



Economic Significance of Downhill Skiing and Snowboarding in Wisconsin 2021/22 Ski Season



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INTRODUCTION

This report provides a brief summary of selected economic and operational measures of the Wisconsin ski resort industry, prepared by RRC Associates for Skiing Wisconsin. This is the latest of a series of economic impact reports conducted by RRC Associates on behalf of Skiing Wisconsin, updating the most recent previous report covering the 2019/20 season.

This report primarily draws on ski resort operator survey data and ski visitor survey data collected by the National Ski Areas Association (NSAA), along with selected other economic data sources. In addition, where data specific to Wisconsin is not available, RRC Associates has utilized documented economic factors for the Midwest or the U.S. generally, as described in the report.

This analysis focuses on the economic activity associated with downhill skier/snowboarder expenditures during skiing/snowboarding trips. Expenditures associated with non-trip-related spending on skiing/snowboarding, such as purchases of equipment not occurring during a ski trip, are excluded. Additionally, expenditures associated with snowsports participation other than downhill skiing and snowboarding (e.g. expenditures associated with cross-country skiing and snowshoeing trips) are excluded.

BACKGROUND FACTS ABOUT WISCONSIN SKI AREAS

- **Number of resorts:** A total of 33 ski areas operated in Wisconsin in the 2021/22 season, per NSAA records (Table 1 below). Wisconsin has the third-greatest number of operating ski areas of any state, behind New York (52 areas) and Michigan (39 areas).
- **Number of skier visits:** Wisconsin ski areas hosted an estimated 2.03 million skier visits in the 2021/22 winter season, or an average of approximately 61,000 visits per ski area. A skier visit is

defined as one person visiting a ski area for all or any part of a day or night for the purpose of skiing, snowboarding, or other lift-served downhill riding (but excluding snowtubing).

Wisconsin ranked 11th among states nationally in the number of resort skier visits in 2021/22, and ranked second in the Midwest (behind Michigan).

Table 1. Wisconsin Ski Areas Operating in 2021/22

SKI AREA	LOCATION	SKI AREA	LOCATION
Alpine Valley Resort	East Troy	Mont Du Lac Ski Area	Superior
Ausblick Ski Area	Sussex	Mt. Ashwabay	Bayfield
Blackhawk Ski Club	Middleton	Mt. La Crosse	La Crosse
Bruce Mound Sports Area	Neillsville	Nordic Mountain Ski Area	Wautoma
Camp 10 Ski Area	Rhineland	Nutt Ski Hill	Plymouth
Camp Forest	Westboro	Paul Bunyan Ski Hill	Lakewood
Cascade Mountain Ski & Snowboard Area	Portage	Powers Bluff	Arpin
Christie Mountain Ski Area	Bruce	Standing Rock	Stevens Point
Christmas Mountain Village	Wisconsin Dells	Sunburst Ski Area	Kewaskum
Devil's Head Resort & Convention Center	Merrimac	The Rock Snowpark	Franklin
Fox Hill Ski Area & Club	Milwaukee	Trollhaugen Ski Area	Dresser
Grand Geneva Resort	Lake Geneva	Tyrol Basin Ski & Snowboard Area	Mt. Horeb
Granite Peak at Rib Mountain State Park	Wausau	Whitecap Mountain	Montreal
Heiliger Huegel Ski Club	North Lake	Whitetail Ridge Ski Hill	Fort McCoy
Kettlebowl Ski Area	Antigo	Wilmot Mountain, Inc.	Wilmot
Keyes Peak Ski Hill	Florence	Winter Park	Kewaunee
Little Switzerland	Slinger		

Source: NSAA.

CHARACTERISTICS OF VISITORS TO WISCONSIN SKI AREAS

- **Day/overnight visitor mix:** Based on data from 20 Wisconsin resorts participating in NSAA's Kottke National End of Season Survey and/or National Demographic Survey in 2021/22 or in recent past seasons, approximately 20 percent of skier visits at Wisconsin ski resorts are estimated to be attributable to overnight visitors (persons spending one or more nights away from home during their trip), while 80 percent are attributable to day visitors.

The day/overnight visitor mix is important from an economic impact standpoint, since overnight visitors often spend more on their trips than day visitors (e.g. additional expenditures on lodging, meals, entertainment, etc.), and thus tend to have a larger economic impact.

- **Geographic origin:** Based on data from seven resorts participating in NSAA's National Demographic skier/snowboarder survey in 2021/22 or in recent past seasons, most visitors to Wisconsin ski areas live out of state (54 percent), including 36 percent from Illinois, 9 percent from Minnesota, and 8 percent from other states/countries. The remaining 46 percent are residents of Wisconsin. *(Because this data is derived from visitor surveys completed at only seven resorts, these results should be used with caution.)*

Geographic origin is also important from an economic impact standpoint. Out-of-state visitation provides a particularly important economic boost, since it brings new dollars into the state, much like other “base” industries. However, the ability of Wisconsin ski areas to serve in-state residents is also important in keeping associated economic activity within the state. If Wisconsin did not have ski areas, many Wisconsin skiers would likely travel to other states to ski and snowboard, and Wisconsin would consequently lose the benefit of the associated economic activity.

- **Day/visitor mix by geographic origin:** The day/overnight mix varies by skier origin. Based on data from six resorts, most Wisconsin visitors to Wisconsin ski resorts are day visitors (78 percent). Additionally, most Minnesota visitors to Wisconsin ski areas are also day visitors (67 percent). By contrast, a comparatively low share of Illinois visitors to Wisconsin ski areas are day visitors (30 percent), while most are overnight visitors (70 percent). Based on the available data sample, Illinois clearly stands out as an important overnight visitor market, accounting for approximately 48 percent of overnight visits to Wisconsin ski areas.

ECONOMIC IMPACT METHODOLOGY

The economic activity associated with Wisconsin ski areas can be segmented into two major categories:¹

1. **Direct economic activity** associated with skier spending: i.e. economic activity derived from skier purchases during their trips, e.g. lift tickets, lessons, rentals, retail sales, dining, lodging, gasoline, etc. (It should be noted that this excludes expenditures made in support of skiing but not during a ski trip, e.g. purchases of snowsports equipment and clothing when not on ski trips.)
2. **Indirect and induced economic activity** associated with ski trips: i.e. the “secondary” or “multiplier” effects attributable to the respending of dollars generated by skier spending, e.g. purchases by businesses that directly serve skiers from their suppliers (indirect effects), and the respending of income earned by employees working for businesses that directly or indirectly serve skiers (induced effects).

Estimates of economic activity are provided in the sections below, for visitor expenditures/business sales, industry output, employment, and income. For output, employment and income, estimates are generated for both direct and secondary economic effects.

The estimates of economic activity described below utilize consumer expenditure and resort operator revenue factors collected via NSAA research. Additionally, to derive output, employment, income, and secondary effects, generalized ratios and multipliers were used, based on published norms in the economic impact literature.²

¹ A third category of economic impact encompasses capital investments made by ski resorts (e.g. ski lifts, on-mountain facilities and support, real estate, etc.) and other businesses which directly serve skiers (e.g. hotels and restaurants which serve skiers). However, these capital expenditure impacts are not estimated here due to insufficient data.

² Stynes, D.J. (2010), as quoted in Crompton, J.L. (2010), *Measuring the Economic Impact of Park and Recreation Services*, National Recreation and Park Association, Ashburn, VA, p. 37. Where appropriate, RRC has adjusted selected published ratios for inflation, as described in the report text.

SALES AND ECONOMIC OUTPUT ATTRIBUTABLE TO SKIING

- Expenditures by skiers:** Table 2 below summarizes the estimated expenditures by downhill skiers and snowboarders at Wisconsin ski resorts in the 2021/22 season. In total, skiers and snowboarders were estimated to have spent approximately \$247 million in the 2021/22 season, or an average of approximately \$122 per skier visit. Overnight visitors staying in commercial accommodations are estimated to have made significantly greater expenditures on a per-skier-visit basis (\$199) than day visitors (\$104) and visitors staying overnight with friends/family or in their own vacation homes (\$157), based on NSAA Demographic survey research of skiers/snowboarders interviewed at four Wisconsin resorts.

Table 2
Estimated Expenditures by Skiers/Snowboarders at Wisconsin Ski Resorts, 2021/22

Visitor Segment	Percent of Skier Visits	Number of Skier Visits	Spending per Skier Visit	Aggregate Spending
Day visitors	79.9%	1,621,803	\$104	\$168,948,802
Overnight - friends/family or second home	3.0%	61,055	\$157	\$9,574,843
Overnight - paid accommodations	17.1%	345,992	\$199	\$68,874,758
Total	100.0%	2,028,850	\$122	\$247,398,403

Sources: Visitor mix at Wisconsin ski resorts is estimated at 79.9 percent day and 20.1 percent overnight, based on NSAA Demographic Survey data and NSAA Kottke Survey data for 17 Wisconsin resorts. Of the 20.1 percent overnight visitors, an estimated 3.0 percent stayed overnight with friends/family or in vacation homes, while 17.1 percent stayed in paid lodging, based on NSAA Demographic survey research at four Wisconsin resorts. Average spending per skier visit is based on NSAA Demographic surveys at four resorts in Wisconsin in recent past years, inflation-adjusted to 2021/22 based on the Midwest CPI-U (US BLS).

- Share of expenditures accruing to resort operators and other businesses:** Table 3 to follow illustrates the approximate share of skier expenditures in Wisconsin that are estimated to be captured by Wisconsin ski resort operators. Midwestern ski resorts are estimated to have garnered an average of \$84.46 in winter-season revenue per skier visit, based on the findings of the 2020/21 NSAA Economic Analysis of U.S. Ski Areas, inflation-adjusted to 2021/22. Assuming that Wisconsin ski resorts share the same financial characteristics as Midwestern ski resorts as a whole, Wisconsin ski area operators are estimated to have grossed approximately \$171 million in revenue in winter 2021/22, or approximately 69 percent of total skier expenditures. The remaining 31 percent of skier expenditures, or approximately \$76 million, are estimated to have accrued to other businesses, illustrating that an appreciable share of the economic benefits of ski trips are captured by the wider business community.

Table 3
Share of Skier Expenditures Captured by Wisconsin Ski Resort Operators and Other Businesses, 2021/22

	Revenue per Skier Visit	Aggregate Revenue	Share of Revenue
Estimated resort operator revenues ¹	\$84.46	\$171,365,521	69%
Estimated revenues accruing to other businesses	\$37.48	\$76,032,882	31%
Total skier expenditures	\$121.94	\$247,398,403	100%

¹Average resort operator revenue per skier visit is for Midwestern ski resorts, based on results of the NSAA 2020/21 Economic Analysis of United States Ski Areas, inflation-adjusted to 2021/22 based on the Midwest Urban Consumer Price Index.

- **Direct, secondary and total output effects:** Table 4 below illustrates the estimated direct, secondary, and total output effects attributable to skiing in Wisconsin. Direct output, estimated at approximately \$198 million, is calculated by multiplying skier expenditures by 0.8 (a generalized factor to adjust for retailer margins). This step is necessary to omit the cost of goods sold which are made outside of Wisconsin, and thus appropriately reflect the economic output captured in Wisconsin.

Secondary (“multiplier”) economic effects, as defined earlier, are roughly estimated at approximately \$139 million. Secondary effects are calculated by multiplying direct output by 0.7, a factor which is also based on national averages in the recreation industry. Total output attributable to skiing is estimated as the sum of direct and secondary effects, or approximately \$336 million.

Table 4
Direct, Secondary, and Total Output Effects Attributable to Skiing in Wisconsin, 2021/22

	Metric	Aggregate Effect
	Total skier expenditures	\$247,398,403
*	Direct output ratio (margin adjustment)	0.8
=	Direct output effect	\$197,918,722
*	Secondary output ratio (statewide)	0.7
=	Secondary output effect (statewide)	\$138,543,106
	Total output (direct and secondary)	\$336,461,828

Note: Direct output ratio (0.8) and secondary output ratio (0.7) are approximate averages for visitor spending effects at the statewide level of geography, as cited as by Stynes, D.J. (2010), as quoted in Crompton, J.L. (2010), *Measuring the Economic Impact of Park and Recreation Services*, National Recreation and Park Association, Ashburn, VA, p. 37. Actual ratios for Wisconsin ski areas may differ from these averages.

EMPLOYMENT AND INCOME IMPACTS OF SKIING

As illustrated in Table 5 below, approximately 5,000 year-round equivalent jobs in Wisconsin are estimated to be directly or indirectly attributable to skier expenditures. This calculation utilizes a generalized ratio of 14.9 jobs per \$1 million in output, based on rough national norms (see note to Table 5 below for explanation).

Additionally, skiing in Wisconsin is estimated to directly or indirectly generate approximately \$118 million in income. This calculation uses a generalized income to sales ratio of 35 percent, again based on approximate national norms.

Table 5
Jobs and Income Attributable to Skier Expenditures in Wisconsin, 2021/22

	Direct effect	Secondary effect	Total effect
Sales (output)	\$197,918,722	\$138,543,106	\$336,461,828
Jobs / \$1M in sales (approx.)	14.90	14.90	14.90
Total Jobs	2,948	2,064	5,012
Sales (output)	\$197,918,722	\$138,543,106	\$336,461,828
Income:sales ratio (approx.)	35%	35%	35%
Total Income	\$69,271,553	\$48,490,087	\$117,761,640

Note: Jobs:sales ratio and income:sales ratio are approximate national averages for rough estimation purposes, as cited as by Stynes, D.J. (2010), as quoted in Crompton, J.L. (2010), *Measuring the Economic Impact of Park and Recreation Services*, National Recreation and Park Association, Ashburn, VA, p. 37. The published jobs:sales ratio in that report is 20 jobs per \$1 million in sales; to adjust this for inflation to 2022, RRC has divided 20 by 1.343 (i.e. the 34.3 percent increase in the national Employment Cost Index for all US civilian workers between first quarters 2010 – 2022, per US BLS). Actual ratios for Wisconsin ski areas may differ from these averages.

ABOUT RRC ASSOCIATES

RRC Associates, a 16-person firm founded in 1983, specializes in providing market research and consulting services to the ski industry, with experience conducting economic and demographic research for ski industry organizations such as the following:

- NSAA (including annual economic, demographic, and resort operations studies)
- Canadian Ski Council
- Pacific Northwest Ski Areas Association
- Canada West Ski Areas Association
- Quebec Ski Areas Association
- Colorado Ski Country USA
- Ski California
- Ski Utah
- Ski Areas of New York
- Pennsylvania Ski Areas Association
- Ski New Hampshire
- Minnesota Ski Areas Association
- Ski Idaho

- North Carolina Ski Areas Association
- Ski Lake Tahoe

RRC also works extensively with individual ski areas and ski resort companies, destination marketing organizations in ski resort communities, and other ski industry participants.