

Manufacturing Business Attraction Analysis

Elevating the Outdoors



Ideas that sustain.



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1. INTRODUCTION

This Manufacturing Business Attraction Analysis is the first of three linked reports that, together with a sales pitch packet, comprise a marketing plan to retain and recruit outdoor recreation and lifestyle manufacturing businesses and employees to Western Maryland.

The initiative's goal is to fully develop Allegany and Garrett counties' potential as an outdoor recreation and lifestyle manufacturing hub and to create jobs, leverage private investment, and use the region's access to natural resources as a marketing tool.

Western Maryland has abundant natural resources, stunning outdoor vistas, a supportive community, and proximity to many of the country's major markets. Outdoor recreation and lifestyle products manufactured in Allegany and Garrett counties can be tested on its whitewater rivers, trout streams, trails, and ski slopes. These unique features all come together in the region to provide an opportunity to grow manufacturing businesses—and to start new ones—that make outdoor recreation and lifestyle products.

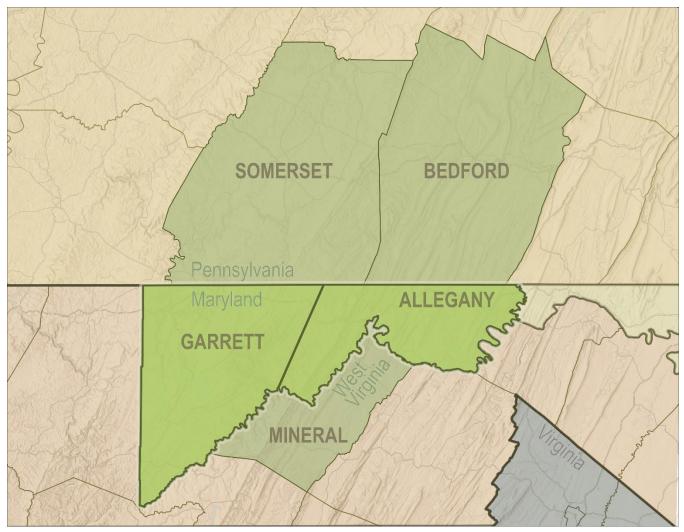
This is a regional initiative. Recruiting outdoor recreation and lifestyle manufacturing businesses to Allegany and Garrett counties will depend not just on the assets and workforce in these two counties, but also on their neighbors. As such, while this initiative's marketing efforts will focus on Allegany and Garrett counties, aspects of our analysis also include Mineral County in West Virginia and Bedford and Somerset counties in Pennsylvania (See Figure 1). Including the larger region enables this analysis to explore how businesses in the two primary counties could grow by supporting and leveraging the economic activity in the immediate region.

The economies of Allegany and Garrett counties are undergoing a transition as they shift from a dependence on coal, timber, and agriculture into new and more diverse industries. This transition has impacted the region's population, which declined in the decade between 2010 and 2020 by about 10,000 people. In 2020, Allegany County's population of about 67,000 more than doubled Garrett County's population of about 28,000. However, at about \$60,000 in 2020, the median income of households in Garrett County exceeds those in Allegany County by about \$9,000.

This Manufacturing Business Attraction Analysis combines an initial quantitative analysis with followup qualitative interviews with business owners, economic development and tourism professionals, and civic leaders. These interviews helped clarify the initial metrics in the compatibility matrix and extended the understanding of the region's economic profile and potential for growth.

Interviewees noted the benefits of both growing existing businesses and attracting new ones. While some manufacturing operations are currently located in the region, few of these operations make outdoor recreation and lifestyle products. Nearly 2,800 employees are estimated to work in manufacturing industries in Allegany and Garrett counties. These employees account for about 6 percent of the total employment in the region and about 9 percent of the total regional output or sales. About 1,000 of those employees are in Garrett County, with the remainder in Allegany County. Across the nation, manufacturing employment averages about 9 percent of total employment, which would indicate there is potential for these counties to expand activity in the manufacturing sector.

Figure 1: The five-county region



Some regional manufacturers—such as cabinetry makers—could diversify production to also make goods for outdoor recreation. Existing businesses may also produce byproducts that could be used by existing or new companies focused on the outdoor recreation market. Being aware of the full outdoor recreation manufacturing ecosystem, and how existing manufacturers in the region could expand and leverage their productivity, can only improve the overall competitiveness of the regional economy, regional productivity, and wages. However, for this strategy to work best, Allegany and Garrett counties will also need to market their unique strengths associated with outdoor recreation activities in a way that attracts new businesses to the region.

The quantitative and qualitative research focused on four outdoor recreation and lifestyle manufacturing industry clusters that have great potential in the region. The clusters identified include:

- 1. **Apparel.** The Apparel Cluster includes businesses that produce many types of clothing footwear, and fabric-type materials that would be utilized in outdoor recreation.
- 2. **Outdoor Vehicles, Boats, Parts, and Accessories.** The Outdoor Vehicles, Boats, Parts, and Accessories Cluster includes not just the manufacturing of vehicles and boats, but also parts and accessories used to build, fix, and outfit them. In addition to boats, it includes off-road vehicles, snowmobiles, motorcycles, bicycles, and eBikes.

- 3. **Timber/Wood.** The Timber/Wood Cluster includes manufacturing that utilizes local forest products to make a wide variety of products, many of which can be marketed to the visitors who come for the region's outdoor recreation and lifestyle opportunities. Some outdoor recreation–related products made from wood, such as certain boats, oars and other boating accessories, are captured in the previous cluster; however, the benefits generated by sourcing locally produced timber would still apply. Our analysis of this cluster acknowledges both small-scale craft manufacturing as well as larger production techniques.
- 4. **Specialty Foods.** The Specialty Foods Cluster includes businesses that produce energy bars, trail mix, energy drinks, or other foods and beverages aligned with outdoor recreation. This cluster includes small-scale production using inputs grown on local farms.

A matrix with five metrics was developed to help identify the compatibility of the industries in the four clusters with the unique resources and assets of the region. This approach utilized both general metrics such as employment and occupational distributions, as well as metrics unique to a regional input/output model that could identify commodities needed for and produced by the industries within the clusters. Thus, the measures utilized in the compatibility matrix were based on an ecosystem approach to the regional economy, and it evaluates both the health of the region's industries and the availability of the resources needed to enhance the region's overall economic health.

The understanding derived from this rigorous economic approach enables the development of policies and marketing strategies that will contribute to more productive and competitive industry clusters in the region. The five metrics that comprise the compatibility matrix, described more fully in Appendix A, are:

- Metric 1: Regional concentration. The industry's existing concentration in the region.
- Metric 2: Economic impact. The industry's regional economic impact.
- **Metric 3: Import substitution.** The potential for the industry to reduce its dependence on inputs from outside the region.
- **Metric 4: Input support.** The industry's ability to provide inputs to the region's outdoor recreation and lifestyle manufacturing industries.
- **Metric 5: Occupational mix.** The suitability of the region's existing labor force to support growth in that outdoor recreation and lifestyle manufacturing industry.

As part of the qualitative research, our interviews included a question to identify comparison geographies that have had success in attracting outdoor recreation and lifestyle manufacturing businesses. While interviewees brought up many possible cities and counties, Asheville, North Carolina and Grand Junction, Colorado were brought up several times and stood out. In the 1980s, Asheville's economy was troubled due to the loss of traditional industries, but through an intentional process that capitalized on its outdoor recreation and natural assets, Asheville and Buncombe County now have thriving tourism industries. Grand Junction and Mesa County also have some things in common with Western Maryland, with interstate access and a wide variety of outdoor recreation assets.

To add context to our analysis of the four clusters, we conducted a void analysis to better understand how the Western Maryland economy compares to these aspirational geographies. A void analysis compares the industry makeup between geographies to identify potential gaps in business and service types. The cumulative industry makeup of Allegany and Garrett counties was compared independently to that of Mesa County, Colorado and to Buncombe County, North Carolina to identify voids as well as industries within each cluster that have succeeded in these comparison geographies.

2. EXPLORING ALLEGANY AND GARRETT COUNTIES

This report focuses on outdoor recreation and lifestyle manufacturing, which will be most likely to succeed if it aligns with and builds upon the outdoor recreation opportunities and lifestyles available in Allegany and Garrett counties. These two counties are home to 170,000 acres of state parks and state forests, which accounts for 31 percent of all public acreage owned by the State of Maryland. The counties have over 500 miles of developed trail systems, one national park, three state forests, and 12 state parks.

2.1 Water-based recreation

Deep Creek Lake is the center of many of the outdoor recreation opportunities in Garrett County. It is a four-season destination with two peak seasons: summer and winter. In the spring, summer, and fall, the lake itself is the main attraction. While many people use private boats and equipment, outfitters also provide boats and equipment for jet skiing, fishing, sailing, kayaking, and pleasure boating on the lake.

The region also offers world class whitewater for rafting and kayaking. In fact, the 1992 U.S. Canoe and Kayak Team Olympic Trials were held in Western Maryland. The Youghiogheny River, which flows north through Garrett County, offers a variety of levels up whitewater up to Class V rapids that draw boaters from all over the world.

Sixteen whitewater outfitters in Garrett County help visitors access the Youghiogheny River and other boating destinations, such as the Savage River and the Savage River Reservoir. Floating and fishing are also popular activities on the North Branch of the Potomac River, located in Allegany County, often with the assistance of river guides.

Rocky Gap State Park in Allegany County is home to the 243-acre Lake Habeeb. Fishing, kayaking, and stand up paddle boarding are all popular activities on the lake.

In addition to these natural attractions, a private whitewater course is located atop Wisp Resort in Garrett County. This Adventure Sports Center International facility can be used by boaters to train in a controlled environment, and in 2014 it hosted the ICF Canoe Slalom World Championships.

In Allegany County, plans are in the works to develop the River Park at Canal Place, which will provide additional river access in downtown Cumberland by removing the dam on the North Branch of the Potomac River. These new access points will add to a central recreational area that already includes access to the GAP Trail and the Chesapeake and Ohio (C&O) Canal Towpath at Canal Place. Plans are also in the works for a man-made whitewater rapids park at this location.

2.2 Land-based recreation

The 12 state parks in Western Maryland are focal points for outdoor recreation with hiking, mountain biking, rock climbing, and camping opportunities. Garrett County hosts the most state parks of any county in Maryland, including:

- Big Run State Park,
- Casselman River State Park,
- Deep Creek Lake State Park,
- Herrington Manor State Park,
- New Germany State Park,
- Sang Run State Park,
- Swallow Falls State Park, and
- Wolf Den Run State Park.

Four state parks are located in Allegany County: Dan's Mountain State Park, Rocky Gap State Park, Sideling Hill Creek State Park, and Will's Mountain State Park. Rocky Gap State Park is the most-visited state park in Western Maryland and hosts the second-largest campground in the state.

Three state forests provide additional outdoor recreation activities in the region. Garrett County hosts Potomac Garrett State Forest and Savage River State Forest, and Green Ridge State Forest in Allegany County is the largest contiguous block of public land in Maryland.

In Allegany County, the Great Allegany Passage (GAP) trail and the C&O Canal Towpath have drawn an estimated 330,000 users per year in recent years. The trails meet at Canal Place in Cumberland. The GAP Trail goes northwest to Pittsburgh, while the C&O Towpath parallels the Potomac River southeast to Washington, DC, within the C&O National Historic Park. Local Allegany County businesses cater to trail users by renting bicycles, providing shuttle services, and offering lodging and meals.

Cross-country skiing is popular in Western Maryland at state parks and state forests and on private land. Wisp Resort is the only downhill ski resort in Maryland. As climate change progresses, snow-based activities may become more difficult to sustain; however, Wisp is a year-round resort that includes not just ski slopes, but also whitewater rafting, kayaking, and golfing. Wisp has multiple retail stores that sell outdoor equipment and apparel, including ski equipment, golf gear, canoes, and kayaks.

More broadly across the region, a wide variety of outdoor activities are popular that do not rely on snowfall, including hiking, hunting, rock climbing, mountain biking, and bird watching. Also, eBikes are becoming more popular on the GAP Trail and other trails where they are allowed.

Off-road vehicles (ORVs) are commonly used. Permits are available to ride on county roads, and ORVs can also be used in private hunting clubs and state forests. Also, the recently opened Wolf Den Run State Park in Kitzmiller is designed for ORV riding and has proven to be popular.

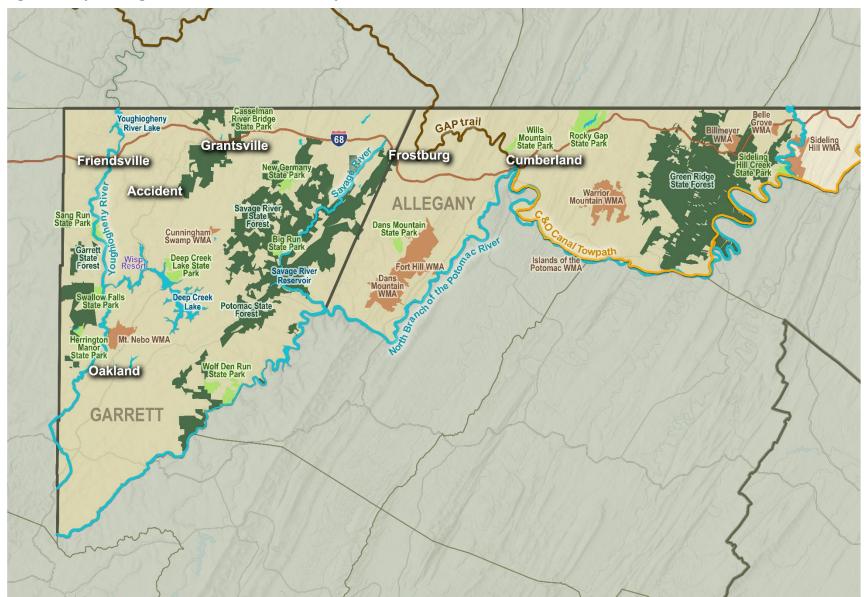


Figure 2: Key existing outdoor recreation and lifestyle assets

2.3 Outdoor recreation and tourism-based businesses

Numerous tourism-related businesses build upon the region's outdoor recreation assets. Local outfitters help visitors access the region's rivers, lakes, trails, and slopes. Wheelzup Adventures in Cumberland, for example, offers shuttle services, tours, and bicycle and kayak rentals, and High Mountain Sports in Garrett County sells a wide range of ski, bicycle, and water sport gear and offers rentals.

Overnight visitors have many lodging options. Camping is available at private campgrounds and at state parks and forests. In addition to traditional hotels, Wisp Resort, Rocky Gap Casino Resort, and Airbnb and VRBO rentals, the two counties offer other unique lodging opportunities. Savage River Lodge, for example, is located in an inholding in Savage River State Forest and offers solar-powered yurts, trails, and fly-fishing expeditions. Ella's Enchanted Treehouses offers furnished, luxurious treehouses with access to hiking, biking, snowmobiling, skiing, swimming, and fishing.

Relatively recent arrivals in the region are several breweries, wineries, cideries, and distilleries, which are popular destinations for tourists and residents. These include, for example, Charis Winery & Distillery, Route 40 Brewing & Distilling Company, and Dig Deep Brewing Company in Allegany County, as well as Deep Creek Cellars, Branch Bender Cidery, and Mountain State Brewing Company in Garrett County.

2.4 The benefits of living and working in Allegany and Garrett counties

A significant benefit of living and working in Western Maryland is the ability to work where you play. Residents can easily maintain healthy, active lifestyles, taking advantage of the recreational activities within a short distance of home or office. The stunning beauty of the mountains and rivers is unique in Maryland, and residents experience clean air and a high quality of life in all four seasons.

Allegany and Garrett counties have numerous other benefits. Compared with major metropolitan areas, there is very little traffic. Western Maryland has a good public education system with reasonably sized classes. High schools offer advanced classes, competitive sports, and quality music programs. Relationships between the education system and the business community are based on open communication and continual improvement that enhances capacity of the region's labor force. Further, Frostburg State University, Garrett College, and Allegany College of Maryland provide many secondary education opportunities, and all three schools have curricula that support the recreation industry.

The cost of living in Western Maryland is lower than in nearby major metropolitan areas. Even in Garrett County, where homes in the Deep Creek area are relatively more expensive than Allegany County, families can buy a lot more home for the same price, as compared with the Washington, DC metropolitan area. Also compared with major cities, there is less crime in Allegany and Garrett counties, and people are friendly and know their neighbors.

For these reasons, Western Maryland is a beautiful location from which to work remotely. In fact, many people moved to the region due to the COVID-19 pandemic, seeking to work remotely or to move to a rural location while staying within close proximity of Pittsburgh, Baltimore, and Washington, DC. As illustrated in Figure 3, much of Maryland, Pennsylvania, New Jersey, Virginia, West Virginia, and Ohio is within a five-hour drive of Allegany and Garrett counties. Western Maryland is also within a five-hour drive of numerous international ports in Maryland and surrounding states.

In addition to this road access provided by Interstate 68, Allegany and Garrett counties are close to Hagerstown Regional Airport, with Allegiant Airlines flights to Orlando and St. Petersburg, Florida, as well as Myrtle Beach, South Carolina. The airport has the second-longest runway in Maryland and is routinely used to land Air Force One on its way to to Camp David.

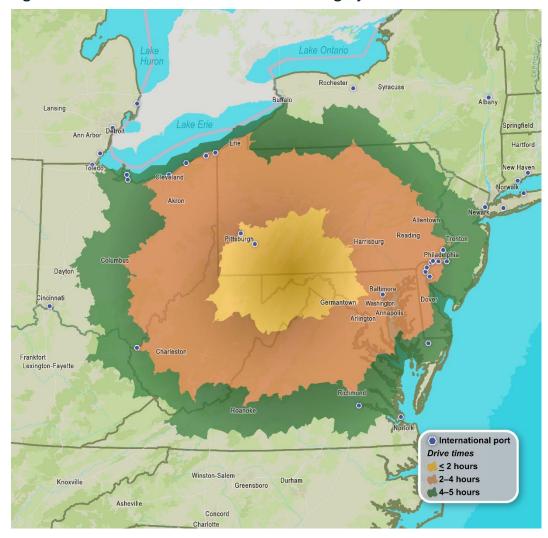


Figure 3: Drive time bands from the center of Allegany and Garrett counties

3. ALLEGANY AND GARRETT COUNTIES PURSUE CONTINUOUS IMPROVEMENTS

While Allegany and Garrett counties have significant appeal for outdoor recreation and lifestyle manufacturing businesses, the region is not without challenges. Some challenges, like the region's distance from a large commercial airport, cannot be addressed—although Amtrack does provide train service to Cumberland. Other challenges, however, can be solved, and Allegany and Garrett counties are already working on solutions.

This chapter summarizes some of the steps underway to address the challenges related to workforce and housing. This is relevant to attracting manufacturers to the region because the counties' efforts to address these challenges is part of what makes the region an attractive place for new investments.

3.1 Affordable housing

As Allegany and Garrett counties ramp up efforts to attract outdoor recreation and lifestyle manufacturing operations, there is the recognition of the challenge of providing enough housing that is affordable to middle-income workers. In Cumberland, for example, much of the older housing stock needs attention. Often, the most affordable homes will need investments to bring them to today's standards.

In Garrett County, particularly in the Deep Creek Lake area, second home purchases have put pressures on the housing market and resulted in home prices becoming unaffordable to many residents and workers. Available homes are often set on large properties that take a lot of work to keep up. Many younger people who might move into the area would prefer townhouses that require less time to keep up, preserving more time to enjoy the outdoor recreation amenities drawing them to live in the region.

A further challenge is the lack of long-term rentals, which are typically rented to visitors. This forces workers to purchase a home or to live far from their jobs and commute.

In Allegany County, incentives are available for upper story residential renovations, which add to the housing stock in urban areas like Cumberland.

Garrett County has put a plan in place to develop market-value housing. In Grantsville, the county's fastest-growing township, the county plans to develop property with utilities and will then make arrangements with contractors to build market-value housing on the property.

3.2 Workforce development

While housing prices make it difficult for middle-income workers to live in the region, existing businesses in Allegany and Garrett counties are having a difficult time finding employees. This is due, at least in part, to workforce shifts seen throughout the county after the COVID-19 pandemic caused people to rethink their workforce participation. On top of that, the region's population has been declining, and, at least in Garrett County, many residents are of retirement age and are not in the workforce.

The region has numerous service-oriented businesses, and these businesses have faced challenges. Due to the COVID-19 pandemic, many of these businesses have been forced to close some days of the week simply because they have not had enough employees to be open all week. Recently, however, more businesses are back at full capacity with regular schedules.

While the challenges witnessed in the service sector are notable, they may not translate directly into challenges for staffing up new manufacturing operations. The service sector typically hires seasonally; permanent manufacturing jobs would be year-round.

If Allegany and Garrett counties are successful in bringing in new manufacturers, it will be a challenge to find an existing workforce that is trained for the specific types of jobs that are required. This is one reason why many local leaders believe that small manufacturers with employment between 25 and 75 would be the best targets to draw to the region, at least at the start of the effort. Small manufacturing operations would also be more likely to be able to find appropriately sized facilities.

The region's strong educational system is well-positioned to provide workforce training—in part because the region is already well known as a hub for outdoor recreation. Frostburg State University, Garrett College, and Allegany College of Maryland all have curricula that support the recreation industry. New workforce training programs to support incoming manufacturing operations can be up and running quickly.

Garrett College, for example, offers an Outdoor Leadership & Adventure Education major in which students can earn an Associate of Applied Science degree. Graduates are well prepared to work in the outdoor, adventure, and recreation fields after completing this program, which uses the region's mountains, lakes, forests, and whitewater rivers as classrooms.

Further, efforts are underway to build curricula at the high school level to support the recreation industry for jobs such as small engine repair, even for those who do not plan to attend college.

The success of Western Maryland Works in Allegany County also demonstrates the region's commitment to workforce training. When it opened in Lavale in 2018, Western Maryland Works' vision was to start a training facility to serve workers laid off when the Verso papermill closed down. The organization successfully retrained close to 100 papermill workers for different types of jobs.

Although not approved yet, a regional U.S. Economic Development Administration grant proposal has been submitted to launch three programs in 2023:

- a bike mechanic training program at Allegany College of Maryland, which will provide for national certification in partnership with a leading certification program based in Asheville, North Carolina;
- a marine mechanic program at Garrett College, similar to the bike mechanic program; and
- the Frostburg State University CANOE Program to create an incubator program to work with biking, boating, and fishing outfitters to provide hands-on training to guides who would be well-qualified to work for one of the region's existing outfitters or to be entrepreneurs to develop new businesses.

3.3 Business climate

While there is sometimes a perception that state regulations present challenges for starting businesses, a variety of types of support are available for businesses looking to move to or start up in Western Maryland.

At the federal level, Garrett County is a Small Business Administration HubZone, which is attractive to companies that wish to take advantage of federal government contracting opportunities. An outdoor recreation or lifestyle manufacturer that, at least in part, sells to the federal government, could benefit from siting in Garrett County.

Because they are classified as Tier 1 counties, certain state incentives are also available for businesses siting in Allegany and Garrett counties. The One Maryland Tax Credit, for example, offers

\$1-5 million tax credits based on the number of employees and size of investment. Allegany and Garrett counties are two of the counties that qualify for this incentive. The More Jobs for Marylanders Incentive Program provides refundable income tax credit for a 10-year consecutive benefit period in Allegany and Garrett counties because they are Tier 1 counties—as opposed to a five-year period in non–Tier 1 counties.

Units within Allegany and Garrett county governments, as well as other local organizations, also offer support to bring companies to the region. Support ranges from local Small Business Development Center offices to incubator spaces to affordable properties at industrial parks.

4. THE APPAREL CLUSTER

Several economic development professionals and business leaders articulated that apparel manufacturing could be a good fit for the region. The region's natural assets provide a valuable testing ground for hiking, biking, boating, skiing, hunting, and fishing apparel and a local market in which outdoor recreational apparel can be continually evaluated. Further, apparel branded as being produced in Western Maryland may appeal to the region's visitors and consumers.

The region has a history of apparel manufacturing, including Super Shoes, which previously manufactured high-quality shoes for work and recreation. Another Allegany County apparel company, Schwab, was located near Cresaptown and made children's clothing. In the 1980s, Biederlack of America manufactured specialty blankets in Cumberland.

Today, Fechhiemer, a Berkshire Hathaway company located in Garrett County, makes uniforms for police departments and the military.

The Mountain Maryland Hemp Alliance provides a forum for potential growers, researchers, marketing experts, and industrial hemp product users to discuss the future of industrial hemp in Garrett County and the surrounding region. While the organization is in its infancy, it could help the region develop its hemp supply chain, which could be used to make apparel.

Within the five-county area, Mark Albert Boots is currently headquartered in Somerset County, Pennsylvania and produces footwear. This business is closing in late 2022 or early 2023.

As described in Chapter 1 and Appendix A, an industry compatibility matrix was developed that includes five metrics for how the industries in this cluster fit into the region's economic ecosystem Table 1 presents the compatibility matrix for the Apparel Cluster, which includes 22 industries.

Observation 1: A few apparel industries have a small foothold in the region

Of the 22 industries in the Apparel Cluster, 14 already provide employment in the five-county region, with an estimated total of 350 employees. The three industries with the largest employment account for 75 percent of the total:

- Men's and boys' cut and sew apparel,
- Footwear, and
- Other leather and allied product.

These three industries have *Very High* regional employment concentrations compared to the national share (Metric 1). Two other industries (*Textile and fabric finishing mills* and *Other cut and sew apparel*), with a total of 60 employees, have *High* regional employment concentrations.

Also notable in the compatibility matrix is that 14 of the other 17 industries currently provide no jobs or negligible jobs in the region. This suggests that there is significant room for growth in many industries within the Apparel Cluster.

Table 1: Apparel Cluster compatibility matrix

	laha	Void	Metric 1: Regional	Metric 2: Economic	Metric 3: Import	Metric 4: Input	Metric 5: Occupational
Industry	Jobs	Void	concentration	impact	substitution	support	mix
Fiber, yarn, & thread mills	1		Very Low	Low	Very High	High	Very High
Broadwoven fabric mills	0	Yes				Very High	Very Low
Narrow fabric mills & schiffli machine embroidery	0					High	Very Low
Nonwoven fabric mills	0					Very High	Very Low
Knit fabric mills	0					High	High
Textile & fabric finishing mills	27	Yes	High	Low	High	Very High	Very High
Fabric coating mills	0					High	Very High
Carpet & rug mills	3		Very Low	Very Low	Very High	Low	Very Low
Curtain & linen mills	0					Very Low	Very High
Textile bag & canvas mills	9	Yes	Low	High	Low	Low	Very High
Rope, cordage, twine, tire cord & tire fabric mills	0					Middle	Low
Other textile product mills	13		Low	High	Low	Very High	Very High
Hosiery & sock mills	<1		Very Low	Middle	Very Low	Very Low	Very Low
Other apparel knitting mills	<1		Very Low	Low	Very Low		Very High
Cut & sew apparel contractors	<1		Very Low	Middle	Very Low	Very High	Very High
Men's & boys' cut & sew apparel	118		Very High	Middle	Very Low	Middle	High
Women's & girls' cut & sew apparel	<1		Very Low	Low	Low	Very Low	High
Other cut & sew apparel	33		High	High	Very Low	Middle	High
Apparel accessories & other apparel	<1	Yes	Very Low	High	Very Low	Middle	High
Leather & hide tanning & finishing	0					High	Very High
Footwear	108		Very High	High	Low	Middle	Middle
Other leather & allied product	36		Very High	Very High	Low	Middle	High

Source: Downstream Strategies analysis based on IMPLAN 2021 data. Note: "<1" for number of jobs indicates part-time or seasonal work and residual industry distributions.

Observation 2: Several apparel industries contribute significantly to the region's economy, while a few others have the potential to contribute to the region's economy if they grew

Of the Apparel Cluster industries that provide employment in the region, six already contribute or could contribute significantly to the region's economy (Metric 2). Notably, the *Other leather & allied product* industry is classified as *Very High* for its ability to contribute to the region's economy.

Observation 3: Several apparel industries have the potential to grow by selling inputs to existing regional companies

Metric 4 of the compatibility matrix identifies industries for which an increase in production could be utilized as inputs for the production of final demand products by outdoor recreation and lifestyle manufacturing businesses. For example, the *Leather & hide tanning & finishing* industry and many of the mill industries have *High* or *Very High* rankings in Metric 4; companies in these industries might find strong market opportunities and low competition in the region providing their output to the industries selling leather goods and clothing to consumers. This same concept would also hold for the *Cut & sew apparel contractors* industry. Companies in this industry could find strong markets by locating in the region and thus provide additional synergies to outdoor recreation apparel manufacturing.

Observation 4: The existing apparel industry with the most employees, Men's & boys' cut & sew apparel, has potential for growth

The compatibility matrix indicates that the *Men's & boys' cut & sew apparel* industry currently has a very high regional employment concentration, and its regional multiplier is classified in the middle range, which along with the relatively large number of employees suggests that the regional economy is dependent on the employment and wages from this industry. In addition, it does not appear that the industry would benefit from finding more local inputs (*Very Low* need for import substitution) If anything, its current regional strength and existing occupational compatibility with the region suggests that it could have potential to expand production into outdoor recreation and lifestyle products.

Observation 5: The Textile and fabric finishing mills industry may benefit from bringing in more local suppliers and may be able to sell inputs to existing regional companies

The *Textile and fabric finishing mills* industry currently employees 27 in the region. Its High ranking in Metric 3 suggests that this industry could provide additional benefits to the region by having more local suppliers for the inputs it needs. This is also, in part, reflected in Metric 4, which indicates that 10 of the industries in the Apparel Cluster—including the *Textile and fabric finishing mills* industry—could provide inputs to outdoor recreation industries.

Observation 6: The mix of the region's existing occupations would support growth in many apparel industries

The mix of the region's existing occupations appears to be bifurcated (Metric 5). It appears that new businesses in most of the industries in the Apparel Cluster could find employees in occupations they need within the region, based on rankings of *High* or *Very High* in Metric 5. New businesses in other industries, however, would be more likely to need to train their employees or encourage regional programs to provide training programs.

Observation 7: Voids were identified for four industries, as compared with Buncombe County, North Carolina and Mesa County, Colorado

Voids were identified for four Apparel Cluster industries, meaning that these industries are more fully developed in one or both of the comparison geographies:

- Broadwoven fabric mills,
- Textile & fabric finishing mills,
- Textile bag & canvas mills, and
- Apparel accessories & other apparel.

An example business in Grand Junction that falls within the *Textile & fabric finishing mills* industry is Western Filaments. Western Filaments makes products from synthetic materials like polyester nylon for automotive, aerospace, medical, textile, and other markets. Relevant to this report, however, is that Western Filaments produces high-performance braided fishing line and fibers for the recreation industry.

4.1 Recommendations

The compatibility matrix results—as well as the interviews with business owners, economic development and tourism professionals, and civic leaders—provide several specific recommendations for developing the region's Apparel Cluster.

- **High-end apparel.** According to several interviewees, high-end apparel would be a great market niche, at least to serve visitors already coming to the region from areas such as Pittsburgh, Baltimore, Washington, DC, and Northern Virginia. Visitors appreciate high-end apparel, and the region's state parks have adjusted inventories at their retail outlets to carry those goods. Many consumers also demand quality, durable, repairable clothing that is more sustainable than typical clothing.
- **Waste-to-value apparel.** Interviewees also identified an opportunity for apparel tied to the waste-to-value process, which includes all types of recyclables. Upcycled backpacks made from old tents is one example of this type of product. Patagonia, an established company in this industry cluster, has clearly benefited by becoming a leader in part by leveraging the waste-to-value manufacturing process, and there should be potential for new local manufacturing to compete in this market.
- **Pet accessories.** Another niche apparel item mentioned in an interview is pet accessories. Many visitors to the region bring their dogs on vacation, seeking out lodging options that accept pets, despite paying extra fees. With the explosion of pet ownership due to the COVID-19 pandemic, an increased number of visitors may bring pets to the region.
- **Hemp clothing.** Meadow Mountain Hemp, located near Accident in Garrett County, is an example of a local farm producing hemp that can be used to produce clothing.
- Birding accessories and gear. Bird watching is a popular activity in the region.

Several interviewees noted that REI has a large distribution center in Bedford County, Pennsylvania and suggested that reaching out to REI to incorporate locally produced outdoor recreation apparel could potentially benefit both REI and the region's producers.

Under Armour, a Maryland-based company whose founder is from Maryland, was also noted in multiple interviews. This local connection could potentially provide opportunities for outdoor recreation and lifestyle manufacturers in the Apparel Cluster.

The compatibility matrix helps identify recommendations for both expanding existing businesses and attracting new ones. Initiatives to facilitate the growth of existing businesses in the Apparel Cluster should start with surveying the current challenges these businesses face. Information should also be acquired regarding existing employee skills and the need for training and education programs to increase employee productivity. Based on both the information from our interviews and from the compatibility matrix, initiatives that would build stronger local supply chain networks within the regional should also be explored. Initially, this initiative should focus on businesses in four specific industries that currently have significant employment levels within the five-county area:

- 1. Men's & boys' cut & sew apparel,
- 2. Footwear,
- 3. Other leather & allied product, and
- 4. Textile & fabric finishing mills.

The compatibility matrix also suggests that opportunities exist for new businesses in at least nine industries in the Apparel Cluster. Most of these opportunities generate from providing inputs that would support production in outdoor recreation and lifestyle manufacturing businesses:

- Fiber, yarn & thread mills,
- Knit fabric mills,
- Fabric coating mills,
- Textile bag & canvas mills,
- Rope, cordage, twine, tire cord & tire fabric mills,
- Other textile product mills, and
- Leather & hide tanning & finishing.

Potential expansion may also exist for two other industries in the Apparel Cluster. These industries currently have very low employment, but businesses moving into the area would need employees in occupations that are present in the region. These two industries are:

- Cut & sew apparel contractors and
- Apparel accessories & other apparel.

5. THE OUTDOOR VEHICLES, BOATS, PARTS, AND ACCESSORIES CLUSTER

The Outdoor Vehicles, Boats, Parts, and Accessories Cluster includes not just the manufacturing of vehicles and boats, but also parts and accessories used to build, fix, and outfit them. The vehicles identified in this cluster include, for example, ORVs, snowmobiles, motorcycles, bicycles, and eBikes.

As with the other industry clusters, economic development professionals and business leaders interviewed about this cluster felt that the best business opportunities would be small startups or expansions. They were skeptical of initiatives to pursue large companies producing motorized vehicles but believed a focus on smaller manufacturers of parts or accessories would be more likely to be successful.

Interviewees often noted the importance of the region's rivers, lakes, trails, parks, and forests as testing grounds for products in this cluster as well as the close interaction with a population of ready consumers who would provide feedback on the utility and durability of the products. The interviewees also noted the potential for further development of parallel economic activities related to maintaining and repairing vehicles and boats. While this business activity does not fit neatly into the manufacturing industries in this cluster, these businesses provide vehicle repair, boat repair, maintenance services, and unique activities such as dock manufacturing. A few of the many businesses in the region include Bill's Marine Service and other marinas on Deep Creek Lake; Xtreme Power Sports in Accident, which offers parts and service for a variety of outdoor vehicles; and Deep Creek Dock Works in Garrett County.

Several businesses in Garrett County are in this cluster and manufacture boats. These include, for example, Savage River Works, which makes a variety of types of canoes and kayaks; Demaree Inflatables in Friendsville, an inflatable boat manufacturer; and Flying Scot, which makes sailboats.

Additional regional production in this cluster includes camping trailers and historically also included bicycles. In Somerset County, Pennsylvania, Xtreme Outdoors manufactures Little Guy teardrop camping trailers. In the past, Cannondale bikes were manufactured in Bedford County, Pennsylvania until 2009. This production would have fit squarely within the Outdoor Vehicles, Boats, Parts, and Accessories Cluster.

Table 2 presents the compatibility matrix for the Outdoor Vehicles, Boats, Parts, and Accessories Cluster, which includes 16 industries.

Observation 1: Four outdoor vehicles, boats, parts, and accessories industries have the strongest foothold in the region

Within the Outdoor Vehicles, Boats, Parts, and Accessories Cluster, 13 industries provide an estimated 665 jobs in the region. Four of these industries, with an estimated 491 employees, account for nearly three quarters of the employment in this cluster. These four industries also had *High* or *Very High* regional employment concentrations (Metric 1):

- Motor vehicle body,
- Motorcycle, bicycle, & parts,
- Heavy duty truck, and
- Truck trailer.

Table 2: Outdoor Vehicles, Boats, Parts, and Accessories Cluster compatibility matrix

			Metric 1: Regional	Metric 2: Economic	Metric 3: Import	Metric 4: Input	Metric 5: Occupational
Industry	Jobs	Void	concentration	impact	substitution	support	mix
Automobile	2		Very Low	Very Low	Very High	Very Low	High
Heavy duty truck	76		Very High	Very Low	Very High	Very High	Very Low
Motor vehicle body	261		Very High	Middle	High	Very High	Low
Truck trailer	67		High	Low	High	Very Low	Low
Motor home	0					Very Low	Very Low
Travel trailer & camper	37	Yes	Middle	Low	Very High	High	Low
Motor vehicle gasoline engine & engine parts	11		Low	Very Low	Very High	High	Middle
Motor vehicle electrical & electronic equipment	1		Very Low	Very Low	Very High	Very High	Middle
Motor vehicle transmission & power train parts	0					Very High	Middle
Motor vehicle seating & interior trim	0					Very High	Middle
Motor vehicle metal stamping	45		Middle	Very Low	Very High	Very High	High
Other motor vehicle parts	24	Yes	Very Low	Low	Very High	Very High	High
Motor vehicle steering, suspension component	27		Low	Very Low	Very High	Very High	Low
Boat building	26		Middle	Middle	High	Low	High
Motorcycle, bicycle, & parts	87		Very High	Very Low	High	Very High	Very Low
All other transportation equipment	1		Very Low	Very Low	Very High	Middle	Very Low

Source: Downstream Strategies analysis based on IMPLAN 2021 data. Note: The Motor vehicle steering, suspension component industry also includes brake systems.

Observation 2: The mix of the region's existing occupations would support some, but not all, industries in this cluster

High rankings in Metric 5 suggest that there is a potential match between the region's existing labor force and the skill sets required for four industries:

- Automobile,
- Motor vehicle metal stamping,
- Other motor vehicle parts, and
- Boat building.

However, companies looking to locate in this region for most of the industries in this cluster would be likely to require training programs for employees, because the occupational distributions for these industries do not align well with the region's existing labor force.

Observation 3: None of the industries in this cluster appear to be dynamically linked to regional economy

While the compatibility matrix identifies several industries with significant employment, no industries in this cluster appear to be dynamically linked to regional economy, as Metric 2 does not score *High* or *Very High* for any industry. This observation is supported by the *High* and *Very High* measures of Metric 3, which suggest that bringing in supporting industries could have a big impact on the region's economy.

*Observation 4: Several industries in this cluster may be able to sell inputs to existing regional companies*¹

The dynamic of linkages is also reflected in Metric 4, which ranks many industries *Very High and* suggests that companies in these industries could move into the region and provide inputs for regional production in outdoor recreation and lifestyle manufacturing businesses. *Motorcycle, bicycle, & parts,* an industry ranked *Very High* in Metric 4, reinforces interviewees' suggestions that companies producing parts and accessories, rather than focusing on the vehicles themselves would be most likely to succeed in the region.

Observation 5: The Travel trailer & camper industry and the Motorcycle, bicycle & parts industry stand out

Two industries clearly linked with outdoor recreation stand out in the compatibility matrix:

- Travel trailer & camper and
- Motorcycle, bicycle & parts.

The matrix suggests that both industries would benefit by having more local suppliers (*High* or *Very* High in Metric 3) and that additional inputs in these industries could be used for further production by other industries in the cluster (*High* or *Very* High in Metric 4).

¹ This observation should be understood as being based on the production functions of the model and, in the case of production in these industries, is likely to reflect vertically integrated firms in which the inputs are sourced from manufacturing plants owned by the same parent company in other regions or from plants that are technically advanced enough that there are only a limited number of companies that produce that input.

Observation 6: Voids were identified for two industries, as compared with Buncombe County, North Carolina and Mesa County, Colorado

Voids were identified for two industries in this cluster, meaning that these industries are more fully developed in one or both of the comparison geographies:

- Travel trailer & camper and
- Other motor vehicle parts.

An example business within the *Other motor vehicle parts* industry is Precision Products Performance Center in Arden, just south of Asheville. This company manufactures wrist pins, valve locks, and many other engine components for race cars, motorcycles, boats, and tractors.

5.1 Recommendations

Interviewees made several specific suggestions of items that could be produced locally in this cluster, including canoes and kayaks—and in the future, eBoats. As illustrated in the compatibility matrix for the *Boat building* industry, there is a potential match between the region's existing labor force and the skill sets that would be required for new businesses in this industry. Further, due to its *High* ranking in Metric 3, the *Boat building* industry has the potential to reduce its dependence on inputs from outside the region, which would further enhance the regional economy.

Interviewees also identified motorcycles, bicycles, and eBikes as potential growth areas in this cluster. These vehicles fall into the *Motorcycle, bicycle, & parts* industry in the compatibility matrix, which already has a relatively strong regional concentration of jobs. Further, as noted above, this industry would benefit by having more local suppliers, with the additional benefit that the additional production inputs in the industry could be used for further production by other industries.

Regional production of travel trailers was also noted in our interviews. The compatibility matrix identified that the *Travel trailer* & *camper* industry could also increase its share of locally supplied inputs, and additional products from this industry could be used as inputs for further production by other industries in the region's outdoor recreation and lifestyle manufacturing businesses.

The most common recommendation from interviewees was to produce parts and accessories for all types of vehicles and boats. Depending on the specific product, this activity would likely fall in the *Other motor vehicle parts* industry, the *Motorcycle, bicycle, & parts* industry, or the *All other transportation equipment* industry. Common among these three industries in the compatibility matrix is that each would benefit by having more local suppliers, and that their output could provide inputs for further production by other industries.

Other recommendations from interviewees include rafts, water skis, paddle boards, wakeboards, skis, snowboards, skateboards, and off-road wheelchairs that can be used on hiking trails.

6. THE TIMBER/WOOD CLUSTER

The timber industry has a long history in Western Maryland, but in recent years, this industry has faced challenges that have resonated across the economy. When the Verso papermill in Luke shut down in 2019, many timber operators went out of business.² However, the region still has significant timber resources and a productive sawmill industry with over 500 employees. As this analysis shows, the region could benefit from new investments in the Timber/Wood Cluster that would create additional regional value by using local timber in production rather than exporting the timber as a low value-added extractive resource.

The Timber/Wood Cluster includes the 24 manufacturing industries that could utilize local forest products to make a wide variety of products, many of which can be marketed to the visitors who often come for the region's outdoor recreation and lifestyle opportunities. Some outdoor recreation–related products made from wood, such as boats, oars, and boating accessories, are captured in the Outdoor Vehicles, Boats, Parts, and Accessories Cluster; however, the cross-cluster linkages with locally produced timber are relevant for these products, and some of that crossover is captured in Metrics 2 and 4 of the compatibility matrices for both clusters. As with the other clusters, the analysis of this cluster acknowledges the recommendations and suggestions from our interviews that small-scale craft manufacturing needs to be included, as well as large-scale production technologies.

A number of industries in this cluster focus on products sold to consumers. These products include indoor and outdoor furniture, tableware, musical instruments, and other products. This production can also increase awareness of the region's outdoor recreation brand. Several businesses in the region manufacture wood products. For example, locally crafted Amish/Mennonite furniture is sold at Whispering Pines, a retail store in Somerset County, Pennsylvania. Snyder Cabinets and other cabinet manufacturers are in the region. A number of other regional companies also provide inputs for the construction industry, such as wood floor manufacturers and truss manufacturers.

Table 3 presents the compatibility matrix for the Timber/Wood Cluster, which includes 24 industries, 16 of which have business activities in the region and employ an estimated 2,135 people.

Observation 1: Ten timber/wood industries provide most of the cluster's employment in the region

Ten industries account for 93 percent of the total employment in this cluster and have *High* or *Very High* regional employment concentrations (Metric 1), suggesting that the regional economy has leveraged some of its abundant local timber for production. Of these 10 industries, four have *Very High* employment concentrations in the region:

- Sawmills,
- Engineered wood member and truss,
- Wood container and pallet, and
- Wood kitchen cabinet and countertop.

The *Wood kitchen cabinet and countertop* industry is estimated to have nearly 750 employees, and by itself exceeds the total existing employment in any of the other three clusters. The six other industries with *High* employment concentrations include some industries that may sell wood products directly to consumers or to industries for further production such as the *Other millwork, including flooring* and the *Prefabricated wood building* industries.

² This loss of supporting businesses reflects the interindustry dependencies examined from different perspectives in the compatibility matrix metrics.

Table 3: Wood/Timber Cluster compatibility matrix

			Metric 1: Regional	Metric 2: Economic	Metric 3: Import	Metric 4: Input	Metric 5: Occupational
Industry	Jobs	Void	concentration	impact	substitution	support	mix
Sawmills	522		Very High	Very High	Very Low	Very High	Very High
Wood preservation	0					Very High	Low
Veneer & plywood	0					Very High	Middle
Engineered wood member & truss	105		Very High	Very High	Low	Very High	High
Reconstituted wood product	0					Very High	Low
Wood windows & door	59		Middle	Very High	Low	Low	Middle
Cut stock, resawing lumber, & planing	14		Middle	Very High	Low	Middle	Very Low
Other millwork, including flooring	41	Yes	High	Very High	Very Low	High	Low
Wood container & pallet	205		Very High	High	Low	Middle	Middle
Manufactured home (mobile home)	40		High	High	Low	Low	Low
Prefabricated wood building	33	Yes	High	Very High	Low	Very Low	Very Low
All other miscellaneous wood product	9	Yes	Low	Very High	Low	High	Very Low
Pulp mills	0					Very High	Very Low
Paper mills	34		Middle	Middle	High	Very High	High
Paperboard mills	0					Very High	Middle
Paperboard container	163	Yes	High	Low	Very High	Very High	Very High
Paper bag & coated & treated paper	0					Very High	High
Stationery product	0					Very Low	Very Low
Sanitary paper product	49		High	Very Low	Very High	Very Low	Low
All other converted paper product	0					Very High	Very Low
Wood kitchen cabinet & countertop	749	Yes	Very High	Very High	Very Low	High	High
Institutional furniture	14	Yes	Low	Middle	Middle	Very Low	Low
Custom architectural woodwork & millwork	12		Low	High	Middle	Very Low	Low
Showcase, partition, shelving, & locker	87		High	Middle	Low	High	Middle

Source: Downstream Strategies analysis based on IMPLAN 2021 data.

Observation 2: Timber/wood industries are already well-integrated into the regional economy

Production in many Timber/Wood Cluster industries have a relatively high impact on the regional economy as revealed in the *High* or *Very High* measures for Metric 2 in 11 industries. This observation of a strong integration of these industries within the regional economy is further reinforced by the *Low* or *Very Low* measures shown for Metrics 3 and 4, revealing the presence already of local suppliers for resources and partially manufactured inputs (Metric 3) and that additional production in the industries in the cluster would not at this point be useful (Metric 4).³

Overall, the strength of these industries revealed in the compatibility matrix reflects on their high employment and relative concentrations compared to the nation (Metric 1).

Observation 3: The mix of the region's existing occupations does not align with averages for the industries in this cluster

The occupational mix metric (Metric 5) suggests that, overall, the occupations of the employees in this region do not align well with the overall occupational matrices for these industries. This appears to be because some of the higher concentrations of occupations in this region do not match the higher concentrations for these industries. This may be because the existing companies in the region are different enough in their industry occupational mix from the national average that the region does not align well by occupations. It might also be because the industries in this cluster have relatively different levels of labor productivity from the national averages, such as a higher share of "in-line" employees rather than employees at corporate headquarters.

Observation 4: Voids were identified for six industries, as compared with Buncombe County, North Carolina and Mesa County, Colorado

Voids were identified for six industries in the Timber/Wood Cluster, meaning that these industries are more fully developed in one or both of the comparison geographies:

- Other millwork, including flooring,
- Prefabricated wood building,
- All other miscellaneous wood product,
- Paperboard container,
- Wood kitchen cabinet & countertop, and
- Institutional furniture.

An example business within the *Institutional furniture* industry is Blue Ridge Chair Works in Asheville. Blue Ridge Chair Works produces wooden chairs, tables, and other accessories for camping and outdoor enthusiasts. Its main factory is in Franklin, North Carolina, where about 10 skilled woodworkers and laborers are employed, producing products for outdoor enthusiasts around the globe.

6.1 Recommendations

Interviewees identified many types of wood products that would align with outdoor recreation and lifestyle manufacturing. The compatibility matrix, on the other hand, captured the relatively larger-scale manufacturing activity that is associated with the Timber/Wood Cluster. Our recommendations for this cluster mostly center on the concepts addressed during our interviews and reflect the necessity for this analysis to address the outdoor recreation and lifestyle component that is less

³ Further integration of inputs might be difficult to achieve for these industries as specific woods have unique characteristics and might not grow in the region. For example, Douglas fir lumber, could be a preferred wood for a in input but could not be locally sourced.

central to the compatibility matrix. However, the region still has significant potential to leverage the skills of the region's existing labor force in this cluster and to encourage existing companies to explore potential markets and production in outdoor recreation and lifestyle products.

One category of outdoor recreational products that could, at least in part, be made of wood include those used directly in outdoor activities. These include, for example, fishing products (poles, nets, lures) and hunting products (knife handles, bows and arrows).

Tableware, wooden utensils, and bowls were also identified by interviewees. While these products are not directly linked with outdoor recreation, they are tied to lifestyle manufacturing. Locally made products such as these, made from local timber, are strongly tied into the region's Appalachian timber heritage.

In addition to these items, there is potential for regional production of musical instruments. This industry could build on the region's strong musical heritage, which includes a nationally known musical festival, DelFest. Leveraging this heritage by encouraging the production of wooden musical instruments and instrument parts should be explored. Although not in the five-county area, the Martin Guitars facility in Nazareth, Pennsylvania and its products in the history of an American music tradition could serve as an inspiration. The potential for additional activity in this cluster is also observed in Rainmaker Music Management, which promotes DelFest and is expanding its focus by establishing a retail presence.

Several interviewees also suggested that furniture production using locally sourced wood could be increased. Expanding the activities of existing companies to include traditional and rustic tables, chairs, and other furniture would enhance the Timber/Wood Cluster with uniquely crafted products made in Western Maryland with Western Maryland wood.

Barrel making could be developed to utilize local wood in the production of barrels for distilleries.

Interviewees also suggested other timber and wood products with less direct links to outdoor recreation and lifestyle products, such as materials for building log cabins, engineered lumber, laminated timber, and wood skids/pallets.

Based on our interviews and economic analysis, one potential industry of focus should be boats, parts, and accessories, including, paddles, oars, and frames. For the compatibility matrix these products are present in the Outdoor Vehicles, Boats, Parts, and Accessories Cluster (See Chapter 5); however, the cross-cluster linkages are obvious and are present in both Metrics 2 and 4 of the compatibility matrices. They are noted here to emphasize the local economic benefits of using the region's timber when appropriate.

Many of the compatibility matrix metrics for the industries in the Timber/Wood cluster identify strong economic activity. The high level of employment in industries such as sawmills, truss manufacturing, container and pallet manufacturing, and wood kitchen cabinets suggests a large labor force with woodworking skills developed for cutting and manipulating wood using large equipment. In addition, the regional economic impacts for many of the industries in the cluster suggest that they are strongly tied into the region, which would also be reflected in the relatively low measures for potential improvements from import substitutions. Thus, from the perspective of the compatibility matrix, existing companies in the cluster should be encouraged to explore the production of products serving the outdoor recreation and lifestyle markets.

7. THE SPECIALTY FOODS CLUSTER

The Specialty Foods Cluster includes a wide variety of foods and drinks. It includes businesses that produce energy bars, trail mix, energy drinks, or other foods and beverages aligned with outdoor recreation as well as the region's lifestyle. The analysis of this cluster also includes small-scale production using inputs grown on local farms.

As with the other clusters, the visitors and residents who take advantage of Western Maryland's outdoor recreation assets provide the potential for a discerning market for locally produced specialty foods and drinks. In addition to purchasing provisions from stores to use on a trail or in a boat, residents and visitors also eat at local restaurants and visit the burgeoning number of breweries, wineries, cideries, and distilleries. These establishments can utilize locally sourced products, adding demand in the Specialty Foods Cluster.

For many visitors and residents, locally produced foods and drinks have a special appeal. Many people want to explore new tastes and pursue local cuisines and the unique local traditions and flavors they express. Specialty foods and drinks produced in Western Maryland can also be sold more widely in regional and even national markets.

Businesses in the Specialty Foods Cluster can utilize local agricultural goods in the foods and drinks they produce, and these local linkages produce economic benefits for the region. Local farms already produce goat milk, honey and beeswax, maple syrup, apples, pears, peaches, hops, beef, lamb, goat, and chicken. Farms also produce non-food products like alpaca wool that can be used as inputs in the Apparel Cluster. This is again an example of a cross-cluster linkage—in this case between an extension of the farms in the Specialty Foods Cluster and an input in the Apparel Cluster.

Several businesses in the region already fall within the Specialty Foods Cluster. Firefly Farms, located in Accident in Garrett County, uses locally produced goat milk to make cheese, which is sold locally at its market and nationally through its website. Western Maryland Lemonade Company, located in Cumberland in Allegany County, sells locally produced lemonade. The company has been in business for about 10 years and has recently expanded.

Deep Creek Lavender Farm harvests its 1,500 lavender plants to produce numerous lavender products, which are sold at its farm store near Accident and online. Basecamp Coffee Company roasts its own coffee, distributes coffee in the tri-state region, and sells coffee online. It also maintains a coffeeshop in Cumberland and has about 10 employees.

In the broader five-county region, Kate's Real Foods in Bedford County, Pennsylvania produces organic granola, energy bars, and wholesome snacks. Kate's Real Foods provides a model for scaling up regional production of specialty foods; the company now employs approximately 500, sells to multiple outlets, and has an online presence.

Other existing regional companies linked to the Specialty Foods Cluster include the popular Frostburg Bologna, breweries, wineries, and distilleries. Also, kombucha, a fermented tea, is produced locally and at least one regional brewery sells this product.

Both Allegany and Garrett counties have food cooperatives that provide outlets for selling locally produced specialty foods.

Table 4 presents the compatibility matrix for the Specialty Foods Cluster, which includes 21 industries; 11 of these industries have an estimated 484 employees across the region.

Table 4: Specialty Foods Cluster compatibility matrix

			Metric 1: Regional	Metric 2: Economic	Metric 3: Import	Metric 4: Input	Metric 5: Occupational
Industry	Jobs	Void	concentration	impact	substitution	support	mix
Fats & oils refining & blending	0	Yes		·		Very Low	Low
Breakfast cereal	0					Very High	Middle
Nonchocolate confectionery	0					High	Middle
Chocolate & confectionery from cacao beans	0	Yes				Low	Very Low
Confectionery from purchased chocolate	16		Low	Very Low	Very High	High	High
Canned fruits & vegetables	0					Low	Very High
Canned specialties	0					High	Low
Dehydrated food products	0					High	Low
Dry, condensed, & evaporated dairy product	9	Yes	Low	High	Very High	Middle	Middle
Poultry processing	10		Very Low	Middle	Very High	Low	Very High
Animal, except poultry, slaughtering	96	Yes	Low	Very High	Very Low	Very Low	Very High
Meat processed from carcasses	1		Very Low	High	Very High	Low	Very High
Rendering & meat byproduct processing	1	Yes	Very Low	Very High	Middle	Low	Middle
Bread & bakery product, except frozen	189	Yes	Low	High	Low	High	Very High
Cookie & cracker	27		Middle	Middle	Very High	Middle	Middle
Dry pasta, mixes, & dough	0					Low	Low
Roasted nuts & peanut butter	9		Low	High	Low	Middle	Middle
Other snack food	71		High	Very High	Low	Middle	High
Flavoring syrup & concentrate	0					Very Low	Very Low
All other food	0	Yes				Low	Very High
Bottled & canned soft drinks & water	54	Yes	Low	Very Low	Very High	Middle	High

Source: Downstream Strategies analysis based on IMPLAN 2021 data.

Observation 1: The Specialty Foods Cluster does not currently have a strong economic presence in the region

The three largest Specialty Foods Cluster industries that account for 65 percent of the cluster's total employment are:

- Bread & bakery product, except frozen,
- Other snack food, and
- Bottled & canned soft drinks & water.

Only the Other snack food industry has a High relative regional industry concentration (Metric 1).

Observation 2: Three industries produce significant local economic benefits

The Other snack food industry, Animal, except poultry slaughtering industry, and Rendering & meat byproduct processing industry appear to be anchored in the region's economy enough to have Very High regional impacts (Metric 2). However, only the first two of the industries listed currently have non-negligible employment in the region.

Observation 3: An additional five industries could contribute significantly to the region's economy

An additional five industries have the potential to contribute significantly to the region's economy, based on their import substitution (Metric 3). However, as with several other potential industries in this cluster, they have very low employment levels. Two of those five industries, the *Meat processed from carcasses* industry and the *Dry, condensed, and evaporated dairy product* industry, have high estimates for a regional impact (Metric 2) and could contribute more, but their low employment levels minimize their overall impact on the region's economy.

Observation 4: Four industries could provide support to existing companies in this cluster

Four industries that do not have any regional production could provide support to existing companies in this cluster and thus have a positive impact on the region's economy (Metric 4). These industries include:

- Breakfast cereal,
- Nonchocolate confectionery,
- Canned specialties, and
- Dehydrated food products.

Companies within some of these industries could easily produce specialty foods products directly tied to the region's outdoor recreation, including, granola bars, energy bars, and dehydrated camping food.

Observation 5: Six industries could potentially benefit from local production of their inputs

Within this cluster, six industries with regional production could potentially benefit from local production of their inputs (Metric 3):

- Confectionery manufacturing from purchased chocolate,
- Dry, condensed & evaporated dairy product,
- Poultry processing,
- Meat processed from carcasses,
- Cookie & cracker, and
- Bottled & canned soft drinks & water.

However, some of the inputs that drive Metric 3 are likely to be basic farm outputs such as flour, sugar, and chocolate that could not be produced in the region.

Observation 6: Employees in the region with compatible skills can be found for many industries in this cluster

Employees in the region with compatible skills can be found for many industries in this cluster, as demonstrated by *High* or *Very High* values for Metric 5.

Observation 7: Voids were identified for eight industries, as compared with Buncombe County, North Carolina and Mesa County, Colorado

Voids were identified for eight industries in the Specialty Foods Cluster, meaning that these industries are more fully developed in one or both of the comparison geographies:

- Fats & oils refining & blending,
- Chocolate & confectionery from cacao beans,
- Dry, condensed, & evaporated dairy product,
- Animal, except poultry, slaughtering,
- Rendering & meat byproduct processing
- Bread & bakery product, except frozen
- All other food, and
- Bottled & canned soft drinks & water.

An example business within the *All other food* industry is Great Eastern Sun Trading Company in Asheville. For more than 40 years, this company has produced and distributed handmade miso. It and its sister company—American Miso Company—employ 60 people in western North Carolina.

7.1 Recommendations

Interviewees had numerous suggestions for Specialty Foods Cluster products that could be produced in Western Maryland. Some of these suggestions are directly tied to outdoor recreation, while others are more appropriately categorized as falling into the lifestyle category.

One set of suggestions include foods—including, for example, granola bars or energy bars—to eat when hiking, biking, camping, and engaging in other outdoor activities. In the compatibility matrix, these foods would most likely fall in the *Other snack food* industry. As noted above, this industry appears to be anchored in the region's economy enough to have *Very High* regional impacts. Growing this industry would broadly benefit the regional economy.

Interviewees also suggested producing drinks, including energy drinks and lemonade, in order to expand upon existing skills in the community. As illustrated in the compatibility matrix, the current occupational mix in the region is well-aligned with the *Bottled & canned soft drinks & water* industry. Further, regional production in this industry could potentially benefit from local production of its inputs.

Jerky produced from meats grown on local farms was also identified as a possible growth industry tied to outdoor recreation. The *Rendering* & *meat byproduct processing* industry in the compatibility matrix suggests that increasing jerky production would have a strong impact on the regional economy.

Suggestions from interviewees also included products that use locally produced maple syrup, such as maple-sweetened granola. Another idea was to tie locally produced specialty food products into catering for visitors to the region for corporate events, weddings, and other gatherings.

With its rapidly evolving regulatory structure, interviewees also noted that cannabis may play a role in the Specialty Foods Cluster. Allegany County already has a large amount of medical cannabis production and is the only Maryland county with a grower, processor, and distributor. In November 2022, Maryland voters voted to legalize recreational use, which will provide new regional opportunities to legally produce and sell cannabis products in stores. Cumberland's existing medical cannabis facilities already employ about 200 people; this number could grow substantially if recreational cannabis products were incorporated into the region's outdoor recreation and lifestyle attractions.

The general perception of several interviewees—that this cluster has potential even though it does not have a strong foothold in the region—is supported by the compatibility matrix. Only the *Other snack* food industry has a high regional concentration of employment. In contrast, several industries could build on the existing occupations in the region. Many of those industries also have a strong regional economic impact. The potential for import substitution also appears to be high for some industries in the region.

8. CONCLUSIONS

This Manufacturing Business Attraction Analysis is the first of three linked reports that, together with a sales pitch packet, comprise a marketing plan to retain and recruit outdoor recreation and lifestyle manufacturing businesses and employees to Western Maryland.

It includes a quantitative analysis to develop a five-metric compatibility matrix; interviews with business owners, economic development and tourism professionals, and civic leaders; and a void analysis to help understand how the Western Maryland economy compares to two similar, aspirational geographies.

Results from the compatiblity matrix, interviews, and void analysis are synthesized for four outdoor recreation and lifestyle manufacturing industry clusters that have great potential in the region:

- 1. Apparel;
- 2. Outdoor Vehicles, Boats, Parts, and Accessories;
- 3. Timber/Wood; and
- 4. Specialty Foods.

As the marketing plan is implemented, the observations and recommendations for each of the four clusters in Chapters 4 through 7 should be consulted to help target efforts toward those industries that show the greatest likelihood of success and that will bring the most significant local benefits to Allegany and Garrett counties.

APPENDIX A: COMPATIBILITY MATRIX METHODOLOGY

This compatibility matrix presented in this report uses unique, measurable features of the region. It focuses on a selected set of manufacturing industries that are in the four clusters analyzed in this report, or that would support activity in the industry clusters. The region being considered is the five-county region of Allegany and Garrett counties in Maryland, Mineral County in West Virginia, and Bedford and Somerset counties in Pennsylvania.

To capture inter-industry linkages between industries, this analysis is based on an input/output model with 546 potential industries. Within the five-county region, only 330 of these industries report employment. Of these 546 industries, 329 are manufacturing industries. Within the five-county region, businesses within 146 of these manufacturing industries employ an estimated 10,165 people.

Of these 146 manufacturing industries within the five-county area, this analysis identified 54 as outdoor recreation and lifestyle–based manufacturing sectors. However, focusing this analysis on only the industries with current employment would have limited the ability of this analysis to explore potential opportunities for businesses in new industries to move into the area to leverage its unique opportunities. With that in mind, this analysis includes 29 other industries that could be included in the four clusters. Expanding the industries set up to 83 allows this analysis to more completely leverage the unique economic characteristics of the region to identify an appropriate set of industries and understand the economics of those industries to enhance marketing to specific companies in in outdoor recreation and lifestyle manufacturing sector.

The structure of this analysis also provides insights into economic development initiatives that could encourage the expansion of existing businesses by reducing the risks and costs of extended supply chains.

Our goal for the compatibility matrix is to provide a set of descriptive metrics associated with the specific industries within these larger industry clusters. These quantitative metrics, together with the qualitative information collected via interviews and research, help clarify strategies to market and encourage the growth of outdoor recreation and lifestyle manufacturing businesses that will be most likely to succeed and provide wide-ranging economic benefits to the region. As such, for the industries of interest, the metrics incorporate information about supply chains, existing and potential businesses, value chains, and the ability of the workforce in the region to contribute to growth. The compatibility matrix uses five metrics.

Regional concentration. This metric assesses the concentration of the industry's employment when compared with other industries in the region and the United States, using an employment location quotient. For an industry, it measures the share of the region's employment in that industry relative to the share observed for the same industry in the nation. A share larger than one indicates that there is relatively more employment in the industry, which suggests that the industry is relatively competitive. A location quotient of zero indicates that the industry is not present in the region. A low location quotient can suggest the potential for growth in the industry or that the industry could support other industries in the cluster.

Economic impact. The second metric assesses how well the industry is integrated into the economy of the region. It provides a measure of the potential value an industry could have in the region by integrating four multipliers that are unique to the five-county region:

- the increase in employment based on adding employees in that industry;
- the increase in output (sales and inventory changes) based on increasing sales in that industry;

- the increase in employment based on increasing output; and
- the increase in value-added (labor income, profits, taxes or government revenues, etc.) based on increasing output.

Our choice of these four multipliers was based on extensive testing. Combining these multipliers allows a single metric to capture a broad estimate of the overall impact the industry has on the region's economy.

Import substitution. The third metric quantifies whether an existing business in the industry would benefit by having suppliers move into the region. Put another way, it provides a measure of how valuable it would be for an existing industry to have more local inputs or how exposed the industry is to using inputs from outside the region. Some imports from outside the region (or outside the nation) may be required if the resources are not regionally available. However, in other cases, components in the industry's supply chain could be supplied regionally if producers could be attracted to the region and could produce the components in a cost-effective manner.

Input support. The fourth metric assesses whether a business in the industry would be able to sell supplies (inputs) to outdoor recreation and lifestyle manufacturing industries. It measures how much an expansion of the industry would contribute to regional production by providing inputs for other industries in the cluster. This is a dollar value measure. This metric is based on the contributions the industry is estimated to have in the nation where the industry's inputs are much more likely to come from within the region.

Occupational mix. The fifth metric assesses whether a business in the industry would be likely to find suitable employees. It measures how well the region's occupational mix could meet the occupational requirements of a new business moving to the region. This metric is based on the concept that the skills and abilities that would be required to fulfill production currently exist in the region. Because the profile of the region's occupations is based on the existing employment, it is assumed that the labor is fully trained for the specified occupations but is also employed. The ideal potential result from an economic development standpoint would be a movement of the labor force into an industry with higher productivity (as might be identified in the fourth metric), which should result in higher regional wages and profits with the same employment levels.

Metric	Minimum	Maximum
Regional concentration	No companies are classified in this industry in the five-county region.	The industry has a relatively higher concentration of employment in the region than it does in the nation.
Economic impact	No companies are classified in this industry in the five-county region.	The production activity from this industry provides a very strong economic benefit to the region in terms of additional jobs.
Import substitution	No companies are classified in this industry in the five-county region.	The goods needed for production in this industry are not made locally, and if they could be made locally, this additional activity would be significant.
Input support	The industry only makes goods for final demand, so no other industries would benefit directly from its production.	The industry makes goods that are used significantly in production by one or more other industries in the outdoor recreation clusters.
Occupational mix	The distribution of occupations in the region barely matches those required for the industry.	The distribution of occupations in the region very closely matches those required for the industry.

Table 5: Compatibility matrix metrics

APPENDIX B: INTERVIEWS

Interviews were conducted with the following people:

Allegany County

- Bill Atkinson, Commissioner, Allegany County Board of County Commissioners
- Jeffrey Barclay, Director of Economic and Community Development, Allegany County Government
- Stu Czapski, Economic Specialist, Cumberland Economic Development Corporation
- Al Delia, Vice President, Regional Development & Engagement, Frostburg State University
- Mandela Echefu, Owner, Wheelzup Adventures
- Juli McCoy, Executive Director, Alleghany County Chamber in Cumberland
- Sarah Milbourne, Park Manager, Rocky Gap State Park
- Matthew Miller, Executive Director, Cumberland Economic Development Corporation
- Dee Dee Ritchie, Executive Director of Canal Place Preservation and Development Authority
- Jennifer Walsh, Executive Director, The Greater Cumberland Committee
- Ashli Workman, Director of Tourism, Allegany County Tourism

Garrett County

- Mike Dreisbach, Owner, Savage River Lodge
- Sarah Duck, Vice President of Tourism Marketing, Garrett County Chamber of Commerce
- Kim Durst, Manager of Business Development, Garrett County Department of Business Development
- Kim Folk, Heritage Area & Groups Director, Mountain Maryland Gateway to the West, Garrett County Chamber of Commerce
- Steve Green, Owner, High Mountain Sports
- Siera Wigfield, Senior Planner, Garrett County Department of Planning & Land Management

State of Maryland

- Daryl Anthony, Executive Director, Office of Outdoor Recreation, Maryland Division of Natural Resources
- Marci Ross, Senior Assistant Director for Tourism Development, Maryland Department of Commerce Office of Tourism
- Andrew Sargent, Senior Business Development Representative, Maryland Department of Commerce