

Non-Technical Summary
Report Title: Economic & Health Benefits of Cycling in Iowa

Submitted to: Iowa Bicycle Coalition

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Bicycling is a significant industry in the United States. Bicycle specific retailers represent a \$5.9 billion industry in the United States (IBIS World, 2011). According to the Travel Industry Association of America, more than 27 million travelers have taken biking vacations in the past five years.

Research suggests tangible positive outcomes of bicycling. Bicycling has the potential to generate economic, social, and personal benefits and contribute to enhanced community identity. Importantly, bicycling leads to significant expenditures creating positive economic impacts in communities and in this case the State of Iowa. From a personal perspective and a health care perspective, cycling can reduce the prevalence of diseases related to obesity and sedentary lifestyles.

In 2010, a first-of-its-kind study sponsored by the Bicycle Federation of Wisconsin estimated recreational cycling generates \$1.5 billion in economic activity a year in Wisconsin. The figures, which include dollars produced by the state's bicycle manufacturing, sales and services industry, suggest cycling has as much impact on the state's economy as deer hunting. The Wisconsin study also quantified the health benefits of bicycling from reduced air pollution, and increased personal fitness. The Iowa Department of Transportation (retrieved 2010, <http://www.iowadot.gov/iowabikes/trails/CHPT02.HTML>).

Not only has biking grown to be one of the most popular outdoor vacations in America, Iowa attracts bikers due to the extensive trail system in the state, and high visibility events such as

RAGBRAI (Register Guard Annual Great Bicycle Ride Across Iowa). Total direct spending (dollars paid for services by travel parties for the event) while in Iowa for RAGBRAI was estimated at \$16,908,642 (8802 travel parties paying an average of \$1,921) (www.uni.edu/step).

According to the Iowa Bicycle Coalition there are over 1,600 miles of trails. The Iowa State Comprehensive Outdoor Recreation Plan (SCORP, 2006) notes that 7% (152,000) of Iowans mountain bike and 41% use trails for fitness (biking/walking). In 2011, Iowa ranked sixth in the nation in terms of bicycle friendliness (League of American Bicyclists, 2011). Among the criteria of these rankings, Iowa ranks highly in bicycle education and encouragement, as well as enforcement.

According to the Iowa Department of Public Health, 29.3% of Iowans do not meet the recommended levels of physical activity (2010). In addition, only 43% of Iowans participate in the recommended levels of physical activity (IDPH, 2004). Along with low levels of physical activity, the 2009 Center for Disease Control (CDC) Behavioral Risk Factor Surveillance System (BRFSS) data estimated 67.2% of Iowan adults were overweight or obese (28.5% - overweight; 38.7% - obese). With low levels of physical activity and higher rates of obesity, Iowans are at a great risk of developing chronic diseases that will not only impact their physical health, but also influence the cost of health care as the prevalence of non-communicable disease (NCD) continues to grow (WHO, 2010).

In Iowa, the cost of health care associated with obesity-related diseases is estimated at \$783 million (Finkelstein, Fiebelkorn, & Want, 2004). The estimated costs do not include expenses related to absenteeism and low work productivity (IDPH, 2009).

This study identifies the economic and health impacts of bicycling in Iowa. Impacts are estimated based on spending by individual cyclists, bicycle specific retail sales, economic activity generated by bicycle organizations, and health cost savings in the State of Iowa. The study is based on primary data collected from individual cyclists, bicycle specific retail operators and bicycle organizations. Health impacts are based on selected primary and secondary data detailed in the methodology. This study presents:

- A profile of the commuter and recreational cyclists in Iowa (party and trip characteristics, spending, and demographic profiles);
- A profile of bicycle retail establishments in Iowa;
- A profile of bicycle organizations in Iowa, and
- A profile of the health benefits and healthy savings from cycling in Iowa.

The data for the study was collected using a questionnaire based survey that was distributed to bicycle riders and organizations in Iowa during the fall of 2011. The U.S. Census and Iowa Department of Transportation statistics were utilized to estimate the number of bicycle riders. Health statistics were obtained from the Centers for Disease Control and the Iowa Department of Public Health.

ECONOMIC AND HEALTH IMPACTS OF COMMUTERS. There are an estimated 24,921 bicycle commuters in Iowa, who ride to work from 1-6 times a week. Commuter respondents to the survey (n=1050, 1.43 travel party size) spend on average \$1,160 per year for bicycle related activities. The IMPLAN models estimate the economic impact of commuter cyclist spending to generate \$51,965,317 in direct and indirect impacts to the State of Iowa. The bicycle commuter population (assuming they are physical fit, and ride the amount of time/distance as reported in surveys) is estimated to save Iowa \$13,266,020 in health care costs.

ECONOMIC AND HEALTH IMPACTS OF RECREATIONAL RIDERS There are an estimated 149,916 recreational riders on Iowa's trails, who use the trails from 1-6 times a week. Sixty three percent (63%) of the recreational survey respondents (n=998, 1.47 travel party size) reported taking overnight bicycle trips to other Iowa communities. Recreation riders spend on average \$1,208 per travel party. The IMPLAN models estimate the economic impact of recreational cyclist spending to generate \$364,864,202 in direct and indirect impacts to the State of Iowa. Recreational bicycle riders (assuming they are physical fit and ride the amount of time/distance as reported in the surveys) are estimated to save the State of Iowa \$73,942,511 in health care costs.

CHARACTERISTICS OF BICYCLE RETAIL ESTABLISHMENTS. There are 61 known bicycle retail businesses in Iowa (not including large chains). Surveys were sent to 38 establishments (those with emails) and 52% responded. There were 18,300 bicycles sold (20% road bikes, 11% children, 21% mountain bikes, and 48% leisure bikes) last year. There was \$8,063,834 sales in bikes, \$1,921,500 sales in clothing, \$4,209,000 sales in accessories, and \$3,658,231 in repair work. The U.S. Bureau of Labor Statistics estimates the payroll in bicycle retail businesses in Iowa to be from \$3,384,615 to \$4,309,625 in employment impact. Throughout the state of Iowa, using the median revenues and expenses estimated by the survey, a total of \$18,157,565 is the estimated total expenses for the sixty-one bicycle specific retail establishments in Iowa. Using the same method, a total of \$8,665,568 was estimated for expenses in the establishments who responded to the survey.

CHARACTERISTICS OF BICYCLE ORGANIZATIONS AND CLUBS. In Iowa there are approximately 800 bicycle organizations formed specifically for RAGBRAI. The majority of these organizations are not active throughout the year. However 15 do remain active and organize regional bicycle events. The average size of the membership of these organizations is 106 members. Nearly 90% of the respondents to the survey reported taking part in these events. The average budget for the organizations is \$21,587 per year, coming from corporations (19%); sponsorships (37%), and donations (44%). On average, there are 12 volunteers per organization (total 124) who spend about 21 hours a month working for the organization. Each organization holds at least 1 event a year and up to 7 per year. The economic value of these volunteers is estimated to be \$339,040.