EMERGING SECTOR SERIES:

Outdoor Products

GROWTH AND OBSTACLES IN THE OUTDOOR PRODUCTS SECTORS IN ALASKA

Presented To The Alaska Division Of Economic Development







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I. Executive Summary

Kate Mitchell, a founder of Nomar Alaska, got her start simply because she had a sewing machine, knew how to sew, and was willing to try. Today the Homer-based gear maker has 16 employees. Hers is a startup story that is not unlike many in her industry: she saw a need in her own life and decided to try something new. Alaska has a reputation for breeding a tough population with a "can do" attitude that finds creative solutions around living and having fun in the wild mountains and raging rivers of this rugged state. This is a culture that is present throughout many industries in Alaska, but especially prevalent in the outdoor products industry.

Emerging Sector Series: Outdoor Products is the fourth report in a series completed by the University of Alaska Center for Economic Development (CED) in partnership with the State of Alaska Department of Commerce, Community and Economic Development - Division of Economic Development (DED). The report attempts to capture the current state of the outdoor products industry in Alaska and identify opportunities for growth. It focuses on existing businesses in the industry and the potential for new entrepreneurship. In the process, CED interviewed dozens of manufacturers and designers, subject matter experts and retailers, and reviewed data and secondary literature from a variety of sources.

As an industry that has growth potential in both in-state and export markets, there are opportunities for current outdoor product businesses to attract new customers globally and for startups to enter the market. Opportunities for manufacturing and design exist, especially when it comes to highlighting "Alaska-made" in branding and messaging to attract in-state customers as well as those from the lower-48 states and around the globe.



Generally, the outdoor products sector is an emerging sector in the economy:

- National industry growth trends. National trends show that growth in the outdoor products industry has held steady over the past five years, which is expected to continue into the near future. A steady appetite for outdoor products on the national level signals potential room for Alaska businesses to grow sales.
- Multi-activity consumers. Outdoor recreation
 is a sector that crosses many different activities,
 and as such, consumer participation is not
 specific to a single industry. A single person can
 bike, ski, fish, canoe, and hike and will need to
 fulfill different product desires for each activity.
- Market tied to consumers' disposable income and leisure time. National statistics show that as consumers have more disposable income and a greater amount of leisure time to spend on outdoor activities, they are more likely to invest more in outdoor products.

Alaska is home to one of the largest consumer bases for outdoor products as a percent of the population. Consumers access a broad range of activities at varying levels of intensity.

- Alaska's outdoor recreation assets. With 15 national parks, 120 state parks, 16 national wildlife refuges, and 2 national forests, Alaska is home to over 322 million acres of public land. Although the allowable activities vary depending on the location, the opportunities across the state for outdoor recreation are plentiful.
- Outdoor participation and the consumer base.
 Alaska is ranked highest, alongside Montana, for outdoor participation. The potential for outdoor recreation-related tourism and associated product purchasing is great. Alaska also ranks highest in fishing licenses per capita in the U.S. One in 3 adult Alaskans purchased a fishing license and 1 in 6 purchased a hunting license in 2017.

Observations about the Alaska outdoor products landscape:

- Manufacturing and margins. As a result a number of factors influencing both the labor market and manufacturing in Alaska, the cost of producing goods is high for outdoor product manufacturers. The high cost of production affects both the ability for manufacturers to scale and their opportunities to sell wholesale. Profit margins on Alaska-made products are frequently much smaller than goods produced elsewhere, and price points are relatively high.
- The power of online retail. Many Alaska startups are primarily accessing customers through online retail. With the exception of the select few that sell at their own store or have scaled to the wholesale market and sell through retailers, the majority of Alaska product manufacturers are selling directly to customers on their own websites.
- Growth in niche products. In an industry that is relatively saturated with larger manufacturers, Alaska outdoor product manufacturers and designers have found success in the market with niche, inventive, or specialty products that meet consumer needs not being serviced by the mainstream market.
- The Alaska appeal. Manufacturers, designers, and retailers interviewed for this report all spoke to the power of the Alaska "brand." As a selling feature to people out of state the brand is rugged and tough. A common refrain is, "if it will work in Alaska, it will work anywhere." To Alaska consumers the brand is a part of the outdoor culture itself. Alaskans buy Alaska manufactured or designed products not only because they want to support local businesses, but because they trust the quality of a product that was made by a fellow Alaskan who has probably explored the same trails and knows what it takes to adventure in Alaska.

• Marketing: A tool and a trouble. Marketing is an area of the business operations that many outdoor products business owners acknowledged struggling with. While many spoke highly of the power of the Alaska brand, they also equally conceded to the fact that marketing their products was a challenge. The lack of marketing capacity means that currently, the brand potential of Alaska-made and designed products is an under-utilized asset.

Based on review and analysis of current trends, CED has identified four focus areas to better capture the economic opportunities for outdoor products in Alaska. These are:

• Branding and marketing. Creation of a coordinated marketing effort to elevate the Alaska brand with regard to outdoor recreation could generate higher demand for Alaska-made, designed, and tested products. Collaboration with the State of Alaska or a coalition of private businesses could create a unique Alaska outdoor brand. There is also potential for marketing Alaska as a testing ground for outdoor products manufactured or designed out of state.

- Trade shows and networking events. The
 State and University of Alaska, or a coalition of
 private businesses and nonprofits could play
 a valuable role to raise awareness and boost
 participation at in- and out-of-state outdoor
 recreation trade shows, as well as hosting
 networking events to help businesses and
 entrepreneurs access consumers, communities,
 and resources.
- Sprints and design thinking tools. These are
 two approaches to spurring the development
 of new products that solve customer needs.
 Alaskans' affinity for outdoor recreation could
 make the state a hotbed of innovation in a
 growing industry. Utilization of design thinking
 principles help entrepreneurs come up with
 new, creative ideas in a short amount of time
 and promotes working in a diverse team.
- Talent development. Many businesses interviewed in this study discussed facing workforce challenges. A greater focus on design thinking and "soft skills" through the use of university, vocational, and high school partnerships. These workforce networks could also play a role in connecting students with entrepreneurs.

An Alpacka raft ready for use. Photo credit: Phillip Tschersich



II. Introduction

Sarah Tingey describes her mother-in-law Sheri as having a "3D wizard in her brain." This conceptual design talent, combined with her knowledge of the outdoors and expert sewing skills, led her son, Thor, to make a specific request of her in 2000. Having returned from a 600-mile trek through Alaska's Brooks Range, he wanted a lightweight packable raft that could handle the unforgiving whitewater that spilled out of the Arctic mountains. Could she make him something like that?

While packrafts were not completely unknown in the marketplace, Thor found the options "wholly inadequate." The model he had taken into the Brooks was made for calm lakes and not whitewater. Sheri's prototype, built in her Chugiak garage, evolved into the Alpacka Raft and soon went into production in 2002. While Sheri sold most of the early rafts to a small band of Alaska adventurers, the packrafts eventually developed a bigger following around the world. Now based in Colorado, Alpacka is an industry leader, widely credited with launching the modern sport of packrafting across the world.

Alaska is synonymous with the great outdoors. Of all 50 states, Alaska has the largest land area and the lowest population density. It has the continent's highest mountains and the majority of the country's designated wilderness lands.¹ Crisscrossed by frothing rivers, mountain ranges, and endless forests, the superlatives are as endless as the opportunities to get outside. It is unsurprising then that residents and visitors alike view Alaska as a place to immerse themselves in nature, fill their freezers with fish and game meat, or prove their mettle in the harsh wilderness. Facing the hazards and extreme conditions of this Arctic state calls for the best preparation and equipment available.

Out of necessity, Alaskans have met these challenges by designing, creating, and adapting wilderness gear. This innovation reaches back

Industry Definition: Outdoor and adventure products can be defined as apparel, equipment, footwear, gadgets, or other manufactured goods that are designed specifically for use in one or more of the following activities: boating (powered or unpowered), camping, backpacking, hiking, bicycling, jogging, fishing, hunting, skiing, snowboarding, dog mushing, or the use of off-road allterrain vehicles (ATV's).

many thousands of years when Inupiaq, Yup'ik, and Unungan (Aleut) people hunted from ingenious skin boats framed by wood. Today the western world knows these devices as kayaks, a staple of outdoor recreation wherever humans and water meet. Of course, such adaptations were originally a matter of subsistence living and not merely for recreation.

Like the Tingeys, Alaska innovators have repeatedly found that gear capable of handling the state's extreme conditions either did not exist or proved inadequate. In the course of this study, CED interviewed Alaska apparel, bicycle, survival product, food pouch, bag, ski, and watercraft designers and makers. Although these businesses are small (the largest have approximately 20 employees), the entrepreneurs behind them highlight areas of economic opportunity for the

state. Outdoor-related recreation purchases totaled \$887 billion in 2017 nationwide,² and several of Alaska's outdoor products entrepreneurs already reach national and global markets. Alpacka, 9:Zero:7, and Revelate Designs are well-known among gear aficionados throughout the U.S. These companies have benefited from, and helped to strengthen, an Alaska brand that signals suitability to harsh conditions everywhere.

As an emerging sector in Alaska's economy, outdoor products companies nonetheless face formidable barriers and obstacles to growth. Reliable workers are difficult to find, particularly when specialized skill sets are needed. Successful product makers that gain traction in the marketplace often quickly find themselves competing with cheaper products sold by larger corporations. Shipping and logistical costs pose problems for any Alaska business that depends on larger scale manufacturing and movement of physical products. With 740,000 residents, the in-state market is small, even if Alaskans participate in outdoor activities at high rates.

Outdoor Recreation Matters to Alaska Residents



Participation Rates

Alaska ranks highest, alongside Montana, for outdoor participation and the potential for outdoor recreationgrounded tourism is great.



Fishing and Hunting Licenses

Alaska ranks highest in fishing licenses per capita. 1 in 3 adult Alaska residents purchased a fishing license and 1 in 6 purchased a hunting license in 2017.



Natural Resources

With 15 national parks, 120 state parks, 16 national wildlife refuges, and 2 national forests, Alaska is home to over 322 million acres of public lands.



Alaska Brand

Manufacturers, designers, and retailers all spoke to the power of the Alaska brand. Many people will say, "if it will work in Alaska, it will work anywhere."

Figure 1

III. The Industry and Trends

If Jennifer Loofbourrow could ask every Alaskan one question, it would be "What is going to get you to spend more time outside?" As founder of outdoor apparel startup Alpine Fit, she thinks part of the answer might be more stylish, better fitting, locally-made apparel. Alpine Fit plans to produce activewear able to accommodate a range of body types with high-tech, odor-resistant fabric that can withstand repeat use between washes. The innovative concept earned Alpine Fit the top prize at the 2018 Alaska Business Plan Competition.

Loofbourrow knows the outdoor products industry well, in Alaska and beyond. She previously worked for Vancouver, Canada-based athletic wear company Lululemon, where she briefed company executives on the properties of different fabrics. Later, she and her husband owned a women's clothing business in Ireland. Armed with this background, Loofbourrow believes she can carve out a niche in an industry dominated by giants like Patagonia and North Face.

Alaska outdoor product companies tend to operate within specialty niches. However, an understanding of the national dynamics of the industry is

essential. The outdoor products industry runs across multiple sectors, some of which serve small or niche markets. CED's analysis of the industry includes the following trends:

- The outdoor and adventure products industry spans multiple sectors of the economy, making it difficult to track and measure precisely.
 However, the federal government is making a concerted effort to better quantify the economic contributions of outdoor recreation.
- Several adjacent sectors can be used as proxies, including those related to the sale and manufacture of bicycles, ATV's, hiking, camping, and snowsport equipment, and others. Most of these sectors show projections of modest annual growth in revenues, generally between 1-3%.
- Key drivers of consumer spending on outdoor products are disposable income, time spent on leisure and sports, and participation in sports. Nationally, all three drivers show slow but steady growth in line with industry revenue projections.



Jennifer Loofbourrow of Alpine Fit. Photo credit: Ciara Zervantian

Growth, innovation, and opportunities in the sector have increased to the point that it is beginning to draw national attention. In 2013, Utah created an Office of Outdoor Recreation. Washington and Colorado quickly followed suit in 2015 and were subsequently followed by Wyoming, North Carolina, Oregon, and Montana. A fellow in the Alaska DED in 2018-2019 will focus on opportunities in the outdoor economy in Alaska.

Part of the mandate of the Congressional Outdoor Recreation Jobs and Economic Impact Act of 2016 was to assess and analyze the outdoor recreation economy; however, that is an ongoing and incomplete process at the time of this report.³ CED and DED are presently conducting a broader study on economic development opportunities in outdoor recreation that will address aspects beyond outdoor products. The present work limits itself to the design and manufacture of these products, however.

For the purposes of identifying trends for this report, CED has synthesized industry reports from directly and adjacently related industries on the national level to identify trends in the outdoor products industries. The industries discussed by no

Key market drivers are disposable income, time spent on leisure and sports, and participation in sports.

means capture the entire outdoor products sector of the economy, but offer a snapshot of the larger, related industries.

Market Driver Trends

The market for outdoor recreation products is largely consumer-driven. Key market drivers are disposable income, time spent on leisure and sports, and participation in sports. IBISWorld predicts that total recreation expenditures and time spent on leisure and sport will both increase over the next five years, which could drive growth in the outdoor products industry nationally.⁴ Within Alaska, the market may show less immediate growth due to the state's recession and high unemployment.

Hats, belts, and tubes are a few of FisheWear's products. Photo credit: FisheWear



Total US Recreation Expenditures

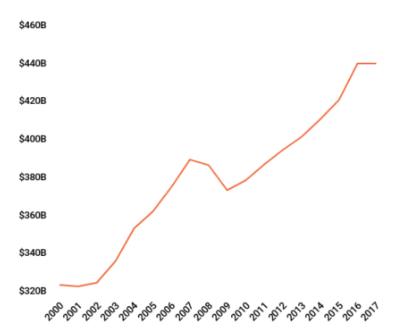


Figure 2. Source: IBIS World

US Leisure and Sports US Time

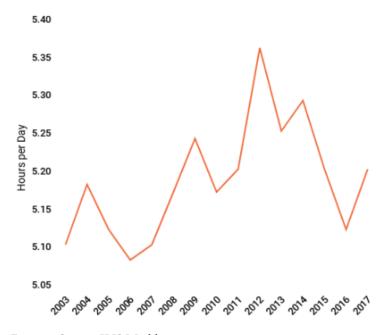


Figure 3. Source: IBIS World

Outdoor Product Retail and Service Markets

National trends in the larger retail and service markets are showing strong and steady growth. These industries include the retailers who sell manufactured outdoor products (bicycle dealerships and repair; hiking and outdoor equipment stores; and sporting goods stores⁵) and larger industries that purchase outdoor

products to rent or support other activities (ski and snowboard rental;⁶ tour operators;⁷ and indoor climbing walls).⁸ Over the past ten years these retail and service industries have shown slow but steady growth, comparable to outdoor product manufacturers. The reliable drivers in the industries have seen revenue growth ranging from 1 to 3 percent, while sporting goods stores boomed with 8 percent revenue growth between 2009 and 2017.

Figure 4. Source: IBIS World

Outdoor Product Manufacturing

National market trends in select outdoor product manufacturing markets (motorcycle, bike, and parts; ATV and snowmobile; athletic and sporting goods; personal watercraft; and bicycles⁹) show slow but steady growth over the past five years, with growth projected to continue. The small motorized recreational vehicle industry growth appears to be the fastest growing industry, with revenues growing at 6 percent between 2009 and 2017. Other outdoor-oriented manufacturing industries have shown slower revenue growth, between 1 to 2 percent.

Location-Based Markets

Location-based markets are those that cater to outdoor activities in a specific place (national and state parks; campgrounds and RV parks; or ski and snowboard resorts). Although not directly involved in the sale and manufacturing of outdoor products, these markets provide a location for outdoor recreation, indirectly supporting spending on outdoor products. Nationally, these markets have seen little to no growth in revenues. However, National Parks and National Forest visitation trends in a few similarly "outdoorsy" states, such as Alaska, Colorado, Utah, and Washington, show that regionally, these location-based markets are seeing large increases in visitation.

Campgrounds and RV parks play a supporting role in the outdoor products sector. Photo credit: Nolan Klouda



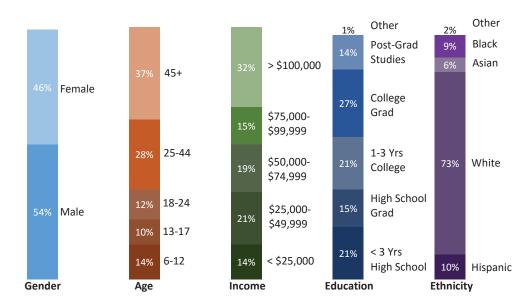
IV. Consumer Participation in Outdoor Recreation

Nearly all of the outdoor product entrepreneurs interviewed for this study are avid outdoorsmen and women themselves. They applied their own first-hand knowledge of gaps in the marketplace, ideas for product improvements, or other customer value propositions to create new products. In addition to this intimate understanding of the user experience, outdoor product companies have access to a wealth of data at the national level on consumer participation rates and demographic data—all of which can help companies target and better serve their ideal customers. This section summarizes some of the available participation data with an eye toward helping Alaska outdoor product companies. Highlights include:

- Alaska is tied with Montana for the highest outdoor participation rate out of all 50 states. According to OIA, 81 percent of Alaska residents took part in outdoor activities in 2017, compared to a national average of 48 percent.
- Participants of outdoor recreation are more likely to be male, white, and from a household earning more than \$100,000 per year. Female participation is on the rise, however.

- Alaska hosts more fishing and hunting licenses per capita than any other state, although residential fishing license sales fell in 2017.
 Nationally, both fishing and hunting declined between 2008 and 2017.
- Data on participation rates for some motorized sports like snowmachining and ATV use are sparse. However, there are nearly 45,000 registered snowmachines in Alaska—one for every 12 adult Alaskans—indicating a high level of use.
- The most popular outdoor activities in the U.S. in 2017 were hiking (43.9 million participants), jogging (43.8 million), camping (42.1 million), bicycle riding (36.4 million participants), and freshwater fishing (29.7 million), according to the National Sporting Goods Association (NSGA).
- The fastest growing activities from 2008-2017 according to NSGA were hiking, jogging, kayaking, and cross country skiing.

Participant Demographics







OIA estimated national participation in recreation 48 percent of the U.S. population in 2017, a rate that has held steady over the past ten years. That same year, Alaska and Montana tied for the highest rate of outdoor participation of all 50 states, with each coming in at 81 percent of all residents.

Nationally, outdoor recreators skew toward a larger number of male participants at 54 percent of the total population. However, this gap has been closing over the past ten years among the young adult population. Male participation has declined by approximately 6 percentage points, while female participation has increased by about the same amount. The 45 and older age bracket is the largest among outdoor participants, making up 37 percent

of the total. Income levels skew toward higher earners with 32 percent of participants reporting household income of \$100,000 or more. About 62 percent of participants have at least some college education. Outdoor participants are predominately white, at 73 percent of the population.¹⁰

Considering that most people participating in the outdoor economy engage in multiple activities, ¹¹ with the available data the level of participation in specific outdoor activities in Alaska is difficult to measure and forecast. However, it is clear from the sources available that the level of participation is significant when compared to the state's population.

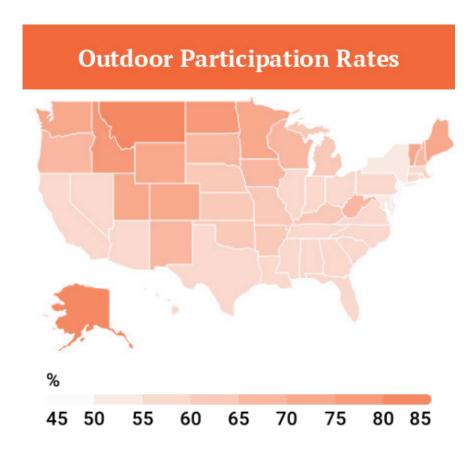


Figure 6. Source: OIA

Fishing and hunting license purchases probably speak the loudest to support OIA's participation statistic for Alaska. The State of Alaska tracks the purchase of hunting and fishing licenses, which makes the subsection of the outdoor recreation consumer base particularly easy to track.

In 2017 the State sold approximately 163,000 resident fishing licenses (and a further 298,000 non-resident fishing licenses).12 When compared

to population on a national level, Alaska sales are well above average.¹³ In 2017 roughly 1 in every 3 adult Alaska residents held a fishing permit. Comparatively, 1 in 8 adults nationally held resident fishing permits in their respective states. While actual national sales were significantly higher than the actual sales in Alaska, the statistic shows that a significant portion of Alaska's population is participating in the industry compared to the nation as a whole, and buying the gear to go along with it.

Alaska Fishing Licenses

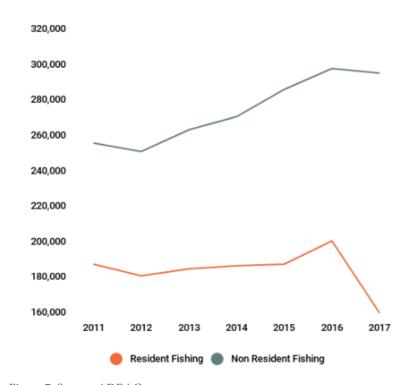


Figure 7. Source: ADF&G



A Far North Rodsmiths fly rod. Photo credit: Chris Carlin



Motorized activities are also a major portion of the outdoor recreation market in Alaska. In 2017 there was approximately one registered snowmachine per 12 adult Alaskans. Since registrations are renewed every one to six years these are likely to indicate relatively active users¹⁴. Analysis of these two segments of the user base – fishing and

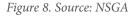
snowmachining – show the sheer size of outdoor recreation participation in Alaska, and respective potential for size of and growth in the market. Aside from power boating, NSGA data does not shed light on participation in motorized outdoor recreation, unfortunately.

US Participation in Biking



Bike Riding

- 7 11 age range had highest participation
- \$100K \$149K household income had highest participation
- From 2008 to 2017, participation declined from 38.7 to 36.4 million



9Zero7 bike on Campbell airstrip trails in Anchorage. Photo credit: Michelle Klouda



Mountain Biking

- 25 34 age range had highest participation
- \$150K+ household income had highest participation
- From 2008 to 2017, participation declined from 10.2 to 5.6 million



US Participation in Camping/Hiking/Backpacking



Backpack/Wilderness Camping

- 25 34 age range had highest participation
- \$100K \$149K household income had highest participation
- From 2008 to 2017, participation declined from 13 to 12.4 million



Camping

- 7 11 age range had highest participation
- \$100K \$149K household income had highest participation
- From 2008 to 2017, participation declined from 49.4 to 42.1 million



Hiking

- 25 34 and 45 54 age range had highest participation
- \$150K+ household income had highest participation
- From 2008 to 2017, participation increased from 33.1 to 43.9 million



Running/Jogging

- 25 34 age range had highest participation
- \$150K+ household income had highest participation
- From 2008 to 2017, participation increased from 30.9 to 43.8 million

Figure 9. Source: NSGA

Heather's Choice dehydrated meals for sale. Photo credit: Heather's Choice



US Participation in Hunting and Fishing



Fishing (Fresh)

- 55 64 age range had highest participation
- \$100K \$149K household income had highest participation
- From 2008 to 2017, participation declined from 37.8 to 29.7 million



Fishing (Salt)

- 45 54 and 55 64 age range had highest participation
- \$75k-\$99k household income had highest participation
- From 2008 to 2017, participation declined from 9.4 to 9.2 million



Hunting (Bow)

- 25 34 age range had highest participation
- \$75K \$99K household income had highest participation
- From 2008 to 2017, participation declined for 6.2 to 5.9 million



Hunting (Firearms)

- 45 54 age range had highest participation
- \$35K \$49K household income had highest participation
- From 2008 to 2017, participation declined from 18.8 to 17.7 million

Figure 10. Source: NSGA

Adventure Appetites meals being assembled.

Photo credit: Adventure Appetites



US Participation in Water Activities



Boating (Power)

- 55 64 age range had highest participation
- \$100K \$149K household income had highest participation
- From 2008 to 2017, participation declined from 27.8 to 14.9 million



Canoeing

- 7 11 age range had highest participation
- \$75K-\$99K household income had highest participation
- From 2008 to 2017, participation declined from 10.3 to 7.9 million



Kayaking

- 12 17 age range had highest participation
- \$150K+ household income had highest participation
- From 2009 to 2017, participation increased from 4.9 to 10 million

Figure 11: Source: NSGA

US Participation in Winter Activities



Skiing (Alpine)

- 12 17 age range had highest participation
- \$100K+ household income had highest participation
- From 2008 to 2017, participation declined from 6.5 to 5.9 million



Skiing (Cross Country)

- 35 44 age range had highest participation
- \$150K+ household income had highest participation
- From 2008 to 2017, participation increased from 1.6 to 2.3 million



Snowboarding

- 12 17 age range had highest participation
- \$150K+ household income had highest participation
- From 2008 to 2017, participation decreased from 5.9 to 4.1 million

Figure 12. Source: NSGA

V. The Outdoor Consumer

Linda Leary has a clear picture of her ideal customer. "The outdoorswoman," she explains, who fishes—and probably also runs, skis, and participates in yoga. As founder of Anchorage-based FisheWear, Leary saw few options in the market for fashionable clothing and accessories for women wanting to fish. She found existing options to be bland and targeted at male sport fishermen anyway. Her customers want clothing and bags that are "functional, technical, colorful, and fun" for fishing. To help establish the FisheWear brand among these outdoorswomen, she had Olympian athletes Holly Brooks and Sadie Bjornsen model her products.

Just like the wide array of activities that comprise the outdoor industry, outdoor product consumers are equally varied. Outdoor product consumers range from the occasional day hiker to the avid hunter and fisher to the experienced backcountry skier. Alaska consumers purchase a range of products to aid their participation in outdoor activities. They must be prepared for seasonal differences and climatic extremes, making their gear needs diverse, as is evidenced by Alaskans' apparent enthusiasm for outdoor products. Like Leary, they often spot underserved market segments as well.

OIA Consumer Analysis

The Outdoor Industry Association (OIA) estimates that the average outdoor recreation consumer spends an average of \$465 per year on outdoor products across four categories.



PERCENTAGE SPENT ON OUTDOOR PRODUCTS

18% 30% 26% 26%

GADGETS APPAREL EQUIPMENT FOOTWEAR

TO THE PROPERTY OF THE PR

Figure 13. Source: OIA

National statistics show that 48 percent of the U.S. population participated in outdoor recreation in 2017.¹⁵ The Outdoor Industry Association (OIA) estimates that the average outdoor recreation consumer spends an average of \$465 per year on outdoor products across four categories (18 percent on gadgets and electronics, 30 percent on apparel, 26 percent on equipment, and 26 percent on footwear).

Using outdoor expenditure data from the OIA ConsumerVue Segment reports, CED calculated the average expenditures by Alaska residents on outdoor products. Assuming Alaskans participate in outdoor recreation at the national average, estimated expenditures on outdoor products by Alaska residents alone could average \$166,500,000 annually. OIA estimates that Alaska, along with Montana, has the highest state participation rate in outdoor recreation; therefore, this estimate should be viewed as a conservative figure.¹⁶

It is also worth noting that Alaska is a major destination for outdoor recreation tourism.¹⁷ CED estimates that of the total population of people visiting Alaska, 61 percent participated in at least one form of outdoor recreation.¹⁸ Given available data, it is difficult to extrapolate a reasonable estimate of total expenditures on outdoor products made by the visitors. Anecdotally, retailers and outdoor product companies interviewed did report making significant sales to visitors, however.

Consumer Segments

Outdoor recreation consumers are difficult to segment into specific consumer groups. The diversity amongst activities that consumers could participate in vary in terms of commitment level, and each individual often engages in a multitude of activities. Participation in each of the activities included under the umbrella of outdoor recreation are not mutually exclusive; a single individual could rock climb, ski, fish, and snowmachine and need different gear for each. Studies looking at

CED estimates that of that total population of people visiting Alaska, 61 percent participated in at least one form of outdoor recreation.

outdoor recreation participation have used multiple different consumer segmentation schemes.

OIA's ConsumerVue segment report divides consumer into seven categories based on consumers' level of interest and engagement in the outdoors.¹⁹ Although these segments are probably relatively aligned with the recreational habits of most Alaska consumers, they may not completely capture the Alaska outdoor market. Many Alaskans have a "make use of the land" mentality that is not specifically present in OIA's ConsumerVue segments. This paradigm stems from activities CED has determined are an integral component of the Alaska outdoor lifestyle, including subsistence activities and personal use hunting and fishing. Nevertheless, OIA's consumer segments represent some of the most thorough market research that is available and contain very specific information about consumer preferences and outdoor products spending habits, which is useful for the purposes of this report.

Caines Head Trail, Caines Head State Recreation Area Photo credit: Richelle Johnson



	Outdoor Recreation	Customer Segments	
The Achiever Focused on competition and performance	 Spends \$799/ year on outdoor products 10% of outdoor consumers and 17% of spending 	23% gadgets29% apparel24% equipment23% footwear	 Mostly between 25 and 34 years old Spends 27 hours/ week outdoors
The Outdoor Native Outdoor recreation as a lifestyle choice	 Spends \$637/year on outdoor products 12% of outdoor consumers and 16% of spending 	12% gadgets33% apparel29% equipment26% footwear	 Mostly between 35 and 44 years old Spends 22 hours/ week outdoors
The Urban Athlete Competition, thrills, and connection	 Spends \$781/year on outdoor products 20% of outdoor consumers and 33% of spending 	24% gadgets27% apparel24% equipment24% footwear	 Mostly between 25 and 34 Spends 24 hours/ week outdoors
The Aspirational Core Possibility for adventure and exploration	 Spends \$476/year on outdoor products 14% of outdoor consumers and 32% of spending 	17% gadgets31% apparel25% equipment27% footwear	 More likely to be married with kids Spends 20 hours/ week outdoors
The Athleisurist Enjoyment and escape	 Spends \$284/year on outdoor products 20% of outdoor consumers and 32% of spending 	8% gadgets29% apparel32% equipment31% footwear	 54% between the ages of 45 and 65 Spends 19 hours/week outdoors
The Sideliner Low key and leisure oriented	 Spends \$162/year on outdoor products 12% of outdoor consumers and 4% of spending 	7% gadgets28% apparel32% equipment33% footwear	 Predominantly female, 61% Spends 13 hours/ week outdoors
The Complacent Family time and sushine	 Spends \$143/year on outdoor products 14% of outdoor consumers and 4% of spending 	8% gadgets31% apparel23% equipment38% footwear	 Mostly between the ages of 45 and 65 Spends 11 hours/week outdoors



VI. Alaska's Outdoor Products Industry

The outdoor products industry in Alaska has developed through necessity and innovation like many industries in the state. Outdoor product business owners whom CED interviewed overwhelmingly stated that their business grew out of their pursuit of activities they loved and their own creative problem solving to address issues they encountered on a regular basis. For example, Eric Parsons of Revelate designed his first bags to suit his own backcountry bike riding and his business took off from there. Revelate now sells its line of bike bags and other accessories around the world.²⁰

The outdoor product industry in Alaska is, for the most part, characterized by niche businesses that create products or services that not found anywhere else (i.e. customization, repairs, specialized products, technical components, or "experience driven" consumerism). Interviews with business owners and managers revealed that Alaska's outdoor products industry is home to The outdoor product industry in Alaska is, for the most part, characterized by niche businesses that create products or services that not found anywhere else.

experienced firms that have been operating and manufacturing in Alaska for years, new startups trying to capitalize on the Alaska brand and physical location within the supply chain, and many somewhere in between. Discussed below are some subsectors of the outdoor recreation industry in which Alaska companies design or create products.





Winter Activities

Alaska is a state with climatic extremes. With a winter that can last up to seven months, most Alaskans do not let cold temperatures stop them from exploring, exercising, competing, and having fun in the outdoors. Skiers, snowboarders, snowmachiners, and many others impatiently wait for snow every year and micro-analyze weather forecasts for the best conditions for adventures.

Alaska's cold weather makes it an excellent place to test winter gear. The cold winter temperatures provide an environment that can push the extremes of products that need to be warm, highly technical, and/or durable. While the conditions of the Alaska winter provides ample testing ground for products nationally, it also has the potential to lend credibility and marketing power to Alaska-made products.

Winter activity product companies interviewed:

- Apocalypse Design
- Avy Pouch
- Fairweather Ski Works

Winter activity product categories made or designed in Alaska:

- Avalanche protection
- Dog booties
- Dog leash hand warmers
- Skis
- Snow shoes
- Snowboards
- Specialized winter camping gear
- Spiked shoes
- · Winter clothing



Bicycling

A longtime fan of winter sports, James Stull thought bicycling should be a year-round activity. The early fat-tire bike models, designed for riding on snow, failed to satisfy him fully. He wanted something lighter with a more ergonomic feel. After spending some time modifying his fat-tire bike, he decided to design something better. He found a manufacturer and pre-sold a small production run of bike frames under the label 9:Zero:7 after the state's area code. Today, the company is a household name in the world of adventure biking.

If you drive around Anchorage you will see an increasing number of roads featuring dedicated bike lanes. Across the state bike racks are full of road bikes, mountain bikes, fat-tire bikes, and everything in between. Biking, which for years was traditionally a summer-oriented sport, has become a booming winter sport with races like the Susitna 500, networks of winter trails throughout cities, and a growing community of winter adventurers. This boom created demand for winter-centric accessory products, such as pogies and bike shoe covers, and has also started to transform into an industry focused on "adventure biking." Although the bicycle industry has been an established market for a long time, entrepreneurs have started to reimagine old styles and technologies and a couple Alaska businesses have found global success.

Bicycling product manufacturing companies interviewed:

- 9:Zero:7 Adventure Bikes
- Revelate Designs

Bicycling product categories made or designed in Alaska:

- Bikes
- Bicycle bags
- Pogies

A snowboard made by Fairweather Ski Works. Photo credit: Fairweather Ski Works

Hunting and Fishing

Few activities are as quintessentially Alaskan as fishing and hunting. Alaska Native peoples have harvested fish and game as a matter of subsistence for millenia. The state's constitution provides specific provisions for public use hunting and fishing, stating "[w]herever occurring in their natural state, fish, wildlife, and waters are reserved to the people for common use."21 Alaskans make use of the resources to feed their families, to generate income, and for recreation. One of the core functions of the State of Alaska Department of Fish and Game's communications and outreach efforts is to promote recreational fishing and to recruit and retain anglers of all ages.²² Data reporting the number of resident and nonresident hunting and fishing licenses show relatively steady sales, although 2017 saw a notable drop. For businesses like FisheWear, it appears that the major push in the subsector is to get a wider range of people involved, creating a wider consumer base consisting of more women and a wider range of ages.

Hunting and fishing product manufacturing companies interviewed:

- Carlin Bamboo
- FisheWear

Hunting and fishing product categories made or designed in Alaska:

- Fishing rods
- Gun accessories
- Hunting and fishing apparel
- Knives and blades

Tube and dry bag made by FisheWear Photo credit: FisheWear In 2017 there were approximately 44,700 registered snowmachines in Alaska, which is means an average of roughly 1 in 12 Alaskan residents owned one.

Motorized Activities

Snowmachines, watercrafts, ATVs, and other modes of off-road transportation have long been integral to Alaskans' ability to move from community to community, where roads are lacking, to hunt and fish, or access other resources.

In 2017 there were approximately 44,700 registered snowmachines in Alaska, which is an average of roughly 1 per 12 adult Alaska residents. Snowmachine users are only a segment of motorized recreation but the statistic lends weight to the size of the subsector. Considering that these activities will continue to be key elements of the everyday lives of many Alaskans, it seems that recreational usage of many forms of motorized vehicles may also hold steady into the future.



Camping, Hiking, and Backpacking

Camping, hiking, and backpacking in Alaska make up a significant subsector in and of themselves, but these activities are also interwoven throughout most, if not all, outdoor recreation activities. For example, many people may backpack to remote locations to hunt or fish, an angler may choose to hike to a remote alpine lake to access the most pristine grayling fishing, or a kayaker may go on a multi-day paddle and camp on beaches along the way. Food, footwear, clothing, camp stoves, etc., some of the products necessary to engage in these activities, are among the most essential for engaging in most outdoor activities.

The level of activity through which people engage in the subsector is incredibly deep, from day hikers and Denali climbing mountaineers to motorhome campers and multi-week backcountry adventurers. For any level of activity the product needs of the participant can vary widely. Some of the gear requirements can either be highly technical or simple and easy to use in tight situations. Alaska entrepreneurs have identified a niche producing easy-to-use, well-adapted, and durable products. From new kinds of technical fabrics, to survival kits and backcountry meals, CED interviewed entrepreneurs who are making products that creatively address the extremes of Alaska.

Camping, hiking, and backpacking product manufacturing companies interviewed:

- Adventure Appetites
- Alpine Fit

Camping, hiking, and backpacking product categories made or designed in Alaska:

- Apparel
- Backcountry gear
- Dehydrated food
- Survival gear
- Tents

Water Activities

John Peterka, owner of Sagebrush Dry likes to tell a particular story relayed to him by a customer. The woman had been kayaking when her boat capsized and she lost all of her gear. Sometime later, a fisherman found the bag—a dry bag made by Sagebrush—25 miles away and tracked her down to return it. When she opened it, all of her belongings were perfectly dry and she even ate the energy bar stowed inside.

With more than 3 million lakes, over 12,000 rivers, and 33,904 miles of shoreline, Alaska has incredibly rich and diverse water resources available for recreation. Like many other subsectors in the outdoor products industry, Alaska products for water activities are characterized by durable that specialize in being functional in extreme conditions.

This subsector of the industry has been characterized by products that are now industry standards and innovating enterprises that have reimagined water sports and recreation. The common thread is a manufacturing system that specializes in attention to detail and durability.

Water activity product manufacturing companies interviewed:

- Alpacka Raft (now based in Colorado)
- AlumaSki
- Great Land Welding
- Nomar Alaska
- Sagebrush

Water activity product categories made or designed in Alaska:

- Dry bags
- Packrafts
- Watercraft

VII. Education and Workforce

During CED's interviews a number of businesses interviewed identified a workforce need for employees with outdoor centric business, leadership, and skills. Many noted that the university system could play a role in filling this gap through degree programs and skills trainings, creating a workforce pipeline connecting students with outdoor business skills with businesses and startups. Alaska is already home to a number of outdoor programs through Alaska Pacific University (APU) and the University of Alaska system that could potentially be better leveraged.

APU's Outdoor Studies degree offers the area of study probably most relevant for the purposes of this report. Paul Twardock, a professor of Outdoor Studies teaches a class entitled "The Business of

Recreation" at APU. His class is project based and teaches student business skills that could make them a valuable asset to any outdoor products business. Students create their own outdoor related business and the theories, processes, and legal concepts behind entrepreneurial recreational organizations. Twardock believes the university systems could play a crucial role in connecting students with the industry for jobs and internships. He notes there are large barriers for students and first time entrepreneurs entering the industry, including startup funding and permitting. Creation of a larger network of support between students and business owner could provide some of the support business owners identified as a need, such as marketing and skills development for employees.

Accredited Outdoor University Programs in Alaska University Degree University of Alaska Southeast Certificate in Outdoor Skills and Leadership University of Alaska Anchorage (Prince William Associate of Applied Science in Outdoor Leadership Sound College) **Outdoor Studies Bachelor of Arts** Alaska Pacific University Alaska Pacific University (1st year Palmer and 2nd Concentrations in Land Managment year Anchorage) **Outdoor Education** Outdoor Entrepreneurship Snow Science **Adventure Therapy Non-Accredited Outdoor University Programs in Alaska** University of Alaska Fairbanks **Outdoor Adventures Trips** Nanook Recreation **Academic Classes**

Figure 15. Source: CED

VIII. Results: Strengths and Weaknesses

CED-led interviews with Alaska outdoor product manufacturers and designers showed that on the business level there is a wealth of passion and excitement behind Alaska manufacturing and products, but the industry suffers from many of the same issues that plague other manufacturingbased industries across the state. CED identified a number of strengths and weaknesses that the industry will have to confront going into the future. In some cases a given attribute—like the state's geographic location—may be both a strength and a weaknesses, with positive and negative aspects from an industry perspective.

Strengths:

Internet retail. The power of Internet retail as a tool to reach consumers is undeniable. Almost all of the outdoor product manufacturers and designers interviewed for this study use online retail, primarily through their own websites, as one of their main sales methods. Many companies reported that this allows them to compensate for higher manufacturing and shipping costs by keeping prices lower than they might otherwise if they were selling through a retailer (who must add their own markup).

- Geographic location. While the remote location can make manufacturing an expensive endeavor in Alaska, a few business owners have begun to make use of Alaska's position as a shipping hub for goods flying across the world. There seems to be a certain amount of untapped benefit to making use of the airline supply chains already moving through the state.
- The Alaska brand. The Alaska market appears to be populated with consumers eager to support local businesses and locally made products, according to local retailers. Alaska business owners have identified a desire to participate in the culture of Alaska-made products. Outdoor product companies say their non-Alaska customers also view the Alaska brand in a positive light. Based on interviews with outdoor products manufacturers and designers, it appears that there is the potential to put a lot more power behind the Alaska brand.
- **Product specialization.** Rather than competing directly with large national or international manufacturers, Alaska outdoor product companies seek out niches in the market that are underserved. They build reputations with customer segments they know well and are well positioned to serve.

Products Filter V 10 products Sort Cam-Dry Bag \$150.00 Hands Free Berry Day Tripper Dry Daypack Basket \$245.00 \$280.00 \$45.00

Sagebrush Dry online store. Photo credit: Nolan Klouda

Weaknesses:

- **Profit margins.** Many of the retailers interviewed reported that the high cost of manufacturing in Alaska (mainly the cost of materials due to shipping costs, but also including electricity, wages, machinery, and rents) makes meeting the margins required to sell goods through outdoor retail stores a seemingly unachievable goal. However, most Alaska product manufacturers have forgone that corner of the retail market and instead focused on online sales. Although a conscious choice by most of the outdoor product companies, it means that many businesses forgo the marketing and direct consumer interaction that is offered by brick and mortar stores.
- Location, location, location. Alaska's geographic isolation makes it an expensive place to do business. Shipping-wise, Alaska is sometimes equated to a foreign country. For example, when shipping to Europe costs \$75, shipping to Alaska can cost \$150. It's a fact that makes the cost of raw materials and finished products high and drives up the cost of doing business. The state's remoteness also poses difficulties in connecting with customers outside of Alaska.
- Workforce development. Most of the companies interviewed mentioned having difficulty finding employees with the necessary skills. The trend was to look for potential

- employees outside the industry who have critical thinking skills – those people whose soft skills lend themselves to problem solving and mechanically-oriented thought processes that make employees self-sufficient and fast learners—rather than focus on finding workers with skill sets that exactly match the process work the manufacturing companies do. However, hiring employees based on introductory skills and training them from the ground up, means that it can take six months to a year for a new employee to be profitable. However, despite this more flexible approach to finding employees, many companies still struggle with finding individuals trained with those soft skills, showing an apparent gap in the labor market.
- Market saturation and competition. The market for outdoor recreation products has been relatively well established for decades, and leading manufacturers have loyal customer bases. Retailers like REI and Cabela's have also entered the product manufacturing market with their own store brands, intensifying the competitive landscape. While many Alaska manufacturers and designers have set themselves apart through specialty products, customization, and unique designs, but some mentioned the difficulty of competing with overseas manufacturers—especially those in China. Cheaper substitute products are always a potential threat.



Professor Paul Twardock and students. Photo credit: APU

IX. Recommendations

Alaska's outdoor products industry is a small sector composed of relatively young companies. Nonetheless, it is home to entrepreneurs who know how to harness Alaska assets and turn one of the state's major resources--wilderness itself--into a strategic advantage. Although several interviewees spoke about the importance of outdoor recreation for quality of life, attracting visitors, and other community and economic benefits, the recommendations described here focus on outdoor product makers and designers. A separate report by CED and DED will discuss outdoor recreation and economic development in a broader context.

Marketing

A small number of Alaska-based outdoor product companies actively leverage the Alaska brand as a selling point for their gear. Bicycle-maker 9:Zero:7, for instance, advertises to a national audience that its bikes are "designed in Alaska for all conditions." Although no longer based in Alaska, Alpacka

Rafts still advertises the company's origins in designing a packraft in Alaska for the state's rugged environment.²⁴ Heather's Choice, also targeting a national audience, stamps their food pouches with Made in Alaska branding on products that are part of the certification program.²⁵

A majority of the companies interviewed, however, indicated limited capacity for, or a lack of comfort with, marketing. As one noted, "marketing is expensive. I am not taking advantage of it in the digital marketing world." A local retailer cited a reason behind a manufacturer's recent closure as discomfort with and lack of marketing. Connecting companies to training opportunities focused on marketing, through the Alaska Small Business Development Center, the Alaska chapter of the American Marketing Association, or private workshops could help companies quickly grow their marketing skills or help them identify the return on investment of hiring a consultant or marketing staff.





Alaska Outdoor Brand Development

Through the Made in Alaska program, the Alaska Division of Economic Development has a successful track record with consumer-oriented marketing. The program authorizes the use of the familiar Made in Alaska mother bear and cub logo to products manufactured in the state. Made in Alaska permit holders benefit from the brand recognition as well as access to promotional events, a listing in an online directory, and other perks. In a 2015 survey, permit holders reported that the program increased their sales by as much as 45 percent. ²⁶ Several companies interviewed for this study, including Adventure Appetites, Apocalypse, Far North Rodsmiths, and Nomar, are permit holders.

To expand upon this shared branding model, the state or a coalition of private businesses could create a specialized Alaska outdoor brand. Such a brand would have its own certification or permitting process, a recognizable logo, and dedicated marketing efforts to promote all participating businesses as a class. It might associate Alaska products with qualities that

complement the state's image as a pristine wilderness and an (occasionally) unforgiving place to experience the outdoors, requiring premium gear. The brand could convey to consumers a combination of durability, specialization, and suitability to harsh conditions. The central message would be that products capable of working reliably in the Alaska wilderness would work anywhere.

Unlike the Made in Alaska program, this outdoor brand could extend beyond products manufactured in the state. Tested in Idaho, an initiative of the Idaho Department of Commerce, recognizes and promotes outdoor recreation companies headquartered in the state that test their products there, while the products can be manufactured out of state. The program has its own standalone website, social media outlets, and an online directory with background stories on each company, along with a listing of products. Tested in Idaho is part of a coordinated statewide effort to advance the state's outdoor recreation sector as an economic driver.²⁷





Trade Shows and Events

A shared marketing strategy, either run by the state or organized privately, could incorporate trade shows to extend the reach of Alaska's outdoor product companies in-state and nationally. An in-state trade show, perhaps in conjunction with the Great Alaska Sportsman Show in Anchorage or the Confluence Summit on the Outdoors in Valdez, could attract members of the national outdoor press like Outside Magazine as well as generate increased local interest.

Assisting Alaska companies wishing to attend national and regional trade shows is another viable strategy. In the past, DED has shared the cost of attending trade shows for other industries like mining and unmanned aerial vehicles. If funded, the same approach could be applied to the outdoor product industry to help the companies build relationships with customers and suppliers. Major trade shows in the U.S. include Outdoor Retailer's Summer Market and Winter Market, which attract thousands of participants from the retail and manufacturing, and provide a platform for the release of new products to be covered in the national press. In the absence of funding to attend trade shows, DED could help coordinate and spread awareness of upcoming events.



Sprints and Catalyzers

Design sprints and the tools used in the process of design thinking can spur new product innovation among aspiring and existing outdoor product companies. Design sprints are a format popularized by Google Ventures and other technology companies to accelerate the process of mapping customer needs and developing new product prototypes in as little as five days. In 2017 and 2018, CED hosted design sprints (called Catalyzers) for the ocean technology and renewable energy realms, with students, entrepreneurs, and technical specialists participating. Teams created prototypes (such as 3D-printed models) and presented them at public showcase events. CED's Catalyzers emphasize iterative design, where a concept is developed, tested, and then refined in an ongoing sequence of continuous improvement. Participants learn new techniques for assessing customer needs and generating solutions with commercial potential. Catalyzers also introduce like-minded, talented individuals to form future collaborations.

Another twist on the design sprint concept would be to use the process to create new marketing assets for existing businesses. Instead of aspiring entrepreneurs creating a new outdoor product, the object might be a new e-commerce website, campaign, logo, or brand concept. In Alaska, Pitch. Click. Give is an annual event that uses a similar approach for nonprofit organizations to receive professional marketing assistance through a creative team process.

Participants in the VOLT49 Renewable Energy Sprint. Photo credit: Ciara Zervantian

Design Thinking

Another strategy for the industry to create innovative outdoor products is through the use of design thinking. The term refers to "a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success." Innovative product designers in numerous industries use the tools of design thinking to identify unnoticed customer needs and design products that meet them. Design thinking trainings or workshops targeting existing and aspiring outdoor product companies could be an effective way to grow product offerings within the sector.

However, existing outdoor product businesses did not identify creation of new products as a major priority. Most were focused on growing sales and optimizing financial performance with their existing categories. The sprint and design thinking recommendations are instead aimed at aspiring entrepreneurs wishing to take advantage of Alaska's setting as a place to spot opportunities for new products, and to test those products.



Talent Development

Most of the interviewed companies expressed at least some level of difficulty finding suitable workers. In some cases, the business owners struggled to find relatively uncommon skill sets like sewing. Almost universal, however, is the need for reliable workers with good problem-solving and other "soft" skills. One potential solution is to connect university and vocational students with these small companies for internships. Several universities around the country facilitate student internships at startup companies, providing students with valuable experience and startups with a pool of talent. Talent 4 Startups, a nascent effort by startup accelerator Launch Alaska, is currently attempting to create more linkages between students and entrepreneurs. Given the University of Alaska and APU offerings in outdoor recreation, the outdoor products industry may be a logical area of focus for the effort.

University, vocational, and even high school student internships can help address some of the challenges identified by the interviewed businesses. For instance, marketing student interns could help outdoor product businesses optimize their websites or improve their promotional materials. Engineering or vocational students could help the companies design more efficient manufacturing processes, as another example.

A recent design thinking exercise focused on winter tourism. Photo credit: Ciara Zervantian

X. Endnotes

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North and South Suicide Peaks, Chugach State Pakr. Photo credit: Nolan Klouda



XI. Contributors



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