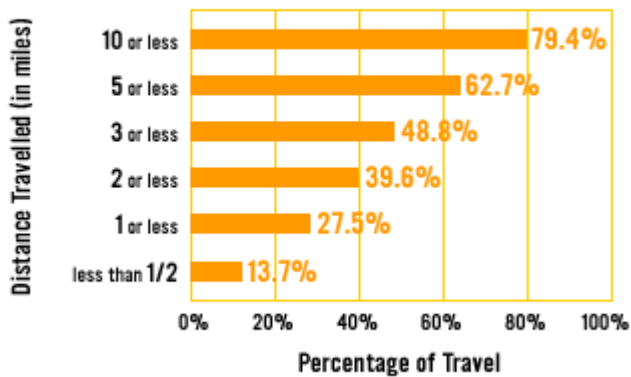
Transportation Benefits:

Many of the trips that Americans make every day are short enough to be accomplished on a bicycle, on foot or via wheelchair. The 1995 National Personal Transportation Survey (NPTS) found that approximately 40% of all trips are less than 2 miles in length – which represents a 10-minute bike ride or a 30-minute walk. In fact, a 1995 Rodale Press survey found that Americans *want* the opportunity to walk or bike instead of drive: 40% of U.S. adults say they would commute by bike if safe facilities were available.

Bicycling and walking can help to reduce roadway congestion. Many streets and highways carry more traffic than they were designed to handle, resulting in gridlock, wasted time and energy, pollution, and driver frustration. Bicycling and walking require less space per traveler than automobiles. Roadway improvements to accommodate pedestrians and bicycles can also enhance safety for motorists. For example, adding paved shoulders on two-lane roads has been shown to reduce the frequency of run-off-road, head-on, and sideswipe motor vehicle crashes.



Daily Trip Distances



Travel Facts

- One in ten U.S. households do not own an automobile (1995 NPTS)
- About one-third of all Americans cannot or do not drive -- they may be too young, too old, or unable to afford a car. (1990 U.S. Census)
- There are 9 million bike trips and 56 million walking trips in the U.S. everyday – an amount that exceeds daily transit trips (1995 NPTS)
- About 40% of all trips are shorter than 2 miles - a 10-minute bike ride or a 30-minute walk (1995 NPTS)
- 40% of U.S. adults say they would commute by bike if safe facilities were available (1995 Rodale Press Poll)

Environmental Benefits:

Motor vehicles create a substantial amount of air pollution. In fact, transportation is responsible for nearly 80 percent of



carbon monoxide and 50 percent of nitrogen oxide emissions in the U.S. Not surprisingly, many metropolitan areas do not meet the air quality standards specified in the 1990 Clean Air Act Amendments. Although individual cars are much cleaner today than they were in earlier years, if total traffic continues to grow, overall air quality will deteriorate. Moreover, cars and trucks burn millions of barrels of oil, a non-renewable energy source, every day.

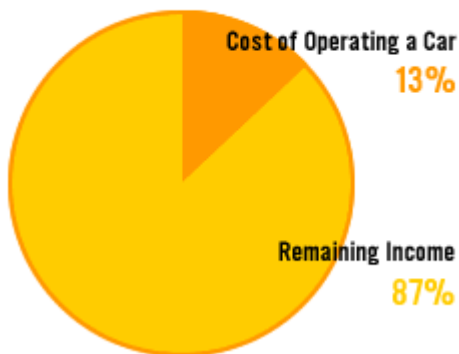
Pollution Facts:

- Motor vehicle emissions represent 31% of total carbon dioxide, 81% of carbon monoxide, and 49% of nitrogen oxides released in the US (The Green Commuter, A Publication of the Clean Air Council)
- 60% of the pollution created by automobile emissions happens in the first few minutes of operation, before pollution control devices can work effectively. Since "cold starts" create high levels of emissions, shorter car trips are more polluting on a per-mile basis than longer trips.
- A short, four-mile round trip by bicycle keeps about 15 pounds of pollutants out of the air we breathe. (WorldWatch Institute)
- Air pollution contributes to the deaths of 60,000 people nationwide. In urban areas with poor air quality, asthma is becoming a more significant health concern. (Harvard University School of Public Health).

Economic Benefits:

Bicycling and walking are affordable forms of transportation. When safe facilities are provided for pedestrians and bicyclists, more people are able to be productive, active members of society. Car ownership is expensive, and consumes a major portion of many Americans' income.

Portion of a Typical U.S. Household's Income Spent on Owning and Operating an Automobile



Money Facts:

- The cost of operating a car for one year is approximately \$5,170 (AAA Mid-Atlantic)
- The cost of operating a bicycle for a year is only \$120 (League of American Bicyclists).
- The average family has to work for more than 6 weeks to pay a year's car expenses, compared to less than one day needed to pay for a year's bicycle expenses. (based on US Census, 1998 median family income figures)
- Walking is **free!**

Quality of Life Benefits:

safe and friendly places to live and visit.

The recreation benefits of bicycling and walking are clear - according to the *Report of the President's Commission on Americans Outdoors* (1990), nearly 90 percent of Americans age 12 and older go outdoors for recreation. This research found that 60 million Americans are bicyclists and 100 million walk for pleasure. Improved sidewalks, trails and bikeways make an evening stroll or bike ride possible and provide public areas where neighbors can get to know each other.