

THE ECONOMIC IMPACT OF BICYCLING IN COLORADO

Summary of Findings

Total economic benefit from bicycling in Colorado is over \$1 billion annually

Manufacturing

Total annual revenue \$763 million

513 FTEs

- Annual payroll \$18.1 million
- Average salary \$35,326

Retail

Total annual sales and service revenue \$200 million

- \$120 million on new bicycles
- \$55 million on bicycling accessories
- \$25 million on repair and maintenance

700 FTEs

- Annual payroll \$16 million

Bike Shops

Total annual sales and service revenue \$80 million

Total annual bicycle rental revenue \$1 million

448 FTEs

- Annual payroll \$11 million
- Average salary \$25,000



Tourism

Bicycling at Colorado Ski Areas

Total revenue by cycling tourists at CO resorts is between \$141 million and \$193 million

- Number of tourists engaged in bicycling 699,000 (just over 50% of all summer visitors)
- 70% of these bicycling tourists were from out of state

103 FTEs employed to promote bicycling and provide bicycling goods and services

- Annual payroll \$3.9 million

7,500 FTEs in summer only positions

- Annual payroll \$40 million

Potential loss of revenue

- Of the 699,000 tourists engaged in bicycling 276,400 indicated they would have altered their vacation destination if bicycling were not available.
- Total revenue from these bicyclists is \$56 million to \$76 million

Nearly 10% of Colorado households report taking a bicycle vacation in CO in the past 12 months

Total annual revenue \$48 million

755 FTEs

- Annual payroll \$10 million

Other Revenue Generators

Bicycle Tours \$640,000

Racing \$2 million

Charity Rides \$3.4 million



THE ECONOMIC IMPACT OF BICYCLING IN COLORADO

Introduction

This report provides statistical information regarding the economic impact of bicycling in Colorado, and documents bicycling behaviors and attitudes of residents of Colorado. This information can be used to inform policymakers of the importance of bicycling both economically and as a mode of transportation and means of recreation for Colorado residents. Analyses of these data also provide insight into the factors that prevent Coloradans from bicycling, and improvements that can be made to facilitate bicycling as a means of transportation.

Beginning in the Fall 1998, the Colorado Department of Transportation (CDOT) contracted with the Center for Research in Economic and Social Policy (CRESP) at the University of Colorado – Denver, to conduct phone and mail surveys of bicycle manufacturers, retail bicycle shops, and ski resort operators in Colorado. This information is used to summarize the impact of bicycling on the Colorado economy in the form of production, sales, jobs, income and tax revenue. In Spring 1999, CDOT and CRESP sent nearly 40,000 surveys to randomly selected Colorado households (see Appendix I of the technical report for details regarding sample selection and weighting procedures). The nearly 6,000 completed surveys provide a wide range of information regarding bicycling behavior, attitudes and preferences. (The survey instrument is included as Appendix II of the technical report.)

THE ECONOMIC IMPACT OF BICYCLING IN COLORADO

By conducting surveys of bicycle manufacturers, retail shops, ski resorts and other bicycle-related organizations and Colorado households, we have assessed the impact of bicycling in Colorado in the form of expenditures, production, employment, income and tax revenues. We highlight the economic impact of bicycle manufacturing, retail sales and tourism in this summary. There is a



brief discussion of other affects of bicycling on the Colorado economy. Additional detail is available in the technical report.

Manufacturing

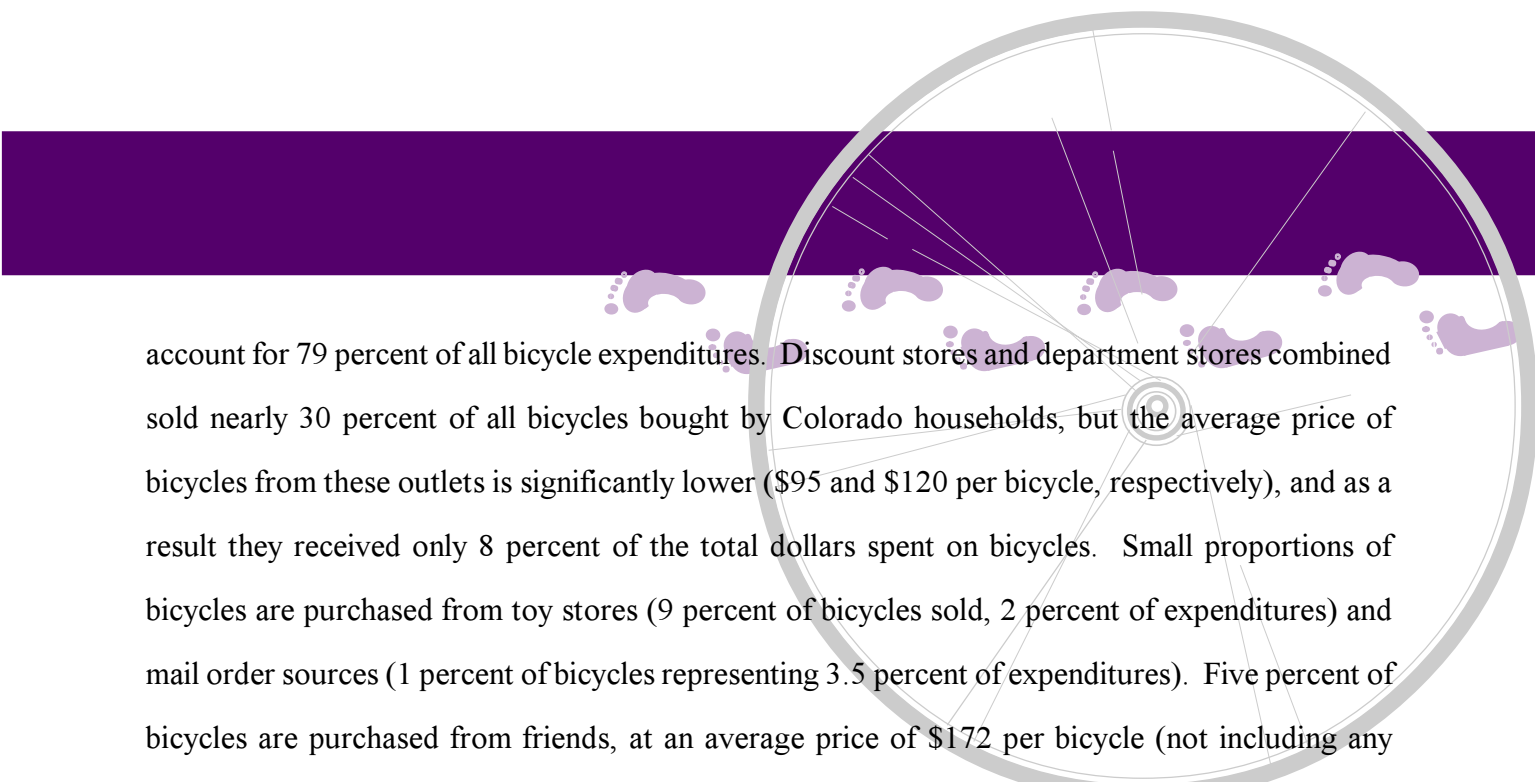
In 1998, nearly thirty companies in Colorado were engaged in the production of bicycles and/or bicycle-related products such as bicycle components, accessories and clothing. These companies reported annual revenues from the sale of bicycle related products of \$762.7 million in 1998. The production and sales of these products adds 513 full-time equivalent (FTE) jobs annually with a payroll of \$18.1 million.

The image of Colorado as a cycling community prompted many companies to locate in the state. Over 40 percent indicated that their company had located in Colorado because of the characteristics of state residents. Specifically, firms indicated that the "proximity to bicycle customers," the "great cycling community," and the "athletic lifestyle" of Colorado residents was the primary reason for their location decision.

Purchases of bicycles and bicycle-related products

Results from our household survey indicate that annual expenditures on bicycles and bicycle-related products by Coloradans totaled just over \$200 million dollars. Of this total, \$120 million was spent purchasing bicycles, nearly \$25 million was spent on repairs and maintenance, and the remaining \$55 million was spent on bicycle accessories.

Coloradans are most likely to purchase a bicycle from sporting goods and bicycle specialty shops. Nearly half of all bicycles are purchased from these stores. The average price of a bicycle purchased at a sporting goods or bicycle shop is \$619, higher than those purchased from most other sources. Therefore, bicycles purchased from sporting goods and bicycle specialty shops



account for 79 percent of all bicycle expenditures. Discount stores and department stores combined sold nearly 30 percent of all bicycles bought by Colorado households, but the average price of bicycles from these outlets is significantly lower (\$95 and \$120 per bicycle, respectively), and as a result they received only 8 percent of the total dollars spent on bicycles. Small proportions of bicycles are purchased from toy stores (9 percent of bicycles sold, 2 percent of expenditures) and mail order sources (1 percent of bicycles representing 3.5 percent of expenditures). Five percent of bicycles are purchased from friends, at an average price of \$172 per bicycle (not including any bicycles received from a friend at no cost). The remaining 4 percent of bicycles were purchased from other sources including more informal purchases such as from classified advertisements, garage sales, and second-hand stores.

These expenditures contribute to the Colorado economy by creating jobs and income. The \$200 million of bicycle-related retail and product sales generates 700 FTE jobs with an annual payroll of \$16 million.

Table 1. Distribution of Bicycle Purchases by Type of Retail Outlet.

Type of Retail Outlet	Fraction of Bicycles Sold	Fraction of Bicycle Expenditures	Average Bicycle Price
General Sporting Good Store/ Bicycle Specialty Shop	49.8%	79.0%	\$619
Discount Store	16.6%	4.0%	\$95
Department Store	13.2%	4.1%	\$120
Toy Store	9.4%	1.9%	\$79
Mail Order	1.4%	3.5%	\$987
Friend	5.3%	2.3%	\$172
Other	4.4%	5.1%	\$448



Bicycle Specialty Shops

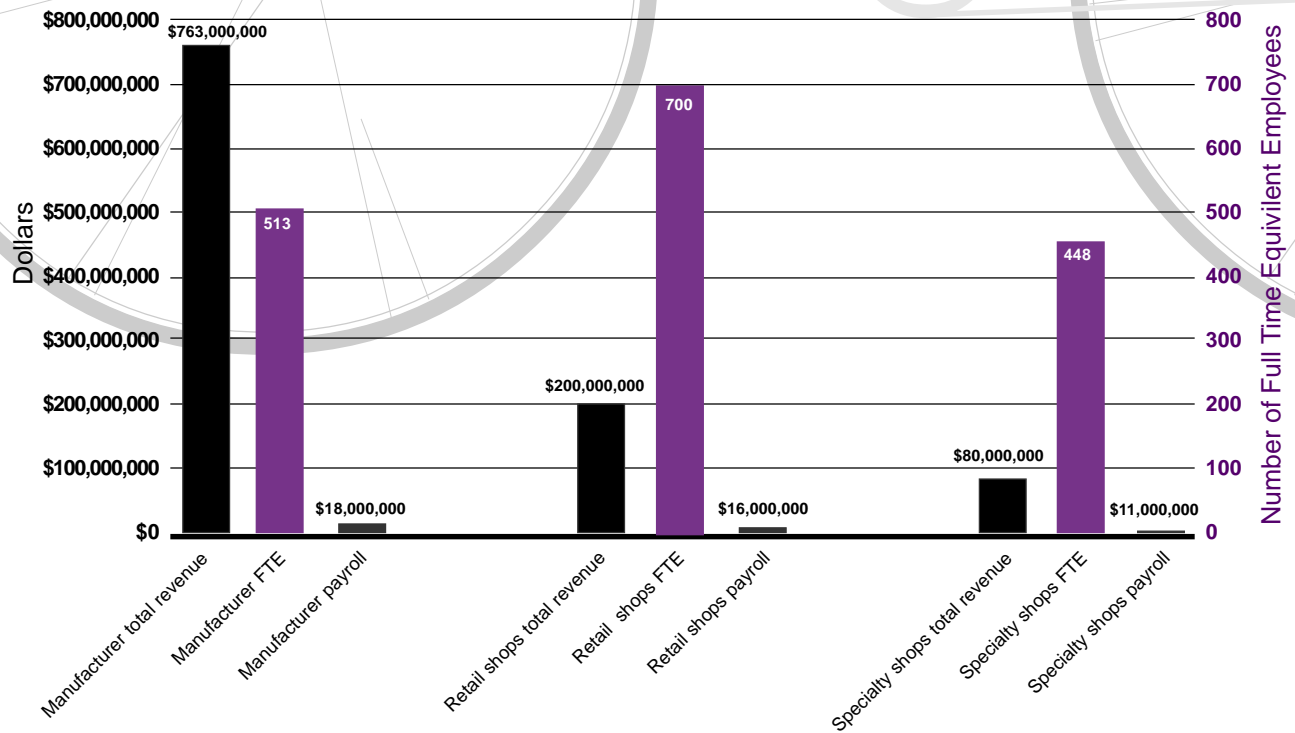
There are over 150 bicycle specialty shops located in Colorado. There are also a few large mail-order business that sell bicycles. We surveyed all of the mail-order businesses, and 40 percent of the retail shops in the state. Using these data we estimate the annual sales, employment and types of bicycle retail activity in the state of Colorado.

Of the \$200 million in total expenditures on bicycles and bicycle-related products reported by Colorado households, \$80 million in sales is reported by bicycle specialty shops and mail-order outlets. (It should be noted that some of the mail-order bicycles were purchased by customers outside of Colorado). These shops report selling approximately 50,000 bicycles in 1998. One million dollars in revenue was generated from bicycle rentals at these shops.

Bicycle specialty shops and mail-order bicycle companies report total annual employment of 448 FTE workers in Colorado. The total payroll for these workers is \$11 million.

Figure 1 summarizes the annual revenue, and employment and payroll from the manufacturing and retail sales of bicycles and bicycle-related products in Colorado. Bicycle manufacturers in Colorado report \$763 million in revenue and employ 513 FTE at a payroll of \$18 million. Total retail sales in the state are \$200 million annually, supporting the employment of 700 FTE earning \$16 million. Of this total, bicycle specialty shops account for \$80 million in revenue, 448 FTE and \$11 million in payroll. \$200 million in retail bicycle sales is slightly higher than the total retail sales of motorcycles in Colorado, and about 20% less than total retail sales of recreational vehicles in the state.

Figure 1
Economic Impact of Bicycle Manufacturing and Retail Sales

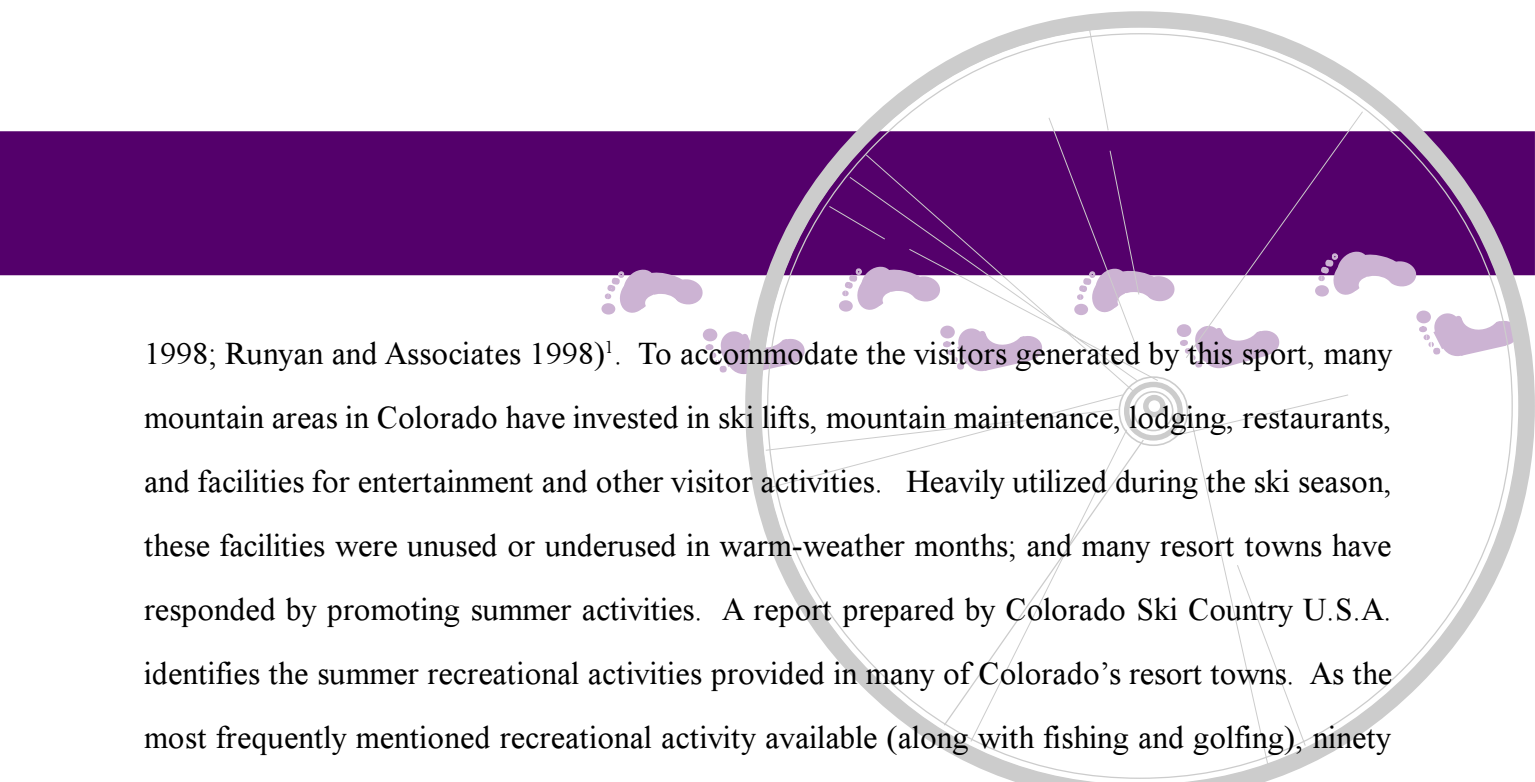


Bicycle-related Tourism

Tourism is an important part of the Colorado economy and outdoor activities play an important role in choosing Colorado as a tourist destination. We conducted a survey of Colorado ski area resort companies and Chambers of Commerce to assess the impact of bicycling tourists on summer revenues at the ski areas. We also obtained information from our household survey regarding bicycle-related vacations taking in and out of state.

Summer Bicycling in the Ski Areas

The ski areas have become some of the most lucrative tourist attractions in the state, accounting for over one-third of overnight tourist spending in Colorado (Longwoods International,



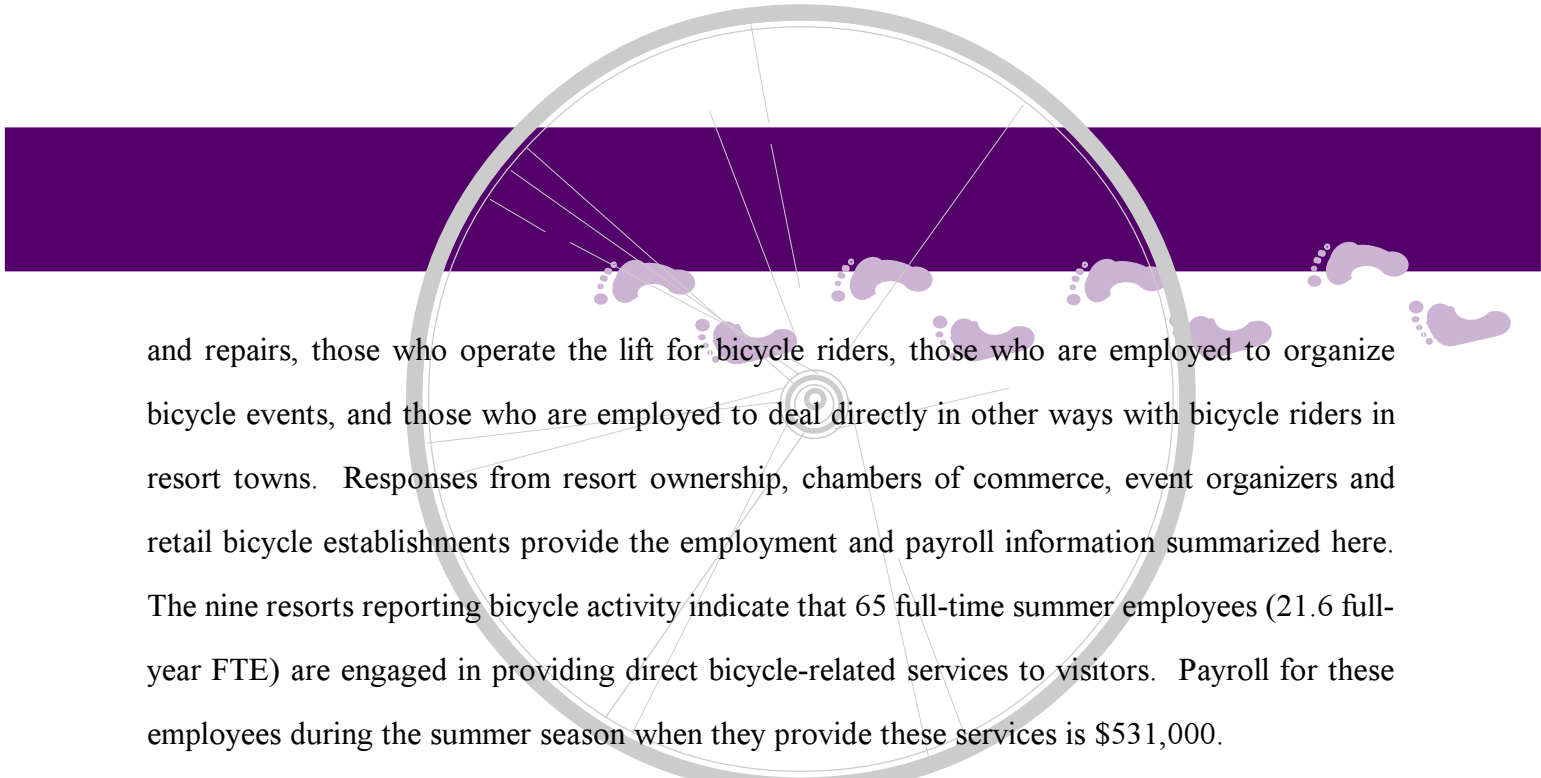
1998; Runyan and Associates 1998)¹. To accommodate the visitors generated by this sport, many mountain areas in Colorado have invested in ski lifts, mountain maintenance, lodging, restaurants, and facilities for entertainment and other visitor activities. Heavily utilized during the ski season, these facilities were unused or underused in warm-weather months; and many resort towns have responded by promoting summer activities. A report prepared by Colorado Ski Country U.S.A. identifies the summer recreational activities provided in many of Colorado's resort towns. As the most frequently mentioned recreational activity available (along with fishing and golfing), ninety percent of the resorts surveyed by Colorado Ski Country U.S.A. indicated that visitors could engage in mountain biking in the summer. However, retail facilities are not always available to support these activities. The same report indicates that there are no bicycle rental shops in 20 percent of the resorts and only slightly over half of the resorts allow bicycles on their lifts.

Our survey of ski resort operators and towns indicated that 699,000 visitors traveled to Colorado mountain resorts in 1998 and participated in bicycling activities. Approximately 70 percent of these bicyclists came to resort towns from out-of-state. Tourists who engaged in bicycling during their vacation at a Colorado resort spent between \$141 and \$193 million dollars. Of the 699,000 who bicycled during their stay, 276,400 were attracted primarily by the availability of bicycling. Our estimates of the total vacation expenditures by these bicyclists range from nearly \$56 million dollars to just over \$76 million dollars. These estimates reflect direct expenditures only on bicycling.

These expenditures on bicycling create jobs for those who provide these goods and services. Direct bicycle-related employment consists of those individuals who provide bicycle rental, sales

¹ Longwoods International, 1998. Travel and Tourism in Colorado: A Report on the 1997 Travel Year. Prepared for the Colorado Tourism Board and the Colorado Travel and Tourism Authority.

Dean Runyan and Associates, 1998. Colorado Travel Impacts: 1997. Prepared for the Colorado Tourism Board and the Colorado Travel and Tourism Authority.



and repairs, those who operate the lift for bicycle riders, those who are employed to organize bicycle events, and those who are employed to deal directly in other ways with bicycle riders in resort towns. Responses from resort ownership, chambers of commerce, event organizers and retail bicycle establishments provide the employment and payroll information summarized here. The nine resorts reporting bicycle activity indicate that 65 full-time summer employees (21.6 full-year FTE) are engaged in providing direct bicycle-related services to visitors. Payroll for these employees during the summer season when they provide these services is \$531,000.

Retail bicycle shops located in the resorts also provide direct bicycle-related employment. We surveyed 31 shops in the resort areas (both specialty shops and locations of chain sporting goods stores) that account for over 75 percent of the resort bicycle shops. We estimate that retail shops in resort towns in Colorado employ 82 FTE at a payroll of \$3 million.

Visitor Expenditures and Employment in the Colorado Ski Areas

Tourists engaged in bicycling create employment not just because there are workers needed to provide bicycle-related services, but also because these tourists require other goods and services as well. This is a measure of the indirect bicycle related employment. In the section above, total spending by tourists engaged in bicycling was estimated to fall between \$141 million and \$193 million each summer.

The midpoint of the lower- and upper-bound expenditure estimates is \$167 million. These expenditures are estimated to support the employment of 2,488 year-long (FTE) or 7,465 summer-only individuals earning a total of approximately \$39.4 million.



Bicycle Advertising by Ski Resorts

Most of the resorts have recognized the importance of encouraging summer visitors and have large advertising budgets to attract these tourists. Total expenditures on advertising that specifically promoted bicycling were \$316,000 for the 1998 summer season. Average spending on the promotion of bicycling per resort is slightly less than \$40,000 per summer season. This includes one resort that reported no expenditures in 1998 but indicated that they were developing a campaign and budget for future years.

Bicycle-Related Vacation Spending by Colorado Residents

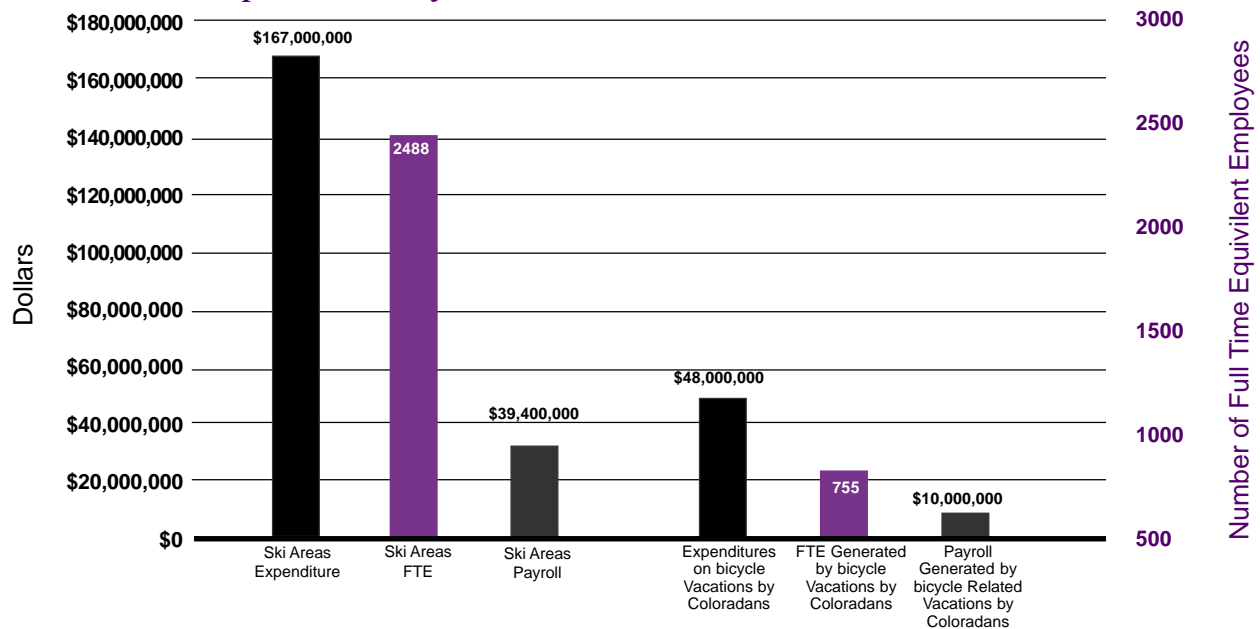
To capture bicycle-related vacation spending in areas other than ski resorts, we surveyed Colorado households to gather information on any vacations they may take (both in-state and outside of Colorado) that are related to bicycling. Nearly 10 percent of Colorado households indicated that they had taken a bicycle-related vacation within Colorado in the past 12 months. Among those households who did, the typical household spent \$360 per vacation. Spending on bicycle-related vacations within Colorado totaled \$48 million dollars over the past 12 months. (It should be noted that these expenditures include those that Coloradoans make on bicycle-related vacations at the ski resorts).

These vacation expenditures also generate jobs for Colorado employees. Specifically, \$48 million of vacation spending creates 755 FTE jobs for workers who supply goods and services for vacationers. These 755 employees earn approximately \$10 million in income as a result of these expenditures.

Though not providing a direct impact on the Colorado economy, our survey also provides information on bicycle related vacations that Colorado residents take outside the state. Just under 5 percent of Colorado households indicated that they had taken an out of state bicycle trip and on average spent \$950 per trip.

Summer vacationers in Colorado often bike in the high country. As shown in figure 2, nearly \$167 million is spent by vacationers who bicycle in Colorado ski areas. This spending creates over \$39 million in income for 2488 FTE employees, both in the retail bicycle or bicycle service industries and in industries that provide general services to tourists. Nearly 70 percent of the visitors to these mountain towns are from out of state. Total vacation spending by Coloradans is \$48 million per year. This supports 755 FTE at a payroll of \$10 million. There is some bicycle-related tourism that is not included in our calculations. Specifically, out-of-state tourists who bicycle, but do not visit Colorado ski areas are not part of our vacation estimates.

Figure 2
Economic Impact of Bicycle Related Vacations



Other Sources of Economic Impact

The presence of bicycling in Colorado is evident in other ways. Both in-state residents and out-of-state tourists participate in a variety of off-road and road and track bicycling events as well as charity rides in Colorado. Companies that book bicycle tours throughout the state report \$640,000 in annual revenue from 3,400 tour participants. The majority of these riders are reported to come from out-of-state. Bicyclists spend additional revenue on off road and road and track races. Riders typically belong to a racing club and pay membership fees and must also pay race registration fees. Association officials estimate approximately 10% of race riders come from outside of Colorado. These participants are estimated to spend \$1.6 million in additional spending at race locations. Coloradans also are active participants in bicycle rides that raise money for charities. Approximately 22,000 riders rode in charity events in 1999, paying \$1.2 million in race fees. These races generated nearly \$2.2 million in pledges and donations for the sponsoring charity.

Figure 3
Expenditures on Various Bicycle Activities

