



CLATSOP COUNTY

# Fermentation Industry

CLUSTER DEVELOPMENT



# Introduction

Clatsop County's fermentation industry—breweries, distilleries and cideries—goes back to 1872 when Columbia Brewing, and shortly thereafter, North Pacific Brewing Company, were established. Following their closure, commercial brewing was largely absent until the beginning of the craft beer movement in the 1990s. In 1997, Wet Dog Café & Pacific Rim Brewing Co., later Astoria Brewing Co. became Astoria's first modern brewpub. Concurrently, in Cannon Beach Bill's Tavern and Brewhouse was revived as a microbrewery. A decade later, Fort George Brewery and Public House scaled from a home operation to a retail location in Astoria on the site of a former auto repair shop. That same year, Rogue Ale Public House opened on Pier 39. Today, Clatsop County is home to 13 fermentation businesses along a 29 mile stretch of Highway 101. Since 2007, the fermentation cluster has grown over 400 percent. Astoria's small downtown enjoys an average density of one fermentation business per square mile. Breweries are now considered a prime North Coast attraction, tantamount to outdoor recreation, historic monuments, and dramatic seaside views.

As Clatsop County's fermentation cluster has created jobs and invested in business expansion, it has created significant direct and indirect economic impacts. During the last five years, the fermentation cluster has been responsible for more than \$30 million in local spending and investments in site development and equipment. Total estimated cluster employment is 520 full and part time employees averaging \$18 million in annual local wages. Current employment is down by a quarter of its pre-pandemic level of more than 700 employees. However, the cluster has recovered more quickly than many other industries hard hit by pandemic related layoffs. In addition, the cluster supports more than 115 local businesses through spending and purchasing. Spending as a result of wages and non-cluster spending at local businesses results in an additional 180 jobs and \$7.7 million in annual wages.

The cluster is also a significant driver of local visitor spending which accounts for more than \$21 million in spending and indirectly supports another 150 jobs and \$6.1 million in wages. The cluster also accounts for one million in Oregon payroll taxes ever year and more than \$200,000 in annual local property taxes.

<sup>1</sup> Penttila, Bryan. Astoria 1811-2011: An Adventure in History. Clatsop County Historical Society, Inc., 2010.

<sup>2</sup> "Letter: Brew history." Daily Astorian, The, sec. News, 6 Apr. 2007. NewsBank: America's News, <https://tinyurl.com/mu87967s>. Accessed 24 Mar. 2022.

<sup>3</sup> Stott, Jon C. Beer 101 North: Craft Breweries and Brewpubs of the Washington and Oregon Coasts. McFarland & Company, Inc., 2017.

<sup>4</sup> Visitor spending for 2019, the last year in which visitor spending and visitor events were at normal levels.



## Fermentation Industry Overview

**T**he fermentation industry operates across production, distribution, wholesale, and retail sectors. Fermentation involves the heating, cooling and liquifying of agricultural inputs like barley, hops and fruit to produce product by the barrel, which are then sold wholesale as kegs, cans, or bottles through regional, statewide, or self-operated distributors. Often, brews are also sold direct-to-consumer through restaurants, bars, grocery stores and bottle shops.<sup>5</sup> In Oregon, breweries can open a taproom to accompany carry-out business. It is estimated that some microbreweries make 60 to 70 percent of their revenue through taprooms alone, thereby keeping a greater share of cashflow in-house and local. Moreover, craft breweries that keep business on-site can achieve a greater sense of community integration.<sup>6</sup> The Oregon Office of Economic Analysis defines brewing as a value-added traded sector industry, with sustainable paths of growth as community-centric operations.<sup>7</sup> Additionally, Clatsop's fermentation cluster is an important part of the food and beverage manufacturing sector that has been identified as a target industry for Oregon because of its growth, innovation and above-average wages.

The Pacific Northwest holds a significant portion of the craft brewing market. In 2008, California, Oregon and Washington accounted for 32 percent of the 50 largest-selling U.S. craft breweries. Just two hours east of Clatsop County, Portland claimed more breweries than any other metro area in the world in 2008, a success the Oregon Brewers Guild attributes to the fact that Northwest residents are "fiercely loyal to local products".<sup>8</sup> In a 2021 economic impact report prepared by the National Beer Wholesalers Association, it was determined that the Oregon beer industry directly employs 18,720 people across brewing, distribution and retailing, resulting in \$778.5M generated in wages and an output of \$2.7B statewide. Indirect and induced impacts through suppliers and related industry services totals an additional \$3.9B in economic output and 21,595 jobs.

<sup>5</sup> John Dunham & Associates. "A Study of The US Beer Industry's Economic Contribution in 2020." Beer Serves America, May 2021. Prepared for The Beer Institute & National Beer Wholesalers Association.

<sup>6</sup> Infante, Dave. "Why Craft Brewing Is about to Go to War with Itself." Thrillist, 23 Apr. 2015, <https://tinyurl.com/bdfaehm2>.

<sup>7</sup> Lehner, Josh. "Oregon Start-up Breweries, Sneak Peek." Oregon Economic Analysis, Oregon Office of Economic Analysis, 5 May 2015, <https://tinyurl.com/55fntm37>

<sup>8</sup> Wisdom, Robbie. OSU, Corvallis, OR, 2008, Investigating a New Business Model for Pacific Northwest Seafood Micro-Canners.

# Fermentation Industry

## Development in Clatsop County

In the 2010s, the proliferation of fermentation start-ups along the North Coast mirrored a statewide up-tick, with a new brewing business entering the cluster nearly every year. Setting the stage for the fermentation cluster, in early 2007, Fort George leased space in the historic Fort George building in downtown Astoria. By the end of 2009, the company had grown to 16 employees and had already exceeded their 10-year forecast. That same year, Fort George completed the purchase of the Lovell building, allowing them to quadruple their brewing capacity and facilitating investment and redevelopment of an entire blighted area of downtown. In 2012, Seaside Brewing Co. opened as a nano-brewery and pub.<sup>9</sup> Owner Jimmy Griffon, formerly the head brewer at Rogue Ales, saw a gap in Seaside's abundant tourism market for a brewing operation. Acquiring the former city jail was a draw given its history and proximity to Highway 101.<sup>10</sup> After a successful opening, the one-barrel brewing system was expanded to a 15-barrel system, with plans to distribute kegs.<sup>11</sup> In 2013, Luke Colvin, Andrew Bornstein, Dan Hamilton and Dave Kroening teamed up to establish Buoy Beer Co. in the former Bornstein Seafood processing plant. Just as Buoy was building to be the second largest brewery in Clatsop County, Astoria's Hondo's Brew & Cork became a nano-brewery, expanding upon its previous role as a bottle shop and homebrew supply store.<sup>12</sup> The move to include beer on tap was a natural transition to cater to the streak of homebrewing in Astoria and capture retail opportunities in the growing craft beer sector.

In 2015, Tillamook-based Pelican Brewing opened a brewpub location in Cannon Beach. For the City of Cannon Beach, the new location encouraged local and off-season visitation. With a 10-barrel brewing system, Pelican Brewing collaborates with local brewers such as Buoy Beer Co., Fort George Brewery and Seaside Brewing Co. to produce limited series and regional brews. In fact, cross-brewery collaborations are common among Clatsop County brewers. While Fort George produces more collaboration beers than all other Clatsop County brewers

combined, Buoy and others produce local, regional and multi-state collaboration beers as well. These collaborations are important for Oregon due to the exposure and increased out-of-state sales they provide for Oregon craft beers. Cannon Beach gained another brewery in 2016, with Public Coast Brewing Co. opening a 10-barrel brewpub. When asked to comment on the City's new breweries, surveyed residents saw Public Coast and Pelican's arrivals as "a remarkable opportunity for Cannon Beach to delve into a new market and demographic." The average Cannon Beach visitor is retirement age, and a growing brewing scene brings the promise of younger visitors.<sup>13</sup> In 2017, Reach Break Brewing opened in Astoria with a taproom and distribution to regional brewpubs. In 2018, Sisu Brewing Co. opened as a microbrewery in downtown Seaside in the former historic Times Theater Building. Brewing tanks were installed on the stage previously dormant for 30 years.<sup>14</sup> In 2019, in their second major expansion, Fort George purchased several buildings at the Astoria Warehouse allowing them to significantly increase production capacity and add distribution to their operations.

Newly formed Obelisk Beer Co. has plans to open in Astoria in 2022. The venture includes a tap room featuring small batch brews. Owner Dave Coyne noted working on a smaller scale will allow the company to source high quality, regional ingredients to support the local economy and bring unique dimensions to their tap list.<sup>15</sup>

While beer brewing looms large in Oregon's beverage sector, the fermentation market continues to diversify, with the North Coast expanding its own market. In 2013, Astoria's first distillery, Pilot House Distilling, opened.<sup>16</sup> After carefully selecting Astoria as the prime location to introduce his new cider house, Jeremy Towsey-French opened Reveille Ciderworks in 2016, joining Reach Break and a hub of food businesses co-located in the former Astoria Station lot.<sup>17</sup>

<sup>9</sup> Struve, Felicia. "Nano-brewery to open in Seaside." Daily Astorian, The, sec. News, 30 Mar. 2012. NewsBank: America's News, <https://tinyurl.com/yjhuybbb>. Accessed 24 Mar. 2022.

<sup>10</sup> Stott. Beer 101 North. McFarland & Company, Inc., 2017.

<sup>11</sup> Swindler, Samantha. "Seaside Brewing expanding operations and building." Daily Astorian, The, sec. News, 5 Nov. 2012. NewsBank: America's News, <https://tinyurl.com/yr8mykv5>. Accessed 21 Apr. 2022.

<sup>12</sup> Stott. Beer 101 North. McFarland & Company, Inc., 2017.

<sup>13</sup> Dani Palmer. "New brewery goes 'Public' in Cannon Beach." Daily Astorian, The, sec. News, 8 Oct. 2015. NewsBank: America's News, <https://tinyurl.com/32v7pxxa>. Accessed 13 Apr. 2022.

<sup>14</sup> "Turning back the Times." Daily Astorian, The, sec. News, 30 Aug. 2017. NewsBank: America's News, <https://tinyurl.com/366dtp39>. Accessed 28 Apr. 2022.

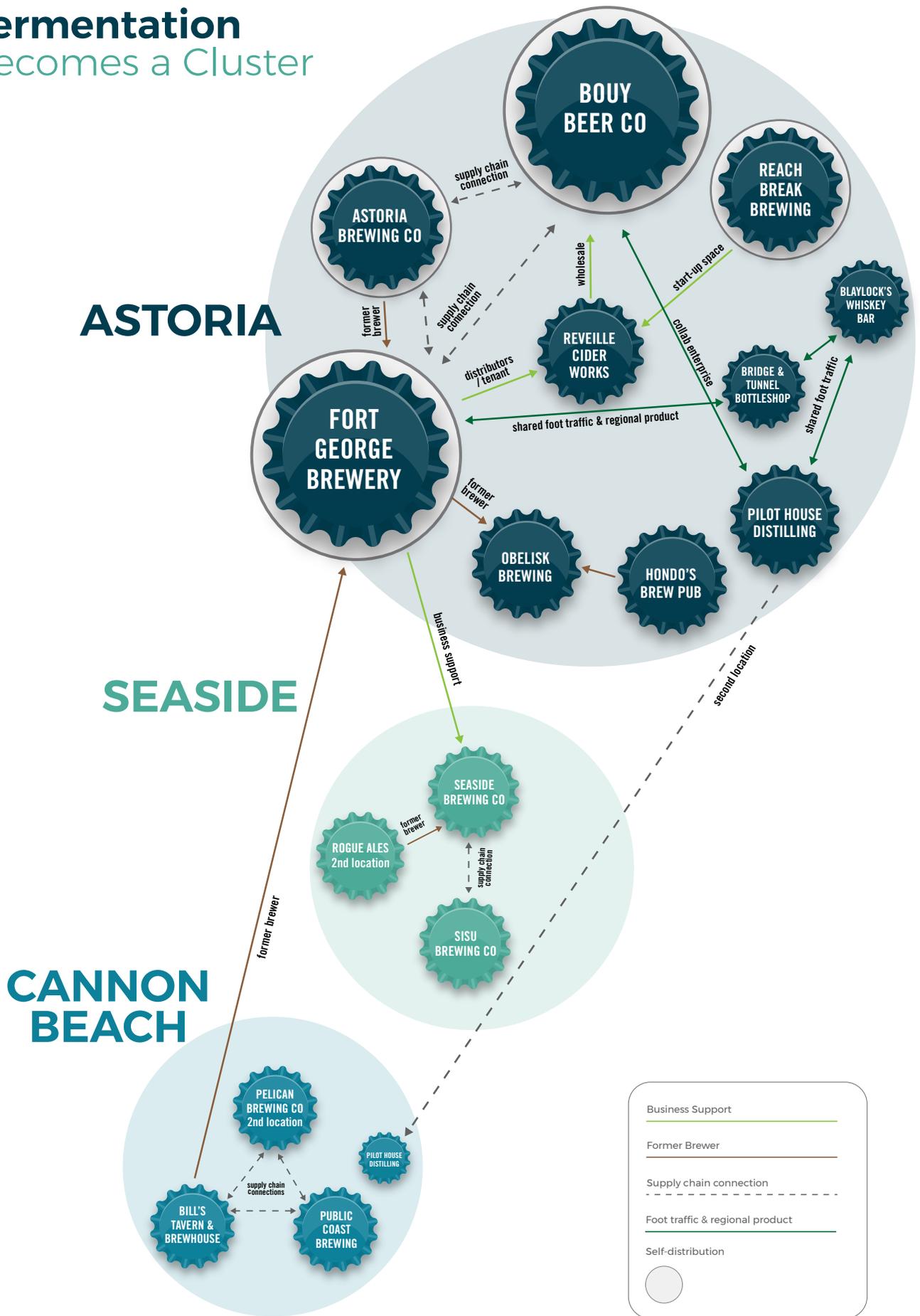
<sup>15</sup> Lindblom, Emily. "Obelisk Beer Co. to open in Astoria - New brewery planned for Columbia Fruit space." Astorian, The, sec. A, July 2021. NewsBank: America's News, <https://tinyurl.com/yy42wvut>. Accessed 31 Mar. 2022.

<sup>16</sup> "Distillery in Astoria: Pilot House Distilling: Oregon." Pilothousestilling, <https://www.pilothousestilling.com/>.

<sup>17</sup> Towsey-French, Jeremy, Personal Interview. 12 April 2022.



# Fermentation Becomes a Cluster





A 2021 study exploring social capital in the craft brewing sector found that the growing sector provides a new approach to economic development and community benefits across urban and rural areas, including preservation and redevelopment of existing infrastructure, increased property values and greater appeal for those looking to relocate for work or start a new business.<sup>18</sup> In the City of Astoria's 'Advance Astoria' five-year economic strategy, the fermentation sector is highlighted as Strategy 8, where companies, institutions and entrepreneurs benefit from geographic concentration and inter-related business operations with a skilled labor force, increased innovation, coordinated advocacy efforts, synergistic supply chains and a cross pollination of knowledge.<sup>19</sup> In essence, the number of brewery businesses and the shared business characteristics of breweries has created an economic cluster whose business activity begets positive financial, community and entrepreneurial assets.<sup>20</sup> Clatsop County's fermentation sector has many of the attributes of a successful economic cluster, including an increase in business start-ups, collaborative production and cohesive branding that links the North Coast community to its breweries. In the cluster, there are several independent distribution operations, bringing production and

supply autonomy to our region – a critical asset in establishing economic and community resiliency.

The presence of the fermentation cluster has fostered the development of more resilient, regional supply chains. Several of the breweries in the county operate independent distribution companies, including Buoy Beer Co, Fort George Brewing, Reach Break Brewing and Astoria Brewing Company. Astoria Brewing previously contracted exclusively with Clatsop Distributing Co., whose clientele includes Budweiser and Ninkasi. Astoria Brewing's decision to launch independent distribution was driven by the company's plan for production expansion and entry into more niche market opportunities and branding. In 2019 Reveille Ciderworks announced its prospective contract with Fort George Distribution, including storage in their Astoria warehouse, a partnership facilitated by a Business Oregon small manufacturing business expansion program grant of \$37,500.<sup>21</sup> Now, Fort George Distribution provides logistics to a variety of regional beverages across the Pacific Northwest. With the autonomy of more regional distribution networks, the North Coast fermentation industry is fortifying a supply chain by vending regional products and strengthening businesses with greater local cash flows.

<sup>18</sup> Knollenberg, Whitney, et al. "Craft Beverage Tourism Development: The Contributions of Social Capital." *Journal of Destination Marketing & Management*, vol. 20, 13 Mar. 2021, p. 100599., <https://doi.org/10.1016/j.jdmm.2021.100599>.

<sup>19</sup> Astoria City Council, et al. "Advance Astoria - A Five-Year Economic Development Strategy." City of Astoria, July 2017.

<sup>20</sup> "Craft Brewing Industry Clusters: The Landscape Ahead." Opus Consulting, 24 July 2018, <https://tinyurl.com/ummtz9vj>. Industry clusters represent an enormous resource for businesses. The Economist identifies the main benefit of clustering as the ability for many small companies to enjoy shared economies of scale usually only available to large companies. While increased competition is certainly a concern when markets are too concentrated, geographic concentration can bring about many positives for a company including access to a knowledgeable workforce who can transfer their skills and experience in an industry between companies, easy access to suppliers who are more willing to build relationships with companies in areas with a high concentration of other customers and more information channels like networking events and trade publications that improve both the quality of the product and the business practices behind it.

<sup>21</sup> Stratton, Edward. "Reveille Ciderworks expands wholesale, pauses retail - New distribution agreement with Fort George." *Astorian*, The, sec. A, 5 Nov. 2019, p. 001. NewsBank: America's News, <https://tinyurl.com/yur98xzp>. Accessed 14 Apr. 2022.

Not only does economic cluster formation provide social and capital infrastructure of which business owners can take advantage, but it also benefits employees. The diverse scale of brewery businesses in Clatsop County offers different types of skill building opportunities for workers either just entering the field or looking to be involved in more complex operations, effectively creating a “career ladder” for those in the industry. In some cases, workers that gain technical brewing skills in one regional business will then leverage their experience to kick-off their own entrepreneurial brewing pursuit. Fort George, Seaside Brewing Co. and Obelisk Beer Co. are all examples of businesses where employees that gained regional industry skills were then inspired to begin their own operations – and keep it local.

Another valuable characteristic of a strong cluster is the presence of anchor businesses, such as Buoy and Fort George that have extended support for smaller enterprises in need of resources, technical assistance, or promotion. The creation of increased industry cohesion and creativity, the establishment of stable supply chains and the prospect of innovative curriculum at the Clatsop Community College all contributed to the impetus to include the fermentation industry as a core strategy in Astoria’s economic development plan. The plan illustrates Astoria’s entrepreneurial ecosystem that supports home-based businesses and startups, spinoffs and the next generation of companies that are sustainable and competitive in a global marketplace.<sup>22</sup> During stakeholder planning sessions, the economic potential and community impact of the fermentation industry were clear. Brewpubs were seen as demographic diversifiers, establishing an “atmosphere that prevent young folks from fleeing, ...namely, 20-to 40-year-olds who drive the economy and bring in new kinds of industry.”<sup>23</sup> In 2010, the Astorian reported that the success of Fort George benefits surrounding brewers, whether in close proximity, like Astoria Brewing Company, or further south, like Bill’s Tavern in Cannon Beach.<sup>24</sup> The residual exposure that a large brewery provides other county breweries is a central feature of a successful industry cluster.



Maintaining the growth of skilled jobs and ensuring the integration of fermentation sector employees into the community is especially important for continued entrepreneurship and the creation of local business networks and local connection as North Coast communities become home to an increasing number of retirees and second homeowners consequently changing the landscape of the regional labor force.

<sup>22</sup> Astoria City Council, et al. “Advance Astoria - A Five-Year Economic Development Strategy.” City of Astoria, July 2017.

<sup>23</sup> “Advance Astoria” aims for economic growth.” Daily Astorian, The, sec. News, 6 Oct. 2016. NewsBank: America’s News, <https://tinyurl.com/muup2x4j>. Accessed 13 Apr. 2022.

<sup>24</sup> Trabucco, Susan. “Beer: Rising industry is putting region on the map, many ‘boats’ likely to float.” Daily Astorian, The, sec. News, 1 Sept. 2010. NewsBank: America’s News, <https://tinyurl.com/bdfecnv>. Accessed 24 Mar. 2022.

# Regeneration-by-Brewery



Starting in the 1870s, Astoria was regarded as a seafood canning empire. In 1945, roughly 30 canneries operated along the Columbia River.<sup>25</sup> However, the 1980s brought the collapse of the seafood and timber industry. Astoria's economy, like many of Oregon's rural, natural resource dependent industrial towns, quickly deteriorated.<sup>26</sup> In the 1990s, the City turned to historic preservation as a key strategy to spur community and economic development. Redevelopment efforts at this time were driven by large-scale public and private investment.<sup>27</sup> It did not take long for local and regional developers to see potential in Clatsop County via historic preservation and hotel operations. Astoria's city historian John Goodenberger, emphasized the importance and influence of flagship commercial redevelopment during this time in creating a safer environment for investment.<sup>28</sup>

In 2018, research on the craft brewery 'revolution' analyzed the growth of brewery clusters and the transformation of post-industrial cities, finding that microbreweries tend to be located in parts of cities once bustling with manufacturing and warehouse activity. For downtowns weakened by de-industrialization, breweries can fill some of that vacant manufacturing space, a frequent phenomenon for North Coast breweries including Fort George, Buoy Beer Co., Seaside Brewing Co., Sisu Brewing, Reach Break Brewing and Reveille Ciderworks which all began and expanded operations in previous manufacturing, processing or historic buildings.<sup>29</sup>

The tie between historical preservation and brewery growth has remained a prominent, if not critical, component of redevelopment in Clatsop County.

<sup>25</sup> "Astoria History." CruisePortInsider.com - Astoria History, [www.cruiseportinsider.com/astoriahistory.html](http://www.cruiseportinsider.com/astoriahistory.html).

<sup>26</sup> "Astoria Tries to Rejuvenate Downtown." Daily Journal of Commerce, 11 Dec. 2000, <https://tinyurl.com/mw8t5xrk>.

<sup>27</sup> "Downtown Astoria." Daily Astorian, The, sec. Article, 17 Jan. 2018. NewsBank: America's News, <https://tinyurl.com/2ep72mbv>. Accessed 1 Apr. 2022.

<sup>28</sup> Goodenburger, John. Personal Interview. 13 April 2022.

<sup>29</sup> Isabelle Nilsson, Neil Reid & Matthew Lehnert (2018) Geographic Patterns of Craft Breweries at the Intraurban Scale, *The Professional Geographer*, 70:1, 114-125, DOI: 10.1080/00330124.2017.1338590



3

Downtown revitalization occurred through commercial and cultural investments, and continues to do so, in concert with the development of the fermentation custer

2

Historic and Cultural Redevelopment became cornerstone of economic development

1

In 1997 "The Astoria Gateway Master Plan" receives federal and state funds to kick start waterfront development

- 
- 2015** Norblad Hotel reopens after renovations
  - 2009** Commodore Hotel reopens after extensive renovations
  - 2008** Astoria Hotel undergoes renovations  
Historic Flavel House undergoes restoration
  - 2007** Fort George begins operations at the historic Fort George building in Astoria. By the end of 2009 they purchased the entire Fort George block.
  - 2006** Liberty Theater completes \$9M in renovations
  - 2005** Cannery Pier Hotel constructed on former site of Union Fisherman's Packing Co.
  - 2003** Hotel Elliot undergoes \$4M renovation
  - 1997** OSU seafood lab, Columbia Memorial Hospital, Aquatic Center, Clatsop Community College, Astoria Riverwalk were all improved

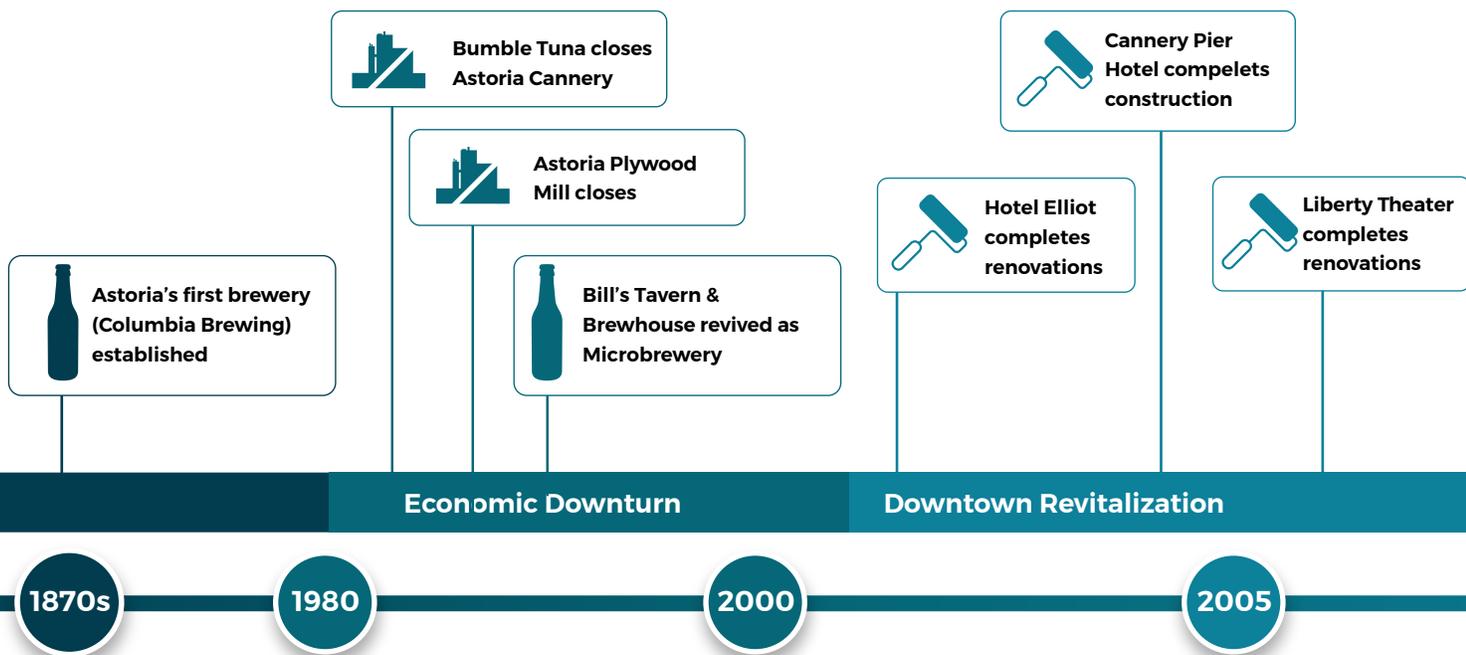


When the former Elmore Cannery plant closed in 2018, there was concern that the production capacity would be lost to service-sector users. Instead, the warehouse became Fort George Brewery's new commercial production hub outfitted with a high-speed canning line, several brewing and conditioning tanks and cold storage space to store brewing inputs and product inventory for their distribution company. Fort George's expansion came at a pivotal moment for Astoria's nascent fermentation cluster, preceding Buoy Beer Co. and Pilot Distilling's expansion into a former sardine processing plant. Fort George's and Buoy's acquisition of former manufacturing properties points to a decisive shift in industrial capacity for the city from seafood canning to brewery canning.

This concept of brewery-driven infrastructure was substantiated in a 2021 report that found the establishment of breweries had the potential to increase community capacity in terms of physical, social and environmental assets, including brewery development in formally vacant space, the creation of park space, or revitalization of a historic community asset.<sup>30</sup> In Astoria, the development of the Buoy Beer Co. campus has brought greater foot traffic to businesses on the west end of Astoria's River Walk or as the Oregonian described it in 2021, "turning a once-abandoned and decrepit dock near the mouth of the Columbia River into a popular destination along the burgeoning Astoria Riverwalk - and one not just for craft beer lovers."<sup>31</sup>

<sup>30</sup> Knollenberg, Whitney, et al. "Craft Beverage Tourism Development: The Contributions of Social Capital." *Journal of Destination Marketing & Management*, vol. 20, 13 Mar. 2021, p. 100599., <https://doi.org/10.1016/j.jdmm.2021.100599> and Sears, Colin, Personal Interview. 4 May 2022: Upgrading underutilized or even dilapidated infrastructure can also be regarded as a form of built environment resiliency (i.e. seismic preparedness).

<sup>31</sup> Meunier Andre. *The Oregonian*. "Buoy Beer Expansion Will Allow Popular Astoria Brewery to Meet Growing Demand." *Oregonlive*, 12 Oct. 2021, <https://www.oregonlive.com/beer/2021/10/buoy-beer-expansion-will-allow-popular-astoria-brewery-to-meet-growing-demand.html>.



## Economic Diversity and Resiliency

At the time of its establishment, Buoy Beer Co. co-owner Luke Colvin saw the economic advantage of a brewery as a manufacturing business, considering the limitation for growth in the service industry in an area with a small year-round population.<sup>32</sup> Craft brewing can perform well in the service industry as well as leverage the value proposition and operational growth opportunity of manufacturing a unique, regionally aligned product. For Buoy investors, a brewery offered the prospect to revive the manufacturing industry in Astoria to its former canning status. For this reason, the craft brewing industry has proved highly resilient in poor economic conditions. For example, the Brewers Association reported that despite the downturned economy, craft beer sales grew 11 percent during the first half of 2008. The Association attributes this growth to an increasing consumer preference for handcrafted, locally produced beer.<sup>33</sup>

In 2012, Carolyn Eagan, former Oregon Regional Economist, tracked the number of jobs in the brewing industry, revealing that while Oregon's total employment shrank by six percent during the worst years of the financial crisis, brewery and brewpub employment grew by 30 percent.<sup>34</sup> Research

conducted in 2018 confirmed such contrarian craft brew economic performance, finding that between 2008 and 2016, the number of brewery establishments expanded by a factor of six and the number of brewery workers grew by 120 percent. Research also suggests that the growth of craft brewing during the 2008 recession was in part spurred by entrepreneurs responding to unemployment by capitalizing on their home brewing operations.<sup>35</sup> While conventional beer sales, like Budweiser and Coors, were declining, craft brewers started to fill the gaps in niche markets and built out the sector's workforce. In 2010, while Astoria was still reeling from the financial crisis, local reporting on North Coast breweries described a harbinger of positive industry growth.

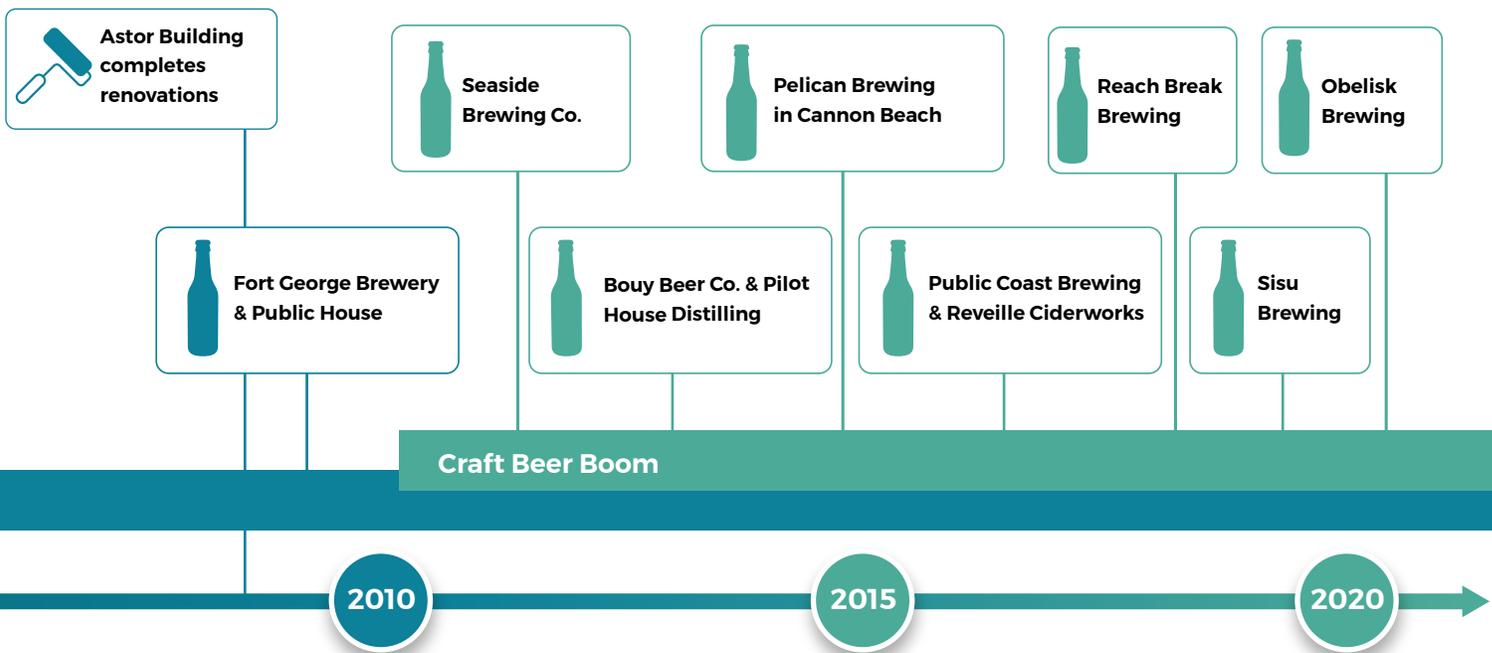
A similar phenomenon played out during the COVID-19 pandemic, which brought government-mandated closures of restaurants, brewpubs, and entertainment venues. According to a 2021 study prepared for The Beer Institute and National Beer Wholesalers Association, nearly 150,800 jobs were lost when on-premises beverage sales stopped at restaurants, bars, and other service locations.

<sup>32</sup> Stott. *Beer 101 North*. McFarland & Company, Inc., 2017.

<sup>33</sup> Wisdom, Robbie. OSU, Corvallis, OR, 2008, Investigating a New Business Model for Pacific Northwest Seafood Micro-Canners.

<sup>34</sup> Broadcasting, Oregon Public. "Oregon May Have Most Brewery Jobs In The U.S." *Daily Astorian*, The (Astoria, OR), sec. News, 22 Aug. 2012. NewsBank: America's News, <https://tinyurl.com/yb6dpjcr>. Accessed 1 Apr. 2022.

<sup>35</sup> Thompson, Derek. "Craft Beer Is the Strangest, Happiest Economic Story in America." *The Atlantic*, Atlantic Media Company, 23 Jan. 2018, <https://tinyurl.com/2yuur7pc>.



While the volume of beer sold rose as breweries pivoted towards increased canning operations, sales fell dramatically as consumers purchased less beer on tap. In total, national sales fell by over \$8 billion.<sup>36</sup> Clatsop County breweries were no exception, forced to cut staff by over half due to a sharp decline in revenue in March 2020. However, throughout the pandemic, North Coast breweries outperformed other breweries in the state in cans sold. As the rest of the state experienced declines in production, Fort George Brewery and Buoy Beer sold more barrels of beer during the pandemic than before, making the North Coast stand out during a tough year for the industry.<sup>37</sup>

While draft beer generates the most revenue for brewpubs, canning offers a volume-consistent line of business, making it a strategic shift for breweries during the pandemic. Since breweries operate within service, distribution, retail, and manufacturing realms, they are more diversified and therefore adept at responding to drastic market behavior, policy changes and economic disruptions. Although the retail portion of the fermentation industry suffered from shut-downs, manufacturing infrastructure enabled breweries to pivot operations and take advantage of

available revenue streams like distribution and canning, while also continuing to make labor and capital investments. A former representative from Business Oregon's Global Strategies & Recruitment office highlighted the dexterity of the dual retail-manufacturing model, enabling companies to navigate volatile or downturned markets, especially as observed during the COVID-19 pandemic.<sup>38</sup>

During this period, regional breweries were able to rely on each other for manufacturing inputs, such as canning materials, and to insulate their supply chains, enabling them to maintain foundational operations. According to Fort George Brewery owner Chris Nemlowill, the Governor's April Executive Order restricting restaurant operations to take-out, resulted in the loss of about 120 staff members, compared to an additional 20 jobs lost outside restaurant/retail operations. Buoy laid off 57 of its 114 employees and the cidery house, Reveille, let go all staff to become an entirely family run business.<sup>39</sup> One year later Fort George was back with two-thirds of its pre-pandemic employment.

<sup>36</sup> John Dunham & Associates. "A Study of The US Beer Industry's Economic Contribution in 2020." Beer Serves America, May 2021. Prepared for The Beer Institute & National Beer Wholesalers Association.

<sup>37</sup> McDonald, Abbey. "North Coast breweries outperformed state during pandemic - Volume was up, but revenue dipped." Astorian, The, sec. A, 4 Nov. 2021, p. 001. NewsBank: America's News, <https://tinyurl.com/y524zjj4>. Accessed 31 Mar. 2022.

<sup>38</sup> Sears, Colin, Personal Interview. 4 May 2022.

<sup>39</sup> Stratton, Edward. "For local bars and restaurants, virus is a gut punch - A sudden blow to the North Coast's economy." Astorian, The, sec. A, 19 Mar. 2020, p. 001. NewsBank: America's News, <https://tinyurl.com/2tvac3ph>. Accessed 25 Mar. 2022 and Towsey-French, Jeremy, Personal Interview. 12 April 2022

# Economic Impacts of the Fermentation Cluster

As Clatsop County's fermentation cluster has created jobs and invested in business expansion, it has created significant direct and indirect economic impacts. During the last five years, the fermentation cluster has been responsible for more than \$30 million in local spending and investments in site development and equipment. Total estimated cluster employment is 520 full and part time employees averaging \$18 million in annual local wages. Current employment is down by a quarter of its pre-pandemic level of more than 700 employees; however, the cluster has recovered more quickly than many other industries hard hit by pandemic-related layoffs. In addition, the cluster supports more than 115 local businesses through local spending and purchasing. Total employee spending as a result of wages and non-cluster spending at local businesses results in an additional 180 jobs and \$7.7 million in annual wages. As the cluster recovers from pandemic-related setbacks, it is projected to add an additional 120 jobs, equating to an increase of \$3.9 million in labor income.

The cluster is also a significant driver of local visitor spending which contributes more than \$21 million in spending and indirectly supports another 150 jobs and \$6.1 million in wages.<sup>40</sup> The cluster also accounts for one million in Oregon payroll taxes and more than \$200,000 in annual local property taxes.

## Total Economic Impacts Of The Clatsop County Fermentation Cluster

**\$38M in local direct and indirect investment and spending** over the past five years

Almost **700 full and part time jobs** and **\$30M in labor income**

**\$27 in visitor related spending and incomes** and more than **150 full and part time jobs**

## Direct Industry Impacts

**\$30M in local spending & investments** in the last five years

**520 employees and \$18M** in local annual wages

More than **\$21M in local visitor spending** from festivals and events each year

**\$1M in annual payroll taxes to Oregon**

More than **\$200k in annual property taxes**

## Indirect & Induced Impacts

**180 jobs** accounting for annual wages of **\$7.7M in related industries**

Visitor spending resulting in nearly **150 jobs and \$6.1M in indirect & induced** wages

**Contribution and support for local community causes** amounts to an estimated \$150K annually

**115 local business supported** through local spending

## Industry Trajectory

Clatsop County's fermentation cluster employment is **recovering 3x faster** than total county employment growth

**Levels of pre-pandemic visitor spending is expected to fully recover by 2025**

<sup>40</sup> Visitor spending for 2019, the last year in which visitor spending and visitor events were at normal levels.

# Craft Brewing Tourism & Community Impact

Securing off-season visitation along the coast is a perennial challenge for the tourism industry. For the North Coast, the craft brewing industry is a notable year-round visitor draw, staging flagship events like Fort George's Festival of the Dark Arts in February. The winter festival features regional food vendors, live music and local artists, considered "a celebration of Astoria, a... craft beer mecca and tourist destination."<sup>41</sup> An estimated 3,000 people attended in 2020.<sup>42</sup> Upwards of 120 local volunteers are recruited to staff the festival. Surrounding business owners attest that the Festival is a big bump for businesses at this time of year.<sup>43</sup> The Pacific Northwest Brew Cup, held each September prior to 2020 by the Astoria Historic Downtown Association, generated a revenue of \$14.2M and required the help of 47 employees.<sup>44</sup>

A community-first business model has long been a central practice for breweries along the North Coast, each with a long history of designing, participating in and supporting a variety of community education initiatives, institutions and causes. In 2012, Fort George and Clatsop Community College announced a public lecture series "Ales & Ideas," hosted at the brewery, covering a range of topics from arts, literature and science.<sup>45</sup> While formalized curriculum has not been established, there is ongoing conversation between Fort George and Clatsop Community College to offer fermentation courses in the county. In 2015, Buoy Beer piloted the concept of a brewery apprenticeship program, partnering with local high schools to establish the fermentation industry as a trades-based career opportunity.<sup>46</sup> Seaside Brewing previously held a 'History and Hops,' lecture series sponsored by the City's historical society with the aim of connecting residents to local history.



<sup>41</sup> Murphey, Colin. "Festival of Dark Arts envelops Astoria." Daily Astorian, The, sec. A, 22 Feb. 2019, p. 005. NewsBank: America's News, <https://tinyurl.com/ychttkcd3>. Accessed 13 Apr. 2022 and Stott. Beer 101 North. McFarland & Company, Inc., 2017.

<sup>42</sup> Evans, Alyssa. "FisherPoets, Dark Arts undercut by virus - Two February festivals altered by pandemic." Astorian, The, sec. A, 12 Nov. 2020, p. 001. NewsBank: America's News, <https://tinyurl.com/ympxwdc>. Accessed 13 Apr. 2022.

<sup>43</sup> Stratton, Edward. "Dark Arts is Astoria's hottest Black Friday sale - Tickets sold out in 30 minutes." Astorian, The, sec. A, 30 Nov. 2019, p. 001. NewsBank: America's News, <https://tinyurl.com/ay93xtye>. Accessed 13 Apr. 2022.

<sup>44</sup> "Pacific Northwest Brew Cup" ZoomInfo, <https://tinyurl.com/dk2nb6jf>.

<sup>45</sup> Clatsop Community College. "Ales & Ideas: Fort George Brewery and Clatsop Community College Announce New Lecture Series." Daily Astorian, sec. News, 26 Sept. 2012. NewsBank: America's News, <https://tinyurl.com/fzpdj5z6>. Accessed 24 Mar. 2022.

<sup>46</sup> "There's a high-schooler in the brewhouse." Daily Astorian, The, sec. News, 16 Nov. 2015. NewsBank: America's News, <https://tinyurl.com/578jun45>. Accessed 6 Apr. 2022.



Another feature of Clatsop County's fermentation cluster is the significant level of direct investments made in the community, whether through partnering with local non-profits, serving as sponsors to events, or offering space free for community use. Fort George alone contributes \$110,000 in direct and in-kind donations on average, annually. One notable contribution includes its support of The Liberty Theater's concessions, which enabled the theater to net \$80,000 over four years of operations.<sup>47</sup> According to owner Dave Kroening, Buoy Beer Co. has contributed upwards of six figures in in-kind and direct donations ranging from targeted fundraisers, food donations and large scale events like the annual Run on the River fundraiser for the Astoria Parks Foundation.<sup>48</sup> Collaborative, limited-edition brews, or "Community Taps", offering proceeds from a special menu selection, allows breweries to send upwards of \$2,000 per month to different local charities. In addition to donating space for community events, Seaside Brewing has also directly donated to organizations like Seaside for Kids.<sup>49</sup> Embracing a triple bottom line is not reserved for legacy brewers, but a community value adopted by even the most novice fermenters. While at Fort George, Obelisk Beer Co. founder Nathan Lampson and co-founder Dave Coyne worked with nonprofits and farmers directly

and intend to incorporate those practices into their own business.<sup>50</sup>

In interviews conducted with fermentation business owners, there was a consistent theme of mutual investment in others' success, both during start-up phases and in current-day operations. It is through independent business success and cross-collaborative efforts that breweries and cities alike can leverage the multiple forms of capital in the craft brewery clusters to benefit the tourism sector, residents' livelihood and the economic prosperity of the region. Several examples of this market cohesion and multi-stakeholder collaboration include events in which multiple breweries participate, organize and/or sponsor (PNW Brew Cup or the Festival of Dark Arts), the tourism assets created (North Coast Beer Trail) and alternative funding strategies leveraged to support business development. The fermentation industry in Clatsop County also exhibits what researchers note as "consideration of social issues in defining craft beverage, such as emphasis on innovation and engagement with local communities," and the dominant role such consideration has in the creation of social capital that supports a successful economic cluster.<sup>51</sup>

<sup>47</sup> Crockett, Jennifer. Personal Interview. 26 April 2022.

<sup>48</sup> Kroening, Dave. Personal Interview. 7 April 2022.

<sup>49</sup> Stott. Beer 101 North. McFarland & Company, Inc., 2017.

<sup>50</sup> Lindblom, Emily. "Obelisk Beer Co. to open in Astoria - New brewery planned for Columbia Fruit space." *Astorian, The*, sec. A, July 2021, p. 001. NewsBank: America's News, <https://tinyurl.com/yy42wvut>. Accessed 31 Mar. 2022.

<sup>51</sup> Knollenberg, Whitney, et al. "Craft Beverage Tourism Development: The Contributions of Social Capital." *Journal of Destination Marketing & Management*, vol. 20, 13 Mar. 2021, p. 100599., <https://doi.org/10.1016/j.jdmm.2021.100599>.



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iven the sizeable geographic area of the cluster, it has a definable and attractive entrepreneurial landscape and start-up destination. Interviews with over a dozen of industry stakeholders revealed the inherent sense of community and shared identity that incentivizes fermentation business development. Having a fermentation cluster in Clatsop County is especially advantageous as the craft beverage industry is unique in its ability to drive place-based innovative product, provide significant investments in the community and spur redevelopment. Clatsop County, with its storied past, historic canning and manufacturing roots and coastal allure has become home to some of the most productive, successful and highly awarded fermentation operations in the state, a fact that we expect to continue to invite greater innovation, visitation and economic vitality.

Thank you to our partners for their contribution to this study

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Astoria Brewing Company  
Astoria Public Library  
Astoria-Warrenton Area Chamber of Commerce  
Bridge & Tunnel Bottleshop and Taphouse  
Buoy Beer Company  
City of Astoria Community Development Department  
Fort George Brewery & Public House  
Oregon Brewers Guild  
Obelisk Beer Company  
Pelican Brewing  
Reveille Ciderworks  
Reach Break Brewing Company  
Seaside Brewing Company  
The Liberty Theater

