



**MAY 2023**

# **The Economic Impact of Colorado's Sports, Recreation, & Tourism Sector**

**Authors:** Cole Anderson, Erik Gamm

## ABOUT THE AUTHORS



**Cole Anderson** is a Research Analyst with Common Sense Institute. He is an alum of the University of Denver where he graduated with a double-major in Public Policy and Economics. His work covers a range of issues including homelessness, inflation, housing, and education.



**Erik Gamm** is a Research Analyst for Common Sense Institute. His experience covers analyzing workforce, health care, and education issues in the state of Colorado.

## ABOUT COMMON SENSE INSTITUTE

Common Sense Institute (CSI) is a non-partisan research organization dedicated to the protection and promotion of Colorado's economy. CSI is at the forefront of important discussions concerning the future of free enterprise and aims to have an impact on the issues that matter most to Coloradans. CSI's mission is to examine the fiscal impacts of policies, initiatives, and proposed laws so that Coloradans are educated and informed on issues impacting their lives. CSI employs rigorous research techniques and dynamic modeling to evaluate the potential impact of these measures on the economy and individual opportunity.

## TEAMS & FELLOWS STATEMENT

CSI is committed to independent, in-depth research that examines the impacts of policies, initiatives, and proposed laws so that Coloradans are educated and informed on issues impacting their lives. CSI's commitment to institutional independence is rooted in the individual independence of our researchers, economists, and fellows. At the core of CSI's mission is a belief in the power of the free enterprise system. Our work explores ideas that protect and promote jobs and the economy, and the CSI team and fellows take part in this pursuit with academic freedom. Our team's work is informed by data-driven research and evidence. The views and opinions of fellows do not reflect the institutional views of CSI. CSI operates independently of any political party and does not take positions.

# TABLE OF CONTENTS

<b>About the Authors</b> .....	<b>1</b>
<b>About Common Sense Institute</b> .....	<b>1</b>
<b>Teams &amp; Fellows Statement</b> .....	<b>1</b>
<b>Introduction</b> .....	<b>3</b>
<b>Key Findings</b> .....	<b>3</b>
<b>About the Sports, Recreation, &amp; Tourism Sector</b> .....	<b>4</b>
<b>The Economic Impact Model</b> .....	<b>5</b>
<b>The Economic Impacts of Colorado's Sports, Recreation, &amp; Tourism Sector</b> .....	<b>6</b>

## Introduction

Colorado boasts a wide array of natural beauty and tourist attractions which attracts millions of visitors to the state every year. Pristine nature, world-class skiing, and captivating sports teams all contribute to the robust inflow of tourists that Colorado welcomes. The revenue generated by the state's diverse attractions supports a substantial share of Colorado's economy and plays an indispensable role in sustaining its economic prosperity and highlighting its invaluable ecological and societal assets. Because each depends upon the others to contribute to Colorado's high quality of life, the sports, recreation, and tourism sectors are interconnected—to account for the impact of tourism, the impacts of recreation and sports must also be included.

The cumulative sector of sports, recreation, and tourism in Colorado adds billions of dollars and supports hundreds of thousands of jobs, even in the absence of major events. This brief will give an overview of the impact that the whole sports, recreation, and tourism sector has on Colorado's economy today and its prospects for future growth.

## Key Findings

- **\$60.1 billion, or 13.7%:** Contribution of the sports, recreation, and tourism sector to Colorado's Gross Domestic Product in 2022.
- **\$34.8 billion:** Total personal income supported by Colorado's sports, recreation, & tourism sector in 2022.
- **622,968:** Number of jobs supported by Colorado's sports, recreation, and tourism sector amounting to nearly one of every 6 jobs.
- **7.17%:** Projected average annual growth rate of the sports, recreation, & tourism sector over the next decade—22% faster than the state's overall economy.

## About the Sports, Recreation, & Tourism Sector

Colorado has long been a favored tourist destination with a wide array of excellent attractions such as skiing, natural parks, rivers/fishing, hunting, and a number of successful professional sports teams and sporting events. A few notable sporting attractions in Colorado include the Winter X Games which has been held in Aspen since 2002, the U.S Olympic Committee headquarters in Colorado Springs, and several skiing and snowboarding events held annually. In addition, Denver is North America's least populous city with 5 major professional sports teams (the Avalanche, Broncos, Rockies, Nuggets, and Rapids), demonstrating metro Denver's love of sports. In 2021, the state welcomed an estimated 84.2 million domestic visitors<sup>i</sup> who supported many sectors of Colorado's economy, like lodging, retail, food and beverage, retail, and air travel.<sup>ii</sup>

Colorado's Office of Economic Development and International Trade (OEDIT), which tracks tourism statistics, states that someone is classified as an overnight visitor when his/her trip, for business or pleasure, results in one or more nights away from home. Conversely, day trip tourists are defined as people who travel 50+ miles for business or pleasure outside their communities or normal routines. This means that some portion of the 84.2 million annual visitors are Colorado citizens and/or repeat travelers. On an average day, almost 231,000 people, including Colorado citizens and repeat travelers, begin either single - or multi-day trips in Colorado. This is more than twice the population of Pueblo.

CSI has chosen to account for these sectors cumulatively due to the proximity of their economic outputs. For example, the Winter X Games held in Aspen is a world-renowned professional sporting event based around extreme winter sports. The event attracts both tourists from around the globe as well as recreational athletes and demonstrates the need for these three sectors to be viewed as interconnected within the larger umbrella of leisure. **Figure 1** shows the average costs of attending four major sporting events in Denver for a family of 4. Families of 4 looking to watch the Broncos,<sup>iii</sup> Avalanche,<sup>iv</sup> or Nuggets<sup>v</sup> will need to set aside over \$300 between tickets, food, drinks, and parking; these totals are near the low ends within their respective leagues. The Rockies will host a family of 4 for an estimated \$160, about average in MLB, although the Rockies boast the cheapest beer in baseball.<sup>vi</sup>

### How Much Does It Cost a Family of Four to Attend Professional Sporting Events in Denver?

	Tickets	Beers	Sodas	Hot dogs	Parking	Total	League rank	Hours of work required to afford total cost*
Rockies	\$102	\$8	\$10	\$23	\$17	<b>\$160</b>	<b>16</b>	<b>4.6</b>
Broncos	\$465	\$16	\$10	\$24	\$20	<b>\$535</b>	<b>30</b>	<b>15.5</b>
Avalanche	\$247	\$14	\$9	\$28	\$20	<b>\$318</b>	<b>26</b>	<b>9.2</b>
Nuggets	\$240	\$29	\$10	\$26	\$20	<b>\$325</b>	<b>22</b>	<b>9.4</b>

\* One earner at Colorado's average hourly wage

Figure 1

CSI estimates that the sports, recreation, and tourism sector directly employed 318,640 workers in 2022 and indirectly supports another 304,327 jobs. The sector is relatively larger in Colorado than the national average. To account for the widespread and varied impact CSI includes a calculated portion of specific sectors. CSI includes portions of industries such as scenic transportation, retail spending, performing arts, spectator sports, air travel, food and drinking places, recreation, gambling, and accommodations among others in our definition of the sports, recreation, and tourism sector because it encompasses such a wide array of economic activity. Though this sector's output fell due to the COVID-19 pandemic in 2020, many industries that make up the sports, recreation, and tourism sector were among the 10 fastest growing industries in 2022.

## The Economic Impact Model

CSI estimated the economic impact of the sports, recreation, and tourism sector by using the Tax-PI model published by Regional Economic Models, Inc. (REMI). This is a dynamic program that estimates the impact of changes in regional economies using representative national and state-level macroeconomic data in an input-output model. As a baseline, the REMI model assumes the Colorado economy employs 3,878,155 people and has an annual Gross Domestic Product of \$438 billion.

Within the North American Industry Classification System (NAICS), which is used by both the Bureau of Labor Statistics and the REMI model, are numerous industry categories composed wholly or partly of activities that CSI believes are within the scope of "sports, recreation, and tourism." To model the impact of that sector, we identified the following industries and made assumptions about the shares of each that contribute to sports, recreation, and tourism in Colorado (these shares are listed in parentheses next to each item):

- Scenic and sightseeing transportation (100%)
- Performing arts & spectator sports (100%)
- Amusement, gambling, and recreation industries (100%)
- Travel arrangement and reservation services (100%)
- Museums, parks, and historical sights (100%)
- Accommodation (85.51%)
- Hunting and Trapping (83.33%)
- Other schools and instruction (52.98%)
- Transit and ground passenger transportation (45.24%)
- Air Transportation (40.45%)
- Food service and drinking places (27.41%)
- Recreational goods, vehicle rentals (22.43%)
- Gas Stations (17.51%)
- Real estate (9.39%)
- Administrative and support services (3.37%)
- Rail Transportation (3%)
- Retail trade (\$3,494,502,900)\*

\*The retail trade parameter is represented by a direct monetary figure rather than a share of the sector because, whereas CSI was able to source an estimate of total retail spending by visitors, that estimate does not specify the degrees to which those visitors impact any of the many subsectors of retail trade.

*CSI estimates that the sports, recreation, and tourism sector of the Colorado economy directly employs 318,640 people and contributes \$40.3 billion of output.*

By reducing the sizes of these industries by the corresponding values in the REMI model, we can estimate the impact (direct, indirect, and induced) of the sports, recreation, and tourism sector across the state holding all other characteristics of the Colorado economy fixed. These parameters are designed to include every industry that is directly influenced by sports, recreation, and tourism, but exclude the portions of those industries that are generated by other activities. CSI used a variety of existing research and economic data to construct this study's assumptions of those values. The model inputs, which are enumerated in the list above, represent CSI's estimates of the direct impact of sports, recreation, and tourism upon Colorado's economy. These describe the value that the sector produces for the state strictly in terms of transactions between sellers and buyers of its goods and services (including labor)—for example, the accommodation industry's employment, wages, and sales of hotel rooms. These direct impacts produce indirect impacts, induced impacts, and dynamic impacts. Indirect impacts reflect relationships within the supply chains of industries that are impacted directly—for example, the output of suppliers that sell textile products is dependent upon the hotel industry's demand for bedding and towels. Induced impacts are the broadest economic impacts of activity within a given sector due to the wealth that it generates—for example, hotel workers earn wages and salaries that they spend on food, clothing, entertainment, and other products. Finally, dynamic impacts are geographic and compositional qualities that exist in response to economic conditions—for example, the closing of a large factory drives workers to find new jobs elsewhere, move their families away, and spend less money locally.

## **The Economic Impacts of Colorado's Sports, Recreation, & Tourism Sector**

CSI estimates that the sports, recreation, and tourism sector of the Colorado economy directly employs 318,640 people and contributes \$40.3 billion of output. Because the sector adds to the economic capacity of the state, it also supports hundreds of thousands of jobs and billions of dollars of output across unrelated industries. The goods and services demanded by companies in the sector, like food, fuel, bedding, towels, and many other intermediate inputs, account for \$10.5 billion of output produced by some 51,000 employees. Additionally, wages and benefits paid to workers in the sports, recreation, and tourism sector, through consumer spending and investment, induce a total of \$48.8 billion of output and 253,000 jobs in other industries.

## Economic Output and Employment Contributions of Colorado's Sports, Recreation, and Tourism Sector

	Output (\$ billion)	Share of total CO output	Employment	Share of total CO employment
Direct	\$40.3	5.5%	318,640	8.2%
Indirect	\$10.5	1.4%	51,008	
Induced	\$26.1	3.5%	116,418	3%
Investment	\$22.7	3.1%	136,901	3.5%
<b>Total</b>	<b>\$99.5</b>	<b>13.5%</b>	<b>622,968</b>	<b>16.1%</b>

*Figure 2*

Including all direct, indirect, and other dynamic effects, the sports, recreation, and tourism sector contributes just over \$60 billion of GDP to the Colorado economy (13.7% of all economic activity). It supports 623,000 jobs and \$29.5 billion of disposable personal income and is projected to grow at a faster rate than the state economy as a whole over the next decade.

The sector's aggregate employment impact is roughly 16% of jobs in Colorado, but this varies significantly by industry. A full accounting of jobs and economic output supported by the sports, recreation, and tourism sector across each affected industry is included in an interactive table on the CSI website.



## REFERENCES

- i. <https://oedit.colorado.gov/press-release/colorados-tourism-economy-saw-growth-in-2021-according-to-annual-research-reports>
- ii. <https://oedit.colorado.gov/sites/coedit/files/documents/2021%20Colorado%20Travel%20USA%20Report.pdf>
- iii. <https://digg.com/sports/link/how-much-nfl-game-attending-ticket-costs-visualized-compared-2022-4bdNy4JcM>
- iv. <https://espnsfl.com/2023/05/03/fla-live-arena-is-the-cheapest-in-the-league-to-watch-an-nhl-game>
- v. <https://digg.com/sports/link/average-cost-nba-game-2022-23-season-ublh8c68UK>
- vi. <https://kdvr.com/news/data/how-much-will-a-colorado-rockies-game-cost-a-family-of-4/#:~:text=A%20Rockies%20game%20will%20cost%20%24140%20for%20a,means%20Colorado%20baseball%20fans%20pay%20almost%20dead-on%20average>