The Path to Growth – **Facing the Challenges**
NSAA’s mission for its membership has always been to foster and develop growth. We have done so through numerous advocacy efforts that have been significantly supported by extensive multi-year research efforts. This research has been continuously used to identify trends that represent both threats and strengths for the resort industry. The quality of this research is unparalleled in the sports world and has depended heavily on the engagement and support of NSAA’s membership. In many ways, you are to thank for the insights and progress we have achieved.

As we move toward a future of new leadership and opportunities, we at NSAA feel it is valuable to note and analyze key issues the industry needs to embrace and address over the next several years. In this document, we will examine, in systematic fashion, several challenges and opportunities snowsports face. Many of these issues have evolved significantly over the past 20 years in ways very different from the past.

Today, demographic change is no longer so much about the departure of the Baby Boomers as the rise of the Millennial and Gen Z generations. Climate change isn’t a debate anymore but a reality we have been living with for quite some time. Revenue management and new product development (always a complex topic) have been enormously complicated by the degree of reliance we have developed on pre-sold products. Consolidation within the industry has dramatically changed the competitive landscape. Access to capital has represented a huge challenge for many resorts. A decline in participant numbers, paired with reaching peak capacity during the most desirable visitation windows, has restricted our ability to grow. Last but not least, a flat trend in the proportion of first timers taking a lesson has been historically hard to reverse.

Each of these issues represents a challenge and opportunity. We hope this analysis of these timely, relevant factors serves as a tool to help your individual operation to thrive. In a broader sense, we also hope that each individual resort’s efforts raise the bar for the entire industry, in ways that boost participation numbers and visitation in all regions of the country.

Michael Berry
NSAA President
Product Offerings and Yield Management

**ISSUE**

Lift ticket and season pass prices, along with the pricing for multi-day products like 4-paks, are one of the most critical elements of the overall health of the snowsports industry. Pricing and product mix are not only important considerations relative to yield, but also in appealing to skiers and riders at every skill level to ensure sustainable growth of the sport. It is important for the industry to offer a product mix that is perceived by the consumer as both compelling and reasonably priced and also profitable to the industry as a whole. Striking a balance between retaining an already active customer base, while attracting newcomers to the sport, is of utmost importance.

**KEY CHALLENGES**

- 20 to 21M visits on passes over last 7 seasons
- 2.0 million unit pass sales in 15/16 (most ever)
- Average number of visits per passholder: 10.5

Season passes. Season passes account for a growing share of all skier visits – 40 percent in 2015/16 alone, up from 30 percent in 2005/06. The growth of season passes has been a notable success for the industry, bolstering against uncertainty around snow conditions, engaging more avid participants, and increasing satisfaction among pass holders. Results from the NSAA National Demographic Study show that season pass holders are consistently more likely to be satisfied with overall value for price paid and the overall skiing/riding experience, are more likely to recommend the resort, and are more likely to return the following season.

While these are all positive outcomes of growing season pass sales, there are risks in a season-pass-centric approach as well. Increasing season pass visits have been a contributor to declining yield ratios over time. Furthermore, research points to a plateauing of season pass unit sales over time, meaning that the season pass market may be approaching saturation point.

Increasing lead ticket prices, but declining yields. In the past decade, average ticket prices have increased dramatically, from $59 ten years ago to $105 in the 2015/16 season, contributing to the perception that the sport is
expensive. As well, average ticket yield percentage has gradually but consistently declined from 54.0 percent in 2005/06 to 47.5 percent in 2015/16, meaning that ski area operators are realizing a smaller share of the lift ticket price in actual revenue per visit. "As the proportion of season pass visits goes up, overall yield comes down," notes Evan Reece of Liftopia. To counter this decline in ticket yield, Reece says that ski areas “increase their lead ticket rates. This makes skiing less accessible to newcomers, and means that the lowest yields tend to be on peak demand days.”

<table>
<thead>
<tr>
<th>Changes in the Past Decade</th>
<th>2005/06</th>
<th>2015/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits on paid tickets</td>
<td>61%</td>
<td>51%</td>
</tr>
<tr>
<td>Visits on season passes</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Average cost of a lift ticket</td>
<td>$59</td>
<td>$105</td>
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**Appealing to first-timers and beginners.** Given that first-timers and beginners are most likely to be on single-day tickets, we risk alienating these newcomers with a high cost to entry. Indeed, research shows that average daily expenditures are higher among first-time and beginner skiers and riders than they are for intermediate and advanced/expert participants. Single-day tickets are also associated with lower net promoter scores, likelihood of return, perceptions of value, and overall satisfaction with the experience. Clearly, there’s more work to do in enhancing the experience for beginners and those on single-day lift tickets.

**FIGURE 1: Ticket Price, Ticket Yield, Yield Percentage**

**FIGURE 2: Average Daily Expenditure by Ability (excluding lodging & transportation)**

5 Seasons Average (2011/12-2015/16)
Effectively targeting intermediate skiers and riders.

Intermediate skiers and riders are as likely to be on a traditional multi-day ticket as a pass. This means they are at a product tipping point. While the multi-day ticket means a higher yield from these customers, a season pass might lead to longer term engagement and satisfaction. What product is best for this segment?

**AREAS OF OPPORTUNITY**

What is the right balance between window ticket prices, season pass prices, and discounted ticket prices? How does advance purchase play into the mix? And what impact does pricing have on crowding during peak times? Arguably, these factors are the most important ones to get right to balance the customer experience and total ticket revenue. There is no one-size-fits all approach, but we recommend making sure there are a variety of products to meet the needs of beginners and experts alike.
experts alike. Here are some ideas for engaging beginner and intermediate skiers and riders:

**First Timers/Beginners.** Although most likely to be on a single day ticket, beginners and first-timers are generally most likely to be attracted to half-day/hourly products compared to intermediate and advanced/expert ability levels. In a climate where half-day tickets have been disappearing in the product offering menus of many resorts (and hourly tickets scarcely existing) it may be advantageous to re-consider these products in light of changing market conditions. Additionally, such a product might further serve as means to manage crowding and traffic flows by shifting demand to non-peak times of any particular day. For example, an hourly (or two-hour ticket) that is available off-peak (say from 11:00 a.m. to 1:00 p.m.) would ease crowding in the peak early morning timeframe while also easing traffic in on-mountain lodges and food and beverage operations during the peak noon-hour rush for lunch, thereby creating improved value perception on many fronts and overall guest experience.

Creative ways to ease beginners and less frequent customers into ticket products that are more affordable should also be considered. Not every skier is going to commit to a season pass, or even a 4-pak, ahead of time. What products are available for the last minute procrastinator? Or the person who skis or snowboards two to four days per season? These infrequent participants might represent the best opportunity for growth, if they aren’t scared away by the ticket price.

**Intermediate/Destination Visitors.** Although the intermediate destination visitor is likely on the cusp or tipping point of making a season pass product a financially worthwhile purchase, perhaps a new product offering that might include other benefits (like discounts in other revenue depts., parking privileges, etc.) would push these candidates over the top for a pass purchase. Resort operators likely covet and prefer the higher yielding multi-day ticket customer; however, in the face of increasing competition and proliferation of pass products across the market, converting these customers into dedicated, loyal pass owners at your resort would seem to represent opportunity for preserving, maintaining, and growing resort business and revenues long-term. These customers would seem to be “primed” for a pass purchase.
Climate change presents challenges to the ski industry that require proactive planning, bold action and leadership. The good news is that the ski industry is adept at managing challenging conditions and began work on addressing this issue 15 years ago with the adoption of a cutting edge climate change policy in 2002. While every industry is affected by climate change, impacts to the ski industry receive a great deal of visibility in the media given the operations’ natural connection to climate. This visibility provides a unique opportunity to lead by example, and we have done so successfully with respect to climate change education, mitigation, advocacy and adaptation.

Ski areas have engaged guests in climate education campaigns to raise awareness, encourage individual action on reducing carbon emissions and urge contact with policy makers. Work on reducing our collective carbon footprint in our operations, or “mitigation”, has provided the credibility to advocate for legislation and regulation on broader-based climate solutions – whether they be market-based, such as a price on carbon, or regulatory in nature. The ski industry is also taking critical action to adapt to the reality of a changing climate through increased investments in snow making, water facilities and water resources, smarter grooming technology and shifting to a four-season business model. These are great examples of climate “adaptation”, or making operational changes to prepare for the future and ensure resiliency.

Although ski area operators have laid a solid foundation on climate action for or over two decades, there is still much work to be done on climate change. In light of the political climate in Washington, the industry needs to be even more proactive about climate solutions to forge a sustainable path forward for the industry.

More than 20 years ago key players in snow sports recognized that climate change would increase the need for better and more efficient snow making technology. Increasing temperatures and variable snowfall had the potential to truncate the length of the season (with highly regionalized effects), and increase the number of unexpected closures. In large part the industry was highly proactive in addressing these concerns through the application of improved snow making technology. By focusing on improved efficiency with snowmaking, resorts not only mitigate their impacts on climate, but also achieve cost savings and increase their ability to stretch limited resources further. In a related vein, focus on smart grooming technology allows resorts to do more with existing snow assets. Along with improvements in equipment and technology, resorts have also taken critical steps to secure water supplies for the future. Investing in water rights, water resources and water facilities has been a priority, and applying innovation to use reclaimed water for snowmaking is on the rise. Protecting water rights in federal court from encroachment by the federal government and proactively assessing water sufficiency for the future have been priorities for the industry. Collectively, all of these actions combine to improve overall adaptability in the future.

It is critical that the ski industry communicate on a climate change in a manner that is not “doom and gloom,” but instead focused on solutions. While the industry must express concern about climate in order to effect broad scale change, one important message that should not be overlooked is that we have snow and do an amazing job of delivering a quality product and
FIGURE 1: Snowfall by Region, 1990/91 to 2015/16

FIGURE 2: Average Days Open, 1990/91 to 2015/16
FIGURE 3: Incidence of Unscheduled and/or Unplanned Midseason Closures Due to Weather, Mechanical, or Other Factors, 2004/05 to 2015/16

Figure 4: Average Snowmaking Acreage, 1994/95 to 2015/16
experience for guests. Yes, there have been significant regional variations in the average per resort snowfall from winter to winter (see Figure 1), but the overall per resort average has remained relatively stable. Similarly, in aggregate, the overall average for the number of days a resort is open has remained relatively stable, despite significant regional volatility (see Figure 2). Perhaps an issue of greater concern and impact for the industry is the number of unplanned closures. The percent of resorts reporting unplanned closures has risen significantly over the past twelve seasons (see Figure 3).

Part of addressing the issue of erratic weather and unexpected closures is improving snowmaking technology and the amount of terrain covered by snow making. The industry has placed an enormous amount of attention towards addressing this issue to provide a more consistent and quality on-mountain experience for guests. To this end, 91 percent of resorts now have snowmaking, with the coverage at resorts expanding in almost every region of the country (see Figure 4). Across the U.S., the average amount of acreage covered by snowmaking has increased by almost 60 percent over the past 21 years.

Along with advances and investments in snowmaking and related facilities, ski areas are successfully transitioning to a four-season business model. Following the 2011 passage of federal legislation (SAROEA) authorizing summer uses on Forest Service lands, summer visitation at ski areas has jumped by 19% over the past four years, with resorts investing in non-skiing related infrastructure such as zip lines, ropes courses, mountain coasters, alpine slides, mountain bike trails and parks and other amenities.

Indeed, the percent of annual revenue attributable to summer operations has increased from 7 percent 10 years ago to 10 percent in the 2015/16 fiscal year, with a particular rise noted in the past three years (See Figure 5). 80 percent of all ski areas now operate during the non-winter months, and 34 percent of resorts offer a summer season pass.

This transition to a four-season model is a critical component of climate adaptation for the ski industry and the local communities in which they operate.

CONCLUSIONS AND OPPORTUNITIES

Climate change represents both a challenge and an opportunity for the ski industry. Fortunately, the industry has been proactive on climate solutions, including education, mitigation, advocacy and adaptation over the past two decades. Collectively these actions have enabled the industry to enhance guest experience, gain credibility with stakeholders and policy makers, continue to grow the business, and improve adaptability for the future.

But there is always room for improvement. Future work on climate change should include a renewed focus on innovation and technology investments; continuing mitigation efforts through programs like the Climate Challenge; assessing water sufficiency and engaging in more comprehensive water management planning; continuing investments in four-season operations; partnering with NGOs on education and outreach; and increasing advocacy on climate solutions. Not only do industry leaders need to advocate broad scale action on climate change, they also need to advocate for support for funding climate adaptation in mountain communities to improve the industry's collective resiliency.
The National Ski Areas Association has been tracking a number of key operational metrics for the industry over the past 35 years. One measure most are familiar with is the concept of the skier/snowboarder visit. The cumulative number of visits has been followed with keen interest by most in snowsports. In a real sense visits are how resorts keep score of their own performance and the comparative levels of success or distress among their competition.

For a period of time in the late 90s it was noticed with some alarm that the industry had seemed to hit a visitation plateau of about 52 million visits (see Figure 1). It was during this period that leaders in snowsports began to use research data to formulate what became “The Model for Growth.” This model took into account demographic trends and participation data, and projected visitation out over the next 15 years or so. At the time it was estimated that of those who tried snowsports, only roughly 15 percent or so continued to participate in the sport long-term. Combine this relatively dismal beginner conversion rate with low levels of new trial and an aging customer base and these findings generated a sense of urgency among industry leadership. It was acknowledged that we collectively needed to improve both our level of engagement with beginner skiers and riders while simultaneously attempting to get more people in the general population to give the sport a try.

Declining participation numbers and changing demographics represent critical challenges for the industry. When we are talking about participants we are referring to the actual number of individuals actively participating in either skiing or snowboarding in any given season. These are people who come to a resort and pay for uphill access during a specific winter. For many years we were encouraged by the relative stability in the number of active participants. During the first decade of the 21st century the number hovered at around 10 million, with about 7.5 million skiers and roughly 2.5 million snowboarders making up that total. But over the past five seasons we’ve seen significant erosion in the number of skiers and a more gradual decline in the number of snowboarders. Today we now have a total of about 8.4 million participants (see Figure 2), far short of the goals set by the Model for Growth years ago and certainly not in alignment with underlying population growth.

In deconstructing the decline in active participants one begins to notice both equipment-related differences and regional variations in declines. In terms of just skier participants, the American west is relatively stable, but all other regions of the country, the Midwest, the Southeast, and the Northeast, are in multiple seasons of decline (see Figure 3). For snowboarding, the region with the greatest number of participants is the Pacific West. This region has shown a volatile level of snowboard participation, but with last winter’s good
conditions it showed a rebound (see Figure 4). The Rocky Mountains has shown relative stability, but it is the region with the fewest number of snowboarding participants. Similar to skiing, in the Midwest, the Southeast, and the Northeast are in multiple seasons of decline.

Beyond regional variations there is also a pattern of failure to generate new trial for both sports. The
number of first time participants for both skiing and snowboarding has been flat over the past five seasons (see Figures 5 and 6). Last season only about 500,000 people chose to try skiing and only 300,000 or so chose to try snowboarding. With an estimated national beginner conversion rate of about 17.5 percent, that means only about 140,000 new participants were generated last season. That is not enough to make up for the number of individuals either dropping out of snow sports temporarily or aging out of the sport entirely.

FIGURE 3: Estimated Number of Skiing Participants by Kottke Region of Residence: 1996/97 to 2015/16

FIGURE 4: Estimated Number of Snowboarding Participants by Kottke Region of Residence: 1996/97 to 2015/16
The aging of the sport also represents a huge challenge, because while some progress has been made in building up Millennial and Gen X participation, they ski and snowboard with far less frequency than prior generations (see Figure 8).

**OPPORTUNITIES**

The opportunity exists to address these declining participant numbers with a more innovative set of product offerings at multiple levels. NSAA's research has shown...
that for younger Millennial participants, lack of equipment ownership can be a significant barrier to greater participation. Increased levels of seasonal rentals have often been cited as a desired service, but the industry has been slow to respond. Similarly, innovation in equipment and instruction technique could also stimulate demand. More flexible lift ticket products are also often expressed as desirable among younger guests. Many who haven’t tried snowsports also have the perception that the learning process will be painful and protracted, making a sport with an already highly perceived hassle factor all the more unattractive.

**FIGURE 7: Number of Active Snowsports participants by Age Cohort: 1996/97 to 2015/16**

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**FIGURE 8: Average Total Number of Days Skied/Snowboarded by Cohort: 1996/97 to 2015/16**

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**ISSUE**

What are the key geographic markets for the US ski industry? What factors influence the performance of those markets over time? Which markets should be targeted for growth in the future? What can resorts – and the broader ski industry – do to grow those markets? These are some of the questions that resort operators, regional skiing associations, NSAA and others wrestle with on an ongoing basis. While the geography of ski markets is complex and regionally variable, some general patterns are apparent that can help inform these decisions.

**KEY CHALLENGES AND OPPORTUNITIES**

- **Most skier visits by US residents are taken on a local or regional basis.** Specifically, in 2015/16, roughly half (49 percent) of visits were taken within 100 miles of home, and two-thirds (68 percent) were taken within 200 miles of home (Figure 1). An additional 11 percent were taken 200 to 499 miles of home, 9 percent were taken 500 to 999 miles from home, and 13 percent were taken 1,000 or more miles from home.

- **Local/regional markets are especially important in regions outside the Rockies.** Resorts in the Northeast, Southeast, Midwest, and Pacific Northwest draw 75 percent of their visitors from within 77 to 200 miles (depending on the region), and 90 percent or more of their visits from within 250 miles (Figure 2). Similarly, resorts in the Pacific Southwest draw 75 percent of their domestic visits from within roughly 250 miles. The Rocky Mountains also lean heavily on local and regional markets, drawing 40 percent of their visitors from within 100 miles, and 44 percent from within 200 miles. However, long-haul markets comprise a greater share of visitors to the Rockies than to other regions, and these destination markets are especially important from a revenue standpoint.

- **Symbiotic relationship between ski resorts and their local/regional markets.** Altogether, the above results speak to the critical importance of local and regional
FIGURE 1: Share of US Resident Skier Visits by Distance Traveled to Ski Resort, 2015/16

Cumulative Share of US Resident Visits

Mileage between Residence and Ski Resort

Note: Mileage is calculated as the straight-line distance between visitor zip codes and resort zip codes. Visits by US residents to foreign countries are excluded. Visits by foreign skiers to US resorts are also excluded.
Source: NSAA Demographic survey database; RRC Associates.

FIGURE 2: Distances that U.S residents traveled to US ski resorts, by resort destination, 2015/16

Miles between residence and resort (US residents only)

Resort destination (NSAA Resort Region)

Note: Mileage is calculated as the straight-line distance between visitor zip codes and resort zip codes. Visits by US residents to foreign countries are excluded. Visits by foreign skiers to US resorts are also excluded.
Source: NSAA Demographic survey database; RRC Associates.
Markets to the ski industry. Additionally, the results also point to the important role that resorts play in cultivating interest and participation in snowsports in their geographic backyards. Per capita ski participation nationally correlates strongly to proximity to ski areas, with the highest participation rates occurring in New England and the West, and the lowest rates occurring primarily in the South (Figure 3). In addition to climate, topography, and proximity to ski resorts, a variety of lifestyle, cultural, demographic and economic factors undoubtedly also influence these participation rates – in addition to efforts by resorts to enhance their reach and appeal to local and regional visitors.

Insofar as skiing has a strong local and regional focus in most parts of the country, efforts to grow snowsports may likewise be most effective if they have a strong grassroots, regional focus. Additionally, while destination resorts tend to play a smaller role in introducing newcomers to snowsports, they can nonetheless help heighten the visibility and aspirational appeal of snowsports generally.

- **Sensitivity of local/regional markets to snowfall:** For resorts in most regions of the country, skier visits are highly correlated with snowfall and/or days open (Figure 4). For example, over the past 25 seasons, variations in snowfall have explained 78 percent of the annual variation in skier visits for resorts in the Northeast, and variation in days open has explained 72 percent of the annual variation in visits in the Pacific Southwest. The sensitivity of visits to snowfall and days open has varied implications. Most notably, many resorts try to insulate themselves from the risks of poor snow years by:
  - Enhancing snowmaking capabilities.
  - Enhancing offerings of non-skiing activities / offerings.
  - Encouraging pre-season ticket/pass sales to lock in revenue.
  - Staying in touch with skiers through poor snow years so that they remain engaged when good snow returns.

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**FIGURE 3: Index of Skier Visits Relative to Population, by State: 2015/16 “Enhanced Data”**

*Index = Percent of 2015/16 US Resort Skier Visits by State of Residence / Percent of 2015 US Population by State of Residence * 100, US overall index = 100*

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- Pursuing or exploring additional strategies such as providing weather/snow guarantees to prospective visitors to minimize their risks; maximizing operational/cost flexibility; diversifying resort holdings or partnerships geographically to reduce weather risk; and purchasing snow insurance.

- **Resiliency of local/regional markets after poor snow years:** In an encouraging pattern, visitation from local and regional markets around the country has tended to rebound strongly following one or more poor snow seasons, suggesting that skiers tend to be committed and resilient. To the extent that global climate change will result in less favorable weather patterns, resorts may benefit by being prepared to fully maximize the opportunities presented by good snow years, while mitigating the challenges presented by poor snow years.

- **Varying long-term trends in geographic markets:** In part impacted by snowfall, skiers residing in different regions of the country have experienced somewhat varying long-term trends in visitation. Patterns based on five-season rolling averages (to help smooth out yearly volatility) are illustrated in Figure 5.
  - Residents in the Northeast (New England and Middle Atlantic Census Divisions), Midwest (East and West North Central divisions), and portions of the South experienced upward-trending visitation from the late 90s through the roughly 2007/08 – 2010/11 period. Visits from these regions have since trended down, in large part due to variable/difficult snow years for resorts in or near these regions since that time.
  - Residents of the Mountain Census Division have exhibited a sustained growth trend – a clear bright spot for the industry, and likely reflecting a

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**FIGURE 4: Share of Variation in Annual Skier Visits Explained by Annual Snowfall and Annual Days Open by NSAA Resort Region, 1991/92 - 2015/16 seasons**

R-Squared (linear model)

- US resorts overall: 25% explained by snowfall; 6% explained by days open.
- Northeast: 78% explained by snowfall; 58% explained by days open.
- Southeast: 39% explained by snowfall; 43% explained by days open.
- Midwest: 21% explained by snowfall; 39% explained by days open.
- Rocky Mountains: 4% explained by snowfall; 0% explained by days open.
- Pacific Southwest: 72% explained by snowfall; 55% explained by days open.
- Pacific Northwest: 64% explained by snowfall; 64% explained by days open.

Source: NSAA Kottke survey database; RRC Associates.
combination of multiple factors (including generally reliable snow conditions, favorable economic conditions, strong population growth, favorable demographics and physical activity patterns, growth in season pass sales, and close proximity to resorts, among other reasons).

- Visits by residents of the Pacific West rebounded to near-record highs in 2015/16 following four poor snow seasons – an impressive show of enthusiasm, resiliency and loyalty to snowsports. (This rebound is not fully reflected in the five-year rolling average).
- In another bright spot, visits by international visitors climbed from the 1990s through the early to mid 2000s, and have since remained at an elevated plateau, albeit impacted in 2015/16 by poor snow in some US regions and a strong US dollar.
- While climate change is likely to make snow conditions progressively more challenging over time, past results suggest that the respective regions and the country as a whole should be poised for a return to strong levels of performance (such as those recorded in the record 2010/11 season) when snow conditions are favorable.

- Decrease in per capita visitation since 2010/11: Per capita skier visits nationally trended relatively flat on a five year rolling average basis between the seasons ending 2001/02 through 2010/11, before declining through 2015/16 (Figure 6). Long-term declines in per capita visitation are apparent in all regions of residence, including even the Mountain Census Division, which has been a source of strong absolute growth in skier visits over time. The failure of skier visits to keep pace with population is clearly in part due to difficult snow and weather conditions in various regions of the country since the 2010/11 record

**FIGURE 6:** Cumulative Percent Change in Five-Year Rolling Average Skier Visits per Capita: by Place of Residence Change relative to 1996/97 – 2000/01 Baseline

*Five-season periods ending 2001/02 thru 2015/16*

Source: NSAA Demographic survey database; RRC Associates.
Additionally, the declines likely also reflect a variety of demographic factors (including shifts to an older, more minority, and more economically stratified population), as well as varied lifestyle factors (growing rates of obesity, increasing options for leisure activities, etc.). The patterns thus in part speak to the opportunity which resorts have to attract underrepresented population segments to snowsports, as well as the challenging and competitive environment in which resorts are vying for customers.

- **Domestic destination markets relatively flat, with economic sensitivity:** Domestic destination skier visits to the western U.S. have trended relatively flat over the past 20 years, averaging approximately 11.5 million skier visits annually and comprising an average of 21 percent of total visits at US resorts (Figure 7). Despite flat long-term trending, destination visits have fluctuated in shorter-term periods, primarily in conjunction with economic cycles. Specifically, domestic destination visits experienced peaks during the economic booms of the late 1990s, mid 2000s, and in 2015/16, and declines in the intervening recessions. Visits have typically been less sensitive (although not immune) to snowfall. The long-term stability in domestic destination visits is an indicator that resorts have been largely successful in replacing Baby Boomer destination skiers with younger generations. Challenges for growth include capacity constraints at peak times (including for lodging, and to some degree air access), as well as high costs (again for lodging, air, and other trip expenses), competition from other vacation options, and stagnant to declining levels of overall snowsports participation.
FIGURE 7: DOMESTIC DESTINATION SKIER VISITS TO THE WESTERN U.S.
1996/97 - 2015/16

Note: Domestic destination visits to Western resorts are defined as visits to the Rocky Mountain, Pacific Southwest and Pacific Northwest NSAA Regions which are attributable to visitors residing in the Northeast, Midwest and South Census Regions; plus visits by residents of the Pacific Census Division to the NSAA Rockies region; plus out-of-state visits by residents of the Mountain Census Division to the Rocky Mountain, Pacific Southwest, and Pacific Northwest NSAA Regions.

Source: NSAA Demographic survey database; RRC Associates.

FIGURE 8: Place of Residence by Resort Destination: 2015/16

Source: NSAA Demographic survey database; RRC Associates.
The demands of maintaining and upgrading ski area infrastructure are key strategic issues to the overall business of running a ski resort. Keeping ski area facilities current will continue to be critical to customer satisfaction and experience, to generating healthy business levels, and to overall financial success.

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The capital-intensive nature of the ski resort industry presents a challenge to many operators. The old adage, “You have to spend money to make money” certainly applies, although it presents inherent tradeoffs. Where are capital dollars best spent? How much can you afford to spend? What is the ROI on those investments? These questions have never been easy to answer, but it remains critical to ask them and to make some kind of capital spending decision.

• Major areas for capital improvements at ski areas include lift upgrades, snowmaking systems, base area facilities, and on-mountain buildings. Indeed, continuous investment has been made in these areas, leading to an improved customer experience, the ability to have a more consistent season length, and opportunities for greater top line revenue.
• The level of lift infrastructure (as measured by vtf/h) has increased, on average, about 2 to 3 percent per year in the industry over the past 15 years. This growth is reflective of new or upgraded lifts installed each season, adding to the collective uphill capacity of the industry overall.
• Similarly, the number of acres covered by snowmaking equipment has gradually inched upwards, typically about 1 to 2 percent per year on average. These
increases show the commitment on the part of the industry to providing a quality ski and snowboard experience for customers.

- The asset level of the industry overall, as profiled in the NSAA Economic Analysis of US Ski Areas, has grown significantly, from an average of $35 million per ski area in the 2002/03 season to $65 million per area in 2015/16. This increased asset base demands a greater level of maintenance capital.
- Maintenance capital has increased in step with the level of gross fixed assets. Maintenance capital expense averages about 1.1% of assets, a figure that has been steady for the past seven years.
- Specific to lift infrastructure, industry statistics indicate that the average age of a detachable lift is 16.7 years, while fixed grip lifts are significantly older (29.6 years). One of the most common and most important discussions at ski areas each year is the refurbish versus replace decision when it comes to lifts.

**OPPORTUNITIES**

The financial commitment to maintaining lifts and buildings, among other facilities, remains critical at ski areas. The overall health of the industry hinges on continuously investing in maintenance, as well as the occasional expansion capital project, to keep ski areas competitive.

Opportunities exist to upgrade lifts, with the benefits of better customer experience and the ability to accommodate a much larger number of visitors. The introduction of a high-speed lift at a ski area means that the customer is able to get more runs in over the same amount of time. "When a resort that has
Investing in maintenance and keeping current with the facilities that customers demand is a never-ending process, one that continues to be critical to the overall, long-term health of the ski resort industry.

A brand-new detachable chairlift is not the only potential upgrade – new technology exists to upgrade existing motors, cables, grips, chairs, and other parts, which can be less expensive but still enhance the customer experience from a comfort and safety perspective.

Buildings and base lodges are another significant capital investment that have an impact on both the customer experience and the potential to drive
top-line revenue. Many ski areas have limited indoor space at peak times, creating a crowded experience for visitors and restricting the level of potential revenue from departments like rentals and food & beverage. Re-designing existing buildings or constructing new ones, while expensive, are important improvements at many ski areas around the country. Increasingly, these buildings are planned and utilized in summer and fall months for activities and events like mountain biking, weddings, and festivals. In addition, the use of these spaces is evolving with a new generation of guests, with many younger participants seeking out flexible work spaces and a wider range of dining concepts and configuration. Regardless, the ability to achieve multi-season utilization makes for a much more attractive ROI on investments in buildings.

CONCLUSION

Investing in maintenance and keeping current with the facilities that customers demand is a never-ending process, one that continues to be critical to the overall, long-term health of the ski resort industry. Access to capital also determines which resorts can be innovators with their infrastructure versus maintainers of their resort configuration. While making decisions when it comes to capital expenditures can be difficult, the importance of continuous re-investment in the infrastructure of the ski industry cannot be understated.
Overnight visitors have historically accounted for about half of skier visits to US resorts. Among these overnight visitors, approximately two-thirds stay in paid lodging, while most of the remainder are second homeowners or stay with friends and family who live in the area. About half of ski resort operators responding to the NSAA Economic Survey themselves have lodging operations and associated lodging revenues.

Within this context, a key issue for resort operators who own/manage lodging is maximizing the return on their lodging assets. Additionally, for all resort operators who experience an appreciable share of overnight visitation, a key objective is to enhance the performance of the bedbase to maximize the number and profitability of overnight ski visitors, and maintain a quality lodging and resort experience for guests.

**KEY CHALLENGES AND OPPORTUNITIES**

Capacity constraints vs. capacity expansion and better utilization. As the economy has improved since the Great Recession, occupancy levels have grown significantly across much of the U.S. ski industry (at least when snow conditions have been sufficiently favorable). Lodging at many ski resorts has essentially hit capacity over key holiday periods and weekends during the ski season. This represents a potential barrier to additional growth and a foregone revenue opportunity.

In the medium to long term, markets should respond with new lodging at resorts facing significant capacity constraints, although opportunities for constructing additional “hot beds” are frequently challenging due to limited land availability, low-growth political environments, and high returns for other types of building products (e.g., residential projects that result in a high share of “cold beds”).

More immediately, the growth and market acceptance of rent-by-owner (RBO) lodging (Airbnb, VRBO, etc.) represents a “relief valve” of sorts for accommodating additional demand, in addition to potentially appealing to new kinds of customers. While RBO lodging has benefits on the visitation side of the equation, the RBO phenomenon is also widely seen as a contributor to resident housing shortages in many resort communities. Communities also wrestle with the neighborhood and community impacts of RBO units, and RBO units also potentially represent increased competition for the traditional lodging bedbase.
Short of constructing new inventory and taking advantage of the RBO phenomenon, opportunities to boost visitation given a constrained lodging inventory include spreading out demand to low-demand/“need” seasons and midweek periods, as well as to “downvalley” or outlying locations with reserve capacity. Resorts with excess bedbase capacity may also be able to attract visitors from more constrained resorts. As crowding concerns grow in some communities, tourism development conversations are sometimes turning to dispersing visitors to off-peak periods and quieter destinations.

High nightly lodging rates: a double-edged sword. Since the Great Recession, growth in demand plus constraints in supply have led to strong growth in average nightly room rates at many resorts. Resort operators that have lodging operations have been positioned to benefit from this growth in rates and resulting revenues. Resort communities have also benefited from increased tax collections, with an enhanced ability to add amenities and services that improve the community experience for residents and guests, and (for DMOs supported by lodging taxes) allow for enhanced marketing.

The following map illustrates nightly room rates that could be obtained in the winter 2015/16 ski season in U.S. ski counties, for purposes of per diem reimbursements of federal government travelers. In many cases, the data understates room rates that skiers are actually likely to experience, insofar as the data reflects lodging anywhere in the applicable counties (rather than specifically proximate to ski resorts); the lodging set is limited to mid-priced, fire-safe properties; and the rates are based on weekdays (weekends excluded). While there is broad variation in costs across the country, the results do show pockets of high lodging costs, including in many western destination resort areas and some eastern areas.

**FIGURE 1: Winter Lodging Per Diem Rates (for federal government travelers ) U.S. Ski Counties**

*FY 2017 Source: General Service Administration*

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Note: Map shows Standard CONUS rate for counties where GSA data are available. The standard CONUS lodging per diem rate is $91.

Note: Per diem rates for federal government travelers are based on:
- Only “fire safe” properties; GSA is required by law to use only properties that are certified as being in compliance with the Hotel & Motel Fire Safety Act of 1990.
- Properties that fall within the mid-price range.
- Data from the prior 12-month period. For FY 2017, this is from April 2015 through March 2016.
- Business travel week data (Monday through Thursday).
Notwithstanding the financial benefits of rising room rates, the ski industry should be mindful of the potential adverse consequences. Most notably, high lodging costs represent a potential barrier to actual and prospective skiers of lesser means, who disproportionately tend to be younger adults, and thus as a whole represent much of the future of the ski industry. Survey research on Millennials has shown that lodging costs are one of several cost barriers (along with lift tickets, equipment and so on) that frequently dampen interest in snowsports participation. Ensuring that interested younger, lower-income visitors are not shut out of overnight ski trip experiences may be in the long-term interest of the ski industry.

**Summer opportunities.** At many resort destinations, summer occupancy levels and room rates trail significantly behind winter. To the extent that resort operators and resort communities are pursuing summer business, these lower lodging costs are one of several factors (along with weather, vacation schedules, a variety of offerings/attractions, and the like) that can allow resorts to attract a broader profile of customers than in winter. Western U.S. resorts tracked by DestiMetrics have been effectively cultivating and capturing summer demand, experiencing stronger growth in occupancy rates and average nightly rates in summer than winter since the Great Recession. Indeed, as summer increasingly hits capacity levels at many resorts, tourism development efforts are frequently turning to the spring and fall shoulder seasons, edging some resorts close to being year-round destinations.

**Ensuring a quality lodging experience.** Lodging satisfaction ratings for resorts tend to be mixed, for reasons of availability (or lack thereof), quality, value, and perhaps other factors. One nationwide survey of skiers finds that skiers rate lodging at individual US ski resorts at an overall average of 7.4 out of 10 (on a scale where 1=poor and 10=excellent), somewhat less than most aspects of the on-mountain ski experience. Bedbase quality is a bit uneven across resorts, and often within a given resort community. Many resorts have a comparatively older bedbase that in significant part dates back to the 1960s, 70s and 80s, some of which has not been renovated. While this can provide a range of products and price points for different segments of guests, it is important to balance that with ensuring a sufficiently attractive and satisfactory guest experience, particularly as competing leisure destinations offer attractive lodging products.
Retailing and the consumer environment are changing rapidly, with effects felt throughout North America and internationally. While snowsports are a relatively small slice of the overall economic pie, the forces that are shaping retailing are also buffeting the skiing and snowboarding sectors and impacting the companies that operate in those spaces. Large-scale trends that are readily apparent include the following:

- Growth in online shopping and services;
- The related trend of “showrooming” (i.e., using a shop as a showroom for goods purchased online);
- The decline in specialty retailers;
- The emergence of big box and discount stores;
- While at the same time, major sporting good players have gone out of business (e.g., Sports Authority and Sports Chalet) and other major retailers have closed stores across the country (e.g., Macy’s, Sears, J.C. Penney);
- And shifting consumer tastes as the much-studied Millennial generation becomes a dominant force in the marketplace.

KEY CHALLENGES

For snowsports, all of these macro-level trends have implications, often presenting challenges to the old ways of retailing.

**Period of growth, followed by potential plateau in total sales.** According to the Snowsports Industries of America (SIA), retail sales grew in total in three of the past four years. As illustrated in Figure 1, data of total sales from all snowsports retail channels combined (snow specialty stores, snow chain stores, and online) show slow but steady growth in sales between 2010 and 2015, but a slight decline in 2015/16.

**Trend toward “showrooming” has undoubtedly impacted snowsports and the use of online shopping.** While the percentage of specialty snowsports retail stores is largely unchanged, the nature of activities in stores has changed with many patrons looking at and sizing equipment but often purchasing items online rather than in the store. This trend may continue to put pressure on snowsports retailing, especially for specialty stores.

**Regional and seasonal differences are evident.** Regional and seasonal volatility are found in the sales data, explained in part by weather but also by the relative size of the underlying market of snowsports participants. As noted previously in this report, there are
FIGURE 1: Total Dollar Sales of Snowsports Products (Billions) by Store Type, 2011/12 - 2015/16

FIGURE 2: Snowsports Retail Sales by Region
major differences in the percentage of the residents that participates in snowsports by state. These findings are borne out in retail sales patterns. As illustrated in Figure 2, the West has shown growth in retail sales over time, while the Midwest and Northeast saw declines in 2015/16, and the South has remained flat over time. The West is the largest source of retail sales for the industry – in 2015/16 western sales of $1.13 billion accounted for nearly half of total retail sales (45 percent).

Equipment sales vary by product category. Looking back over the past four years, sales of alpine equipment have grown while snowboard equipment has remained relatively flat. Meanwhile, nordic and telemark equipment sales have declined. Measured in percentage terms, the segment of the market that has seen the most growth is alpine touring equipment and adjustable poles (together up 7 percent between 2014/15 and 2015/16), although these two segments together still only represent about 3 percent of total retail sales.

Share of revenue attributable to retail and rental operations at resorts relatively flat over the past decade. A different measure of retailing and commerce is provided by NSAA Economic Survey data. The study measures the percent of resort revenue attributable to various operations including retail, rental, tickets, and food and beverage. As summarized in Figure 3, retail and rental operations represent a relatively small share of total resort revenue with 3.6 percent of total revenue from rental shops and 6.9 percent retail stores in 2015/2016. These percentages have remained fairly level when tracked over the past decade. For example, in 2006/07 the percentages were 4.2 percent for rental and 5.2 percent for retail stores.

**FIGURE 3: Share of Revenue Attributable to Retail and Rental Operations**
A review of data and anecdotal feedback suggest that the snowsports industry has been subject to or adopted some new retail developments, while at the same time bucking the trends in other ways. Performance data provide further understanding of some of the significant structural changes in recent years, and help to identify future trends that warrant attention as the skiing and snowboarding industries look forward.

Despite major changes in the overall retail environment, snowsports sales channels are stable. While national retail trends point to declines in specialty store sales and growth in online sales, the three channels that are tracked separately for snowsports retail showed little change. Data showed 52 percent of sales in snow specialty stores in 2015/16, 26 percent in snow chain stores, and 22 percent online. Comparing these results to percentage sales by channel in 2012/13 showed only slight differences with 54 percent in specialty stores, 25 percent in chain stores and 22 percent online.

In particular, the percentage of industry sales from Internet channels are remarkably stable over the past four years. This is in marked contrast to increases in online sales nationally. The data suggest that snowsports channels were impacted relatively early by online stores: sales online for snowsports were 20 percent of the total product sales in 2011/12 at a time that online sales nationally were only about 5 percent. However, in recent years, snowsports online sales have stayed at approximately 21 percent, while overall national online sales continue on an upward trajectory (with 8 percent of all retail sales taking place online in 2016). Ultimately, the data suggest that the market penetration of this channel has plateaued over the past four years.

Significant growth in the revenue attributable to retail stores within resorts. While largely unchanged in percentage terms, departmental revenue has continued to grow at resorts overall with a 10-year gross revenue increase of 41.5 percent (see Figure 4). Within the same period, retail stores growth was 63.5 percent, suggesting that retailing within the resorts has been a relatively

![Figure 4: Department Revenue per Visit and 10-year Percent Change](image-url)
strong segment and a positive contributor to overall performance. While the percentages of departmental revenue have not grown dramatically, overall revenue has increased measured on a per-visit basis, and the health of retailing is notable.

These findings are borne out by reported retail and rental sales results from some of the larger resort companies. For example, Vail Resorts reported retail growth of 13 percent in the quarter ending October 31, 2016. They noted particularly strong pre-season sales events, with these events occurring in metropolitan areas like San Francisco, as well as in mountain communities in locations that included Colorado and Lake Tahoe. These results reported by resort operators concerning the contributions from retail and rental operations are potentially significant given that there has been speculation that the rental and retailing operations at resorts might experience growth at the expense of metropolitan stores.

There has been speculation that a variety of factors could be anticipated that might explain shifting geographical results by retailers. These include the economies of scale of ever-larger resort operators through consolidation, and some of the national changes in sporting goods retailing. Further, the ability of resort operators to provide a seamless experience including booking, lodging, equipment, ticketing, and lessons might lead to new innovations in retailing. While the future may see growth in rental and retailing operations at the resorts themselves, or in resort communities (i.e., other retailers that are growing at destination resorts), data through 2016 provide mixed messages. The overall percentages of revenue from retail and rentals at resorts have not shown big increases over time, but the growth in overall revenues is a positive sign and may be one that suggests that resort retailing is proving successful in spite of the competitive environment and forces shaping retailing in general.

**Growth in Alpine Touring warrants attention.** The growth in this new segment of snowsports participants is noteworthy, in part because it is showing relatively strong growth against an overall pattern of slow growth.

**Outerwear retail sales have helped to improve overall snowsports retailing results.** Snowsports outerwear, which includes insulated and non-insulated shells, fleece, and soft shells, accounts for approximately 70 percent of all snowsports retail, and this category has seen greater growth than equipment, including alpine and snowboarding goods. Data suggest that sales to outdoor enthusiasts that purchase outerwear for a variety of activities that extend beyond snowsports benefits snowsports retailing as a whole. The industry should consider these trends in order to maintain market share in a retail environment where fashion trends often embrace outdoor pursuits and an active youth culture. However, more passive recreational activities are preferred by a large segment of younger Americans, suggesting that these trends may be influenced by the ever-changing recreational habits of various consumer cohorts.

**CONCLUSION**

Although sales data point to slow growth in snowsports retailing, they also point to a generally stable retail environment as compared to overall national retail trends. Retailers are encouraged to stay on top of these trends to fully realize areas for potential growth. The strength of retail stores at resorts and within resort communities, growth in alpine touring equipment sales, fitness trends, and the role of outerwear in the overall product mix are all areas the industry could explore further.
ISSUE

Many ski areas are continuously challenged with finding enough qualified employees to work in various departments throughout the company. While compensation for most ski area employees includes a season pass and benefits to ski at other resorts, these perks may have a lower perceived value than in the past, especially given the high cost of rent and housing in many ski area counties (particularly in mountain resort towns in the West). “The ability to hire quality employees is one of the more important challenges facing the broader industry, especially as we have seen unemployment drop well below 5 percent across the country,” said Dave Byrd, NSAA’s Director of Risk & Regulatory Affairs. Another challenge related to staffing for many ski areas is a lack of diversity in the employment base, with women and minorities typically underrepresented in the staff. Having an adequate number of trained staff, and looking outside the traditional segments for resort employees, is a critical element to success in the winter resort industry.

KEY CHALLENGES

Minimum Wages. Labor is the largest expense line item for ski areas, averaging 24 percent of revenue nationally for the 2015/16 season. Adding to this expense is the phasing in of minimum wage increases in many ski states, including Colorado (to $12/hour by 2020), Washington (to $13.50/hour by 2020), California (to $15/hour by 2020), New York ($12.50/hour by 2020), and Vermont ($10.50/hour by 2018).

Numerous comments from resort operators indicate that these increasing minimum wages will be a challenge; however, higher wages might have the effect of reducing employee turnover, lowering recruiting and onboarding costs, and bringing a higher caliber of employee who will be able to provide a greater level of service and improve the customer experience. Indeed, paying staff a higher wage might have the advantage of making ski areas more competitive and compelling as a place to work, especially considering that many US counties with ski resorts had very low unemployment rates as of December 2016. “Many ski areas are already paying entry-level workers well above the local minimum wage—we have to, it’s that competitive of a marketplace for labor,” Byrd said. “And as season pass products have become much more competitive across the ski industry, the ability to lure individuals to ski areas with a season pass or family pass is even harder, since younger people can more easily afford these pass products than in the past.”
Housing Costs. The cost and availability of housing for staff can be a significant issue in certain regions of the country, especially in large destination resort areas. The limited amount and high cost of housing makes it difficult for ski area employees to find a place to live, and therefore for resorts to be fully staffed. Average rent for a two-bedroom unit in counties with more than one ski area is $971/month, ranging from $650 to $1,600 per month depending on the specific county. These rents are a simple outcome of the free market system of supply and demand, but that doesn’t mean that ski areas can’t take steps to address this issue. To be sure, many areas continue to pick away at the housing issue, buying apartment buildings or other housing inventory to rent to their staff.

Workforce Diversity. The lack of diversity in the workforce at many ski areas could be a liability in terms of attracting a younger customer base that is multi-ethnic and multi-cultural. Diversity in the workforce has many benefits, perhaps most critically for ski area customers to feel comfortable and included in the overall culture of snowsports – whether it’s learning from a non-white
you can’t pay your rent with a season pass. Health care, transportation benefits, discounted food, and other benefits are important to offer your workforce.

**Employee Housing.** Employee housing is a difficult challenge, but working with local housing authorities, developing and buying housing to rent to seasonal staff, and even encouraging locals to rent out rooms to ski area employees are all tactics to address this challenge.

**Recruiting a Diverse Workforce.** Some progress has been made at diversifying the workforce, but ski areas need to be more proactive in recruiting employees from non-traditional sources. A diverse workforce will be critical to the long-term health of the ski resort industry, both in terms of having enough qualified workers and to be an attractive place for visitors and workers alike.

**OPPORTUNITIES**

Opportunities exist to address these challenges.

**Competitive Compensation Packages.** Beyond the hourly wage paid to employees, ski areas need to up their game when it comes to compensation and benefits. After all,