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EXAMINING THE TRENDS OF CRAFT BEER LEGISLATION IN THE U.S.

by

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A THESIS

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ABSTRACT

Brewing and beer production historically have been intertwined with government, politics, and regulation in the United States. With the growth of the craft beer industry, discussions surrounding brewing regulation have refocused on their impact on smaller businesses and this growing segment of the alcohol beverage market. The history of beer and craft beer in the United States has been studied, as well as the impact of taxation and regulation on business, but research on craft brewing regulation has been relegated to broad studies of specific regulation or case studies of cities and states covering several regulations. This present research seeks to fill the gap in the literature related to the overall state of craft brewing regulation and the relationship of regulation at different levels of government. This thesis takes a multi-faceted approach to understand the state of craft beer legislation and trends across the country; it reports on a content analysis of the legalization of brewing and breweries, existing regulation, and number of craft breweries, as well as three case studies of cities in the United States. The content analysis and case studies indicate that states and local governments approach craft beer regulation differently, including the application of federal and state regulations, concluding that more research is needed to understand these relationships.

Keywords: craft beer, public administration, legislation, alcohol regulation, craft brewery

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CHAPTER 1

INTRODUCTION

When Creature Comforts Brewing Company opened its doors in Athens, Georgia in 2014, the brewery experience was a far cry from its current 2021 taproom. Visitors were able to drink—but not purchase—beer from the brewery. This was accomplished through “tasting tours,” which could be purchased for \$10-15 and included tickets for 4-ounce sample pours. The brewery was legally required to announce tours to its patrons and was cited in 2016 when an undercover agent visited the brewery during an industry night for bar, restaurant, and liquor store employees and received a free beer but without the offer of a tour. At the time, Georgia law permitted free tastings during educational or promotional tours (Aued, 2016). Outside of any special events, patrons could pay for a “tasting tour” but were not required to take a tour. Instead, many would stand in lines to receive their sample pours, oftentimes hopping back in line before finishing their drink, and were not able to purchase canned or bottled beer from the brewery—to do that, they would have to drive to a local bottle shop or grocery store and pick up a six-pack (matthewpulver, 2015).

In 2017, legislative changes in Georgia made a difference in how breweries would interact with patrons. While they could still offer tours, breweries were now able to sell directly to customers in the form of “full pours,” or 12- to 16-ounce beers, which could be consumed on site (Sheinin, 2017). With prices starting at \$5 per beer, this option was not only more profitable for breweries, but also enabled a brewery experience where

patrons could get a beer and sit down to drink their beverage. Also in 2017, legislation opened even more doors—breweries could now sell takeaway beers so that patrons and visitors could leave the taproom with a six-pack or bottle of beers, or a combination of these packages as long as it was less than 288 ounces (Townsend, 2018; Ray, 2017). After the new law went into effect, 13 breweries opened in the state within a year (Townsend, 2018).

Georgia's legislative changes opened the doors to more profitable brewery practices and new ways to interact with the community and beer drinkers, but some restrictive legislature remained on the books. In 2019, the Georgia state legislature proposed a change to laws, allowing for breweries under the same ownership to share beers (Kellogg, 2019). For Creature Comforts, this would have meant beer brewed in Athens could be packaged and transported to a second brewery location in Atlanta without additional taxes or red tape. This proposed change, however, died in the Senate. In 2020, when Creature Comforts announced it was opening a second location, the announcement came that it would not be in Atlanta. Instead, the brewery would move cross-country for a new location—to Los Angeles. The reason for a West Coast destination? More freedom and less regulation (Townsend, 2020). If Creature Comforts opened an Atlanta taproom, legislation would not allow the brewery to transfer beer between locations—each brewery would have to brew its own beers, and those beverages would be the only ones allowed on tap.

The story of Creature Comforts Brewing Company is but one example of the complexity of legislation around craft breweries, brewing, and distribution. Since the repeal of Prohibition in 1933, states have taken different approaches to the legislation of alcohol production and distribution. While some states regulate all levels of production,

from brewing limits to brewery location to beer sales, other states impose fewer regulations or put regulatory power in the hands of local governments. As craft breweries became more prevalent in the early 2000s, some Prohibition-era laws were brought to the forefront of legislative conversations, with small craft breweries arguing for fewer restrictions and more freedoms in order to promote small business. These regulations vary between states and continue to change based on market pressures, lobbying efforts, and local decisions. When seeking to understand the state of craft beer legislation, however, information on the brewing industry, as well as studies of this industry and the laws that regulate it, is mainly fragmented, and exists in hyper-local case studies or generalizations that cover large regions or basic, national trends.

Economists have discussed legislation's role in craft beer's proliferation throughout the country, and researchers have covered topics like the three-tier system—a framework for the brewery to consumer supply chain that exists throughout the country—and state-level restrictions on alcohol by volume (Roth, 2019). Case studies have also explored how local-level guidelines, such as zoning regulation, impact the distribution of breweries throughout a community (Barajas et al, 2017; Baginski & Bell, 2011; Boarnet et al, 2010; Beer: Is it zoned out?, 2013). Other researchers have studied breweries as a catalyst for economic development and urban revitalization (Barajas et al, 2017; Nilsson et al., 2018; Somerville, 2013). From a cultural lens, breweries have also been marked as attractive destinations for young professionals. They can be spotlighted by cities and states as a stopping point for tourists, while providing a peek into the culture of a city and/or state (Wolinsky, 1983). Throughout the literature, however, these studies continue to exist in silos considering select elements of legislation, such as the legalization of

homebrewing, or provide an overview of regulation at the hyperlocal level through case studies of cities or communities.

This thesis builds on previous literature by analyzing the variety of legislation and scopes of regulation impacting each of the 50 states and the District of Columbia, as well as the variation between states, with the goal of answering several research questions:

1. What is the current status of brewery regulation in the United States?
2. What processes or practices are states regulating? Based on those regulations, what challenges might breweries have?
3. How do local governments interpret and apply state regulations, and how do those regulations impact local economies?

To date, these questions have not been answered and public administration researchers have not explored this topic from a public administration lens. By analyzing the differences and similarities in regulation across the country, and creating a comprehensive understanding of this legislation, this thesis aims to inform future analysis of trends, economic impact, and legislative impact as they relate to craft breweries. Craft brewing is a relatively young segment of the alcoholic beverages market when compared to distilling or wine making, but it is expected to account for 15 percent of the global beer market in coming years (Wallace, 2019). As craft breweries become more entwined with the growth and restructuring of communities (Wallace, 2019; Weiler, 2000; Somerville, 2013), it becomes more important to understand the impact of regulation from a public administration lens, as this lens enables local and state leaders to understand the implications of legislation, the economic impact, and potential next steps in action.

This thesis approaches the topic of brewing legislation through a content analysis of existing legislation at the state level, as well as three case studies that explore the

relationship between state-level and local-level regulation and provide further insight into the impact of regulation on breweries and communities. Data from the Brewers Association, state legislatures, and local or regional craft brewing guilds inform the content analysis of state legislation, while data for the case studies are drawn from news articles, craft brewing websites and blogs, and city websites. The content analysis informs our understanding of brewery distribution laws, legalization of brewpubs and homebrewing, the number of breweries, economic impact of craft beer, and licensing regulations for breweries. The case studies look at Birmingham, Alabama; Asheville, North Carolina; and Denver, Colorado and inform our understanding of the connection between local regulation and city planning and zoning, economic development initiatives, craft beer tourism, and urban revitalization.

This thesis is broken into five chapters. The literature review in Chapter 2 provides an overview existing knowledge regarding the history of craft beer breweries, legislation regulating breweries, and notable trends as they relate to craft breweries and the brewing industry. It also discusses how other schools of thought have approached the topics of regulation through an economic, historical, and/or political lens. Chapter 3 will cover the process of data collection for this thesis, as well as research completed to craft three case studies regarding three cities across the United States. Chapter 4 includes analysis of data collected regarding state-level legislation, as well as three case studies on Birmingham, Alabama; Asheville, North Carolina; and Denver, Colorado. In the concluding chapter, Chapter 5, this thesis considers unanswered questions and possibilities for future research in craft brewing legislation and public administration.

CHAPTER 2

LITERATURE REVIEW

Booze, Brewing, and Bans: A History of Craft Beer in America

From tales of low beer stores leading to the Plymouth Rock landing to tavern gatherings spurring the American Revolution, history shows that beer and events in United States history often are entwined. And from the time of British rule to the 21st century, historical events have spurred alcohol taxes and regulations. In fact, the first domestic tax imposed by the newly formed American federal government aimed to curb alcohol consumption and to raise money (Malone & Stack, 2017). While Americans drank heavily through the 18th and 19th centuries (Rorabaugh, 1981), the perspective on alcohol shifted during the Industrial Revolution, when intoxication could lead to dangerous and deadly consequences in factories. Temperance societies grew during this time, and in 1920 the 18th Amendment signed in the Prohibition Era. While craft brewing is an industry that has seen resurgence and significant growth in the last 20 to 30 years, changes occurring pre- and post-Prohibition have left a lasting impact on the industry.

The temperance movement found its start with Protestant evangelicals in the 1800s, when the American Temperance Society was founded in 1826 (Frendreis & Tatalovich, 2010). The idea of temperance was rooted in American religious and moral ideals that believed alcohol was a scourge on society that led to corruption, crime, and death. It also tied back to the country's ongoing clashes of urban versus rural, upper versus middle class, and Catholic versus Protestant. The temperance movement found

most of its support in Protestant churches and evangelicals, and those religious roots can still be seen in modern alcohol regulations (Frendreis & Tatalovich, 2010).

Prohibition was able to grab a foothold in American society at a time when progressive ideals and a “temporary spirit of wartime sacrifice” led many to support the 18th amendment and a ban on alcohol sales and production (Frendreis & Tatalovich, 2010), and beer and brewing received a lot of focus, as it was the most highly consumed alcoholic beverage at the time (Dighe, 2016). This change, however, led to several others. Before Prohibition, taxes on alcohol made up about 30 percent of the United States’ federal budget, meaning that as the goal of prohibition arose in 1913, a federal income tax was created to make up for the looming loss in revenue (Malone & Stack, 2017). This loss in revenue, along with the fact that Prohibition was seen as a catalyst for the growth of gangs such as the Mafia and other illegal activity (Tamayo, 2010; Kerr, 2005), is seen as a reason Prohibition was deemed unsuccessful and repealed in 1933. Anti-prohibition organizations, including the Association Against the Prohibition Amendment (AAPA) and Women’s Organization for National Prohibition Reform (WONPR), also worried that Prohibition led to a rift between citizens and the government. Additionally, they were opposed to government interference in individual behavior and claimed that prohibition was not only wrong in principle, but highlighted hypocrisy and corruption (Kyvig, 1976).

It is also interesting to note that while the 18th amendment applied to all alcohols—wine, beer, and distilled spirits—it was not enforced equally across alcohols. Wine, for example, was still permitted for religious use, and could still be bought, sold, and consumed for “sacramental purposes” (Newsom, 2005). In the same vein, when Prohibition was repealed 13 years later in 1933, alcohol sales did not return all at once. Brewing—a practice that uses hops, water, and wheat to produce beer—was able to

return in April 1933, while distilling—a process that produces spirits of a higher alcohol by volume concentration—remained illegal until Prohibition was formally repealed in December of that year. This left federal and state governments, as well as brewers, grappling with a new era of increased investment in alcohol and decreased consumption, as well as consolidated brewing companies and the desire for regulation.

One focus of regulation included the relationship between the producers and sellers of alcohol. Prior to Prohibition, entities commonly referred to as “Tied Houses” existed. These were taverns or bars owned or managed by an alcohol producer, and where alcohol sold was exclusively from that one producer, creating a vertical integration system or a monopoly in the market (Tamayo, 2010). As breweries were able to reenter the market in 1933, they did so with depleted numbers as a result of consolidation that took place during Prohibition. And while there were only about 160 brewing companies in existence in 1933, this list included breweries that had national and international distribution—such as Anheuser Busch and Pabst—as well as regional and local breweries (Kerr, 2005). Larger breweries reemerged and continued tied-house practices, as these national names reestablished pre-Prohibition relationships in real estate, financing, and advertising (Kerr, 2005). This system, however, was seen as too similar to the corrupt and drunken images related to public houses, taverns, and saloons of earlier eras, and regulation preventing these tied houses eventually followed.

First, however, came industry and government organizations. The temperance movement had been somewhat successful in its goals, in that American consumption of alcohol had decreased and the demand for alcohol was lower in 1933 than it was in 1920 (Kerr, 2005). The government and some citizens also believed it was important to continue to reduce drinking and mitigate drunkenness (Malone & Stack, 2017). The

National Industrial Recovery Act (NIRA) was established in 1933 as a means to encourage cooperation on price across industries. While later declared unconstitutional in 1935, its impact can still be seen in the brewing industry through actions taken to regulate pricing and thereby prevent beer prices from dipping too low—an action that some believed would encourage more drinking or drunkenness (McGahan, 1995). In 1935, the Federal Alcohol Control Administration (FACA) was also established as a group that sought to curb the excess drinking that was prevalent before Prohibition. As these federal entities formed, however, the brewing industry became concerned such organizations would minimize industry freedoms. In response, associations such as the United States Brewers Association (USBA), Brewing Industry, Inc. (BII), American Brewers' Association (ABA) and others arose to show a united front and claim that breweries could self-regulate (McGahan, 1995; Kerr, 2005). These organizations claimed that breweries would regulate each other, prevent excessive price cutting, and act responsibly, an idea that appealed to Congress as it meant the goals of regulation could be met while avoiding mechanisms that violated anti-trust laws (McGahan, 1995). And while formed by breweries, larger organizations also tended to advocate more for larger breweries and corporations, rather than local and regional brewers (Kerr, 2005).

Larger breweries, in fact, first advocated for a three-tier system that would prevent the establishment of tied houses. The first draft of a three-tier system was crafted by the United States Brewers' Association, which represented about 60 percent of the brewery power in the country and was in large part controlled by national, more profitable brewers. The three-tier system removes the possibility of a direct producer-retailer relationship, and instead requires that alcohol producers first sell their wares to a wholesaler, who in turn sells the alcohol to a retailer. USBA presented its plans in 1933,

which allowed any vertical integration of brewer and retailer in place before September of that year to stay intact. Smaller brewers decried this system, as it benefited the larger, national brands and negatively impacted local and regional brands (Kerr, 2005).

Breweries could not agree on an effective system, and eventually, President Franklin D. Roosevelt created a President's Special Committee on Alcohol, which established a code the committee claimed was geared toward fair competition. Written into law in 1935, the Federal Alcohol Administration Act created tied-house laws, which outlawed tied houses and made monopolies in the brewing supply chain illegal. In addition to limiting the market, these laws were enacted to prevent the beverage supplier from having undue control over a retailer, and they have changed little over the decades. And while the Federal Alcohol Administration Act did not mandate a three-tier system—and to date, no federal law does—most states have a three-tier system and a franchise law that regulates the relationship between brewers and wholesalers (Scott, 2013). Comparatively, only 34 states allow for a form of self-distribution, such as selling to-go cans from the taproom (Tamayo, 2010). Where a three-tier system is not in place, the two-tier system remains. In this system, brewers sell directly to retailers or establish their own means of distribution or wholesaling (Sorini, 2017).

As the 21st Amendment allowed for the return of alcohol sales, it also left most alcohol regulation in the hands of the states. Because states could craft their own laws and policies, they could also retain Prohibition-era restrictions. State control over these policies has continued throughout history and has modern impacts on the amount of craft brewing activity within states and regions, as well as the freedoms allowed to or restrictions placed on breweries. One example of disproportionate deregulation can be seen through The Cranston Act, which is one piece of legislation that arguably opened

the door to the modern-day craft beer movement. Despite being from the morally and politically conservative South and from Georgia, President Jimmy Carter passed the Cranston Act in 1978, an action that made homebrewing legal at the federal level. This act was necessary as the repeal of Prohibition did not include the repeal of a ban on homebrewing for personal consumption (McCullough et al., 2019). Carter's action reversed the Prohibition-era laws that outlawed homebrewing and had been in place for about 40 years¹. Homebrewing, or the act of making small batches of beer at home and for personal consumption rather than sales, is how many entrepreneurs enter the world of craft beer, and many attribute homebrewing with the start of their brewing passion (Cohran, 2019; Dighe, 2016). Prior to the Cranston Act, 13 states affirmed the right to homebrew at a state level, and following the Cranston Act, another nine states legalized it (McCullough et al., 2019). After the late 1970s, however, this repeal of regulation took much longer to move throughout the country. It took until 2013 for homebrewing to become legal in all 50 states, but Carter's first act is seen as a step toward the craft brewing boom (Weiler, 2000; Reid et al, 2014; Cohran, 2019).

In the 21st century, opinions toward beer and alcohol consumption have become more accepting, and beer and liquor laws have become more relaxed (Tamayo, 2010). This can be connected to changing social norms, including the “new temperance movement,” a movement that is defined by the fact that individuals are choosing to drink less based on a public health perspective, rather than a moral imperative. This movement has opened doors to regulation of alcohol consumption from a non-legal approach (Tamayo, 2010). Social norms and the economic impact of breweries have changed since

¹ President Barack Obama was the first U.S. President to brew beer at the White House by way of homebrewing (Chappell, 2011).

initial Prohibition-era policies hit the books, which has led states and federal governments to reconsider these policies (Malone & Stack, 2017). Additionally, local governments work to grapple with regulation challenges such as zoning laws, economic development, and urban revitalization (Wallace, 2019; Weiler, 2000; Somerville, 2013).

In 2017, the Craft Beverage Modernization and Tax Reform act was introduced as a two-year provision to revise the tax structure for brewers, winemakers, and distillers, and it received bipartisan support (PR Newswire, 2017). It was set to expire in 2019, but the Craft Beverage Modernization and Tax Reform Act of 2019 brought forth similar provisions. In a brief issued by the U.S. Senate Committee on Finance, the Committee cited undue burden on breweries and unnecessary regulation as reasons for reform. Reforms included reducing excise taxes for brewers and creating a tax structure based on production. It also simplified recordkeeping and inventory rules, as well as allowed for the transfer of beer between breweries and facilities even if the breweries are owned by different companies (U.S. Senate Committee on Finance, 2019).

Micro versus Macro: Defining and Categorizing Craft Beer

Craft brewing is an industry that is, as a modern occurrence, tied back to the 1980s, although craft breweries have existed throughout history (Cohran, 2019). While the term can be seen as subjective and colored by personal opinion and experience, “craft beer” typically is reserved for beers produced by small, independent companies known as craft breweries. Since 2005, the Brewers Association, a 501(c)(6) not for profit trade association, has advocated for craft brewers and craft brewing enthusiasts, in addition to providing industry data and resources. As an organization, the Brewers Association collects an annual survey of breweries to gather information on production, number of

breweries, and economic data. The Brewers Association also supplements this survey with information from the Bureau of Labor Statistics and information from statewide brewers guilds. The Brewers Association is also a resource for industry standards for market segments and terminology. According to the Brewers Association, craft brewers are defined as small brewers that produce 6 million barrels of beer or less per year and are independently owned. This is formally defined as a brewery where less than 25 percent of the brewery is owned or controlled by a larger or non-craft-beer entity, such as a beverage alcohol industry member (Brewers Association, 2020). In contrast, the terms “national brewery” and “macrobrewery” are used to describe larger national and international brands that produce and distribute more than 6 million barrels of beer per year.

Previously, the Brewers Association divided the market into three segments—microbreweries, brewpubs, and regional craft breweries (Reid et al., 2014)—but as the industry has grown and become more complex, that number of segments has increased to six, which are commonly used to categorize and define craft beer and craft breweries. These segments include microbreweries, brewpubs, taproom breweries, regional breweries, contract brewing companies, and alternating proprietors. *Microbreweries* are defined as breweries producing less than 15,000 barrels of beer per year. They sell 75 percent or more of beer off site and connect to the public through the three-tier system, a two-tier system, or selling on site directly to the consumer. A *brewpub* is a restaurant-style brewery that sells 25 percent or more of its beer on site and has a significant portion of its business focused on food services. Most beer is brewed for on-site sale in the restaurant and bar. When it is allowed by law, brewpubs may also sell to-go beer or distribute their beer. *Taproom breweries* are professional breweries that sell 25 percent or

more of their beer on site but do not have significant food services. Brewed beer is sold in the tap room, and if allowed by law, may be sold to go or for distribution at off-site locations. *Regional breweries* are breweries with annual beer production between 15,000 and 6 million barrels. *Contract brewing companies* are businesses that hire another brewery to produce its beer. This can include breweries that hire another brewery to produce additional beer. *Alternating proprietors* are a licensed tenant brewery that physically takes possession of a shared brewery. This differs from contract brewers, as alternating proprietors will be the “brewery of record” and take on obligations such as record keeping, tax payments, etc. (Brewers Association, 2020). These types are summarized in Table 1.

Table 1: Craft brewing industry market segments and definitions, according to the Brewers Association

Term	Definition
Microbrewery	A brewery producing less than 15,000 barrels of beer per year.
Brewpub	A restaurant-style brewery that sells 25% or more of its beer on site and has a portion of the business focused on food services.
Taproom brewery	A brewery that sells 25% or more of its beer on site but does not have food services.
Regional brewery	A brewery that produces between 15,000 and 6 million barrels annually.
Contract brewing company	A business that hires another brewery to produce its beer. This can include a brewery that hires another brewery to produce additional beer
Alternating proprietor	Licensed tenant brewery that physically takes possession of a shared brewery

Craft brewing is seen as a relatively new business model and a new trend, with most records and datasets regarding craft breweries starting in the mid-1990s. In 1994, there were a total of 537 craft breweries in the United States. As of 2015, that number

had grown by nearly 800 percent to 4,803 and then in 2019 grew again to 8,275 craft breweries. In comparison, large or non-craft breweries continued consolidating, decreasing in number from 160 in 1933 to fewer than 50 by the 2010s, and then growing from 44 in 2015 to 111 in 2019 (Brewers Association, 2019). Craft beer has shown a larger economic impact as well. According to a study by the Brewers Association, small and independent craft breweries in America contributed \$82.9 billion to the economy in 2019. There were also 580,000 total jobs throughout the production, distribution, and sales supply chain, with 160,000 jobs created at breweries and brewpubs.

Although the number of craft breweries remained low in the 1980s, that era is seen as the time for modern craft brewery growth and revival (Reid et al., 2014). Around this time, states on the Pacific Coast and in the Western United States began to modify legislation in ways that opened opportunity for more craft breweries. Other states, including those in the South and Southeast, held onto such regulations, which many attribute to the presence of dry counties, conservative beliefs, and slower progress in legislation related to craft brewing (Reid et al, 2016; Cohran, 2019). Most states saw their first post-Prohibition craft breweries—defined in this context as breweries that produced beer to serve in the taproom, not just to sell through a third-party vendor—open in the 1990s (Cohran, 2019). As of 2020, there remains an uneven distribution of craft breweries throughout the United States. The Pacific Coast has seen the greatest growth in production volume, while the Southeast has seen the least (Barajas et al, 2017). In the Southeast, the number of breweries is not proportional to population growth, and breweries remain concentrated in large population centers (Baginski & Bell, 2011).

History's Hangover: Regulation's Influence on Industry, Economic Development

Analysis and discussion of craft brewing in the United States would not be complete without a modern-day lens. While the previous section addressed the chronology of legislation and regulation as it relates to craft beverages and beer brewing, this section will discuss the modern-day implications of Prohibition-era and post-Prohibition legislation. Most of the legislation and regulation was first put into place in regard to brewing and alcohol production, and it was not specifically targeted at craft breweries. The history of modern craft brewing—independently owned breweries producing less than 60,000 barrels of beer per year—begins around the 1980s and 1990s when technology and legislation opened the doors to smaller, independent breweries rather than only national brands (Baginski & Bell, 2011). The webs of legislative changes, repeal, and new regulation weave throughout the nation's history, however, and will be analyzed through a look at the level of regulation, rather than chronologically.

Modern National Regulation

As the United States repealed Prohibition and sought to leave it behind, the roots behind the movement lingered. Even in the 2010s, those roots continued to impact alcohol legislation surrounding production, distribution, and sales, with regulations varying at the state, regional, and local levels. After the repeal of Prohibition in 1933, all 50 states were left partially “wet,” meaning there was no statewide law prohibiting alcohol sales (Frendreis & Tatalovich, 2010). Regulation was left in the hands of the states, enabling them to choose between removing, revising, or retaining Prohibition-era policies. The repeal and retention of such policies varied across states and regions of the country, and a current map of craft breweries within the United States reflects the

influence and consequences of regulations on the production and distribution of craft beer. The Pacific Coast has more readily reduced restrictions on alcohol production and craft breweries, while restrictions remained in place in the South and Southeast through the 2010s (Barajas, 2017). As of the early 2000s, no states had sweeping, statewide laws prohibiting alcohol sales. Thirty-nine states, however, had legislation allowing local counties, municipalities, or jurisdictions to limit or prohibit the sales of distilled spirits, wine, or beer, producing what is commonly referred to as a “dry county” (Frendreis & Tatalovich, 2010). The 21st century existence of dry counties is an example of the lingering impact of prohibition, and an analysis of dry counties completed by Frendreis and Tatalovich (2010) showed that while the number of dry counties has declined since the 1960s, there is a link between Evangelical Protestant communities and the presence of dry counties.

Much craft beer history begins in the 1980s and 1990s, which saw regional regulatory changes that led to an increase in beer production and distribution in the United States. These changes, however, tended to benefit larger beer producers, which could expand quickly and begin to control the markets, rather than local or regional breweries. Transportation improvements and the potential for refrigeration during transit also benefited larger breweries (Baginski & Bell, 2011), and the brewing industry saw a lot of consolidation around this time. As the number of breweries decreased, the power of larger breweries continued to grow—both within the industry and in the political sphere. For example, take Anheuser-Busch Companies, the parent company of one of the largest breweries in the country. This company not only brews beer, but also owns subsidiaries involved in the brewing process—from agriculture to marketing to entertainment (Scott, 2001). It operates more than a dozen breweries in the United States, produces 30 beers

across different beer brands, and maintains control over 13 wholesale distributors. In the 1990s, Anheuser-Busch brewed and sold almost half of the beers in the U.S. beer market, and it also faced lawsuits from smaller brewers, which claimed Anheuser-Busch's business operations violated anti-trust laws (Scott, 2001). The company is also involved in politics through its ability to invest in lobbyists (Scott, 2001).

As larger, national breweries advocate for new legislation to benefit beer and brewing by way of reduced taxes, or advocate for the overall reduction of restrictions, craft breweries may see significant growth. An example of this is in Denver, Colorado, where national brewery Coors Brewing Company had the lobbying power to encourage the lifting of Prohibition-era laws. Rather than focusing on loosening regulations, the brewing industry—and craft brewers—could focus on opening new breweries and protecting existing freedoms (Byce, 2017). As of 2017, Colorado had about 8.4 breweries per 100,000 adults aged 21 and older, with about 50 new breweries opening each year (Byce, 2017).

The most recent national-level policy regarding craft beer is the Craft Beverage Modernization and Tax Reform Act (CBMTRA), which was first passed in 2017. This updated legislation affecting the production and distribution of beer, wine, and distilled spirits, but it was initially passed for a two-year period. It was extended in December 2019, set to expire on December 31, 2020, and in December 2020 some provisions were made permanent (Brewers Association, 2021). Legislation signed on December 27, 2020 made tax provisions related to beer permanent, including a reduced federal excise tax for craft brewers. In the eyes of breweries and the Brewers Association, the CBMTRA has reduced some regulatory burden. It has lowered the federal excise tax on alcohol production for craft breweries, which are breweries producing less than 6 million barrels

per year. It also enables for the transfer of beer between bonded facilities, for example breweries that are in partnership but not owned by the same company. Previously, this transfer would be taxed, which proponents of CBMTRA argue limited smaller breweries' ability to collaborate by way of brewing beer together at one facility and then distributing that beer at both companies' taprooms (Brewers Association, 2020).

Modern State-Level Legislation

A review of state-level legislations on craft beer and brewing shows a general trend of increased restrictions leading to fewer breweries. States that restrict distribution of craft beer, oftentimes by requiring beer distribution through a wholesaler rather than directly from the brewery, tend to have fewer breweries, while those that legalize self-distribution see more breweries (Malone & Stack, 2017). A similar trend can be seen regarding restrictions on homebrewing. For example, Mississippi and Alabama, the last states to legalize homebrewing (Cohran, 2019; Malone & Stack, 2017), have some of the fewest breweries per capita. States with higher rates of regulation also tend to have fewer breweries, as navigating red tape can deter these small businesses from opening (Gely, 2015). In the South, an area where more regulation has remained on the books for longer, most states have fewer breweries per 100,000 residents than those on the West Coast, and breweries are more clustered in metropolitan areas. This clustering suggests that breweries are spreading across the state and region at a slower rate (Baginski & Bell, 2011). The South also has a higher concentration of dry counties, or counties in which beer cannot be produced or sold, which can limit the spread of breweries.

As states have reduced the number of restrictions placed on distribution, more craft breweries have opened. Some research has also shown that an increase in the

number of breweries indicates an increase in tourism and wages within the tourism and hospitality industry (Malone & Hall, 2017). One example is Colorado, where until 2019, beers with more than 3.2% alcohol by volume only were sold in liquor stores. When this law was reversed, more retail avenues—including grocery store shelves—were opened for beer, and sales jumped 20 percent (Roth, 2019).

One of the most popular state-level restrictions to come under scrutiny is that of the three-tier system. Even though this is not federally mandated, the tied-house laws put in place in the 1930s have led most states to interpret such regulation as a reason for establishing a three-tier system. Additionally, the Federal Alcohol Administration Act states that retailers can only purchase alcohol from one source. This is cited as one reason for the existence of wholesalers and their position in the alcohol supply chain (Tamayo, 2010). This three-tier structure, which was first passed to discourage monopolies, regulates the relationship between brewer and consumer, often requiring the use of a wholesaler to distribute beer to stores (Scott, 2013). For most states, a three-tier system has been in existence for decades, and regulations have faced few changes. While it continues to regulate how breweries can get their beers on store shelves, however, some states have created exceptions in the supply chain, namely by allowing breweries to sell to-go beers from the taproom directly to customers.

In 2010, around 34 states allowed this practice (Tamayo, 2010), and other states have modified their restrictions as recently as 2017 (Cohran, 2019). Former Alabama Governor Robert Bentley, for example, signed the beer-to-go bill in 2016. Prior to this law, Alabama breweries could sell alcohol for on-premise consumption, but patrons could not leave the taproom with beers to consume off premises (Techo, 2016; Berry, 2016). In North Carolina, as another example, there are different laws for the brewer, the

wholesaler, and the retailer, all limiting the amount of alcohol that can be sold and held. While the state claims that the three-tier system can promote growth of the brewing industry and work to maintain healthy competition, some researchers claim that its limit on the number of wholesalers a brewery can sell to thereby limits the number of competitors in the market and can negatively impact small or new brewers (Scott, 2013).

Craft breweries have sought to modify or abolish the three-tier system to open up the market to benefit their business. Proposed changes include repealing state-level regulations that regulate brewery to distributor relationships and instead allowing breweries to self-distribute on a greater scale. There are also arguments that claim increased competition between wholesalers would encourage them to have more knowledge in craft brewing and therefore provide a better service to craft breweries (Scott, 2013). As it currently stands, the three-tier system requires contracts that lock brewers into the business relationship. This began with beer franchise laws established in the early 1970s, which limited the reasons for which a brewery could terminate a contract with a wholesaler (Tamayo, 2010), and some researchers claim that this means wholesalers have little incentive to adapt or improve (Scott, 2013). This system also does not promote industry growth, and may increase overall cost of beer by about 18 to 25 percent, a price increase that Scott (2013) argues would not exist without it.

Despite the push by craft breweries to abolish or modify this system, wholesalers continue to resist changes by claiming it helps temper alcohol consumption (Tamayo, 2010). Others argue that weakening the three-tier system would have a negative impact on retailers and wholesalers, which could upset distribution (Chaudhuri, 2018). No matter the side of the argument, many agree that changes in perspective—either fighting for or against the three-tier system—can be attributed to the fact that as legislation changes in

2017 enabled more states to sell beer for off-site consumption directly to consumers, and breweries saw a 24.2 percent increase in sales, lobbyists from both sides became fiercer in their arguments for legislative changes (Chaudhuri, 2018).

Modern Local Legislation

The topic of local legislation is frequently discussed in case studies, or with a narrow scope, as regulation regarding zoning, business hours, and more can vary widely across states and regions. While local governments are within their scope to regulate local businesses, including breweries, these regulations tend to be drawn from state regulations and modified for the local community. State attempts of growth regulation can trace back to the 1970s, when land use regulation was set up to regulate house prices and growth patterns (Boarnet, et al., 2010). In the 1970s and the following decades, land use regulations effectively shifted areas to growth. Once regulations came into a district or area, and those regions became more heavily regulated, growth would move to less regulated areas. This trend, some authors argue, shows that regulation impacts where and when development—rather than how much—will occur (Boarnet, et al, 2010).

Regulation impacting craft breweries, however, does not always have a clear tie to historical legislation or restrictions. While national and state regulations impact breweries, local legislation does as well. Local legislation relating to tax incentives, business partnerships, and zoning regulations can have a more indirect impact on breweries. Craft breweries are viewed as a unique business model that does not cleanly fit into typical zoning regulations. They require large spaces and the ability to manufacture products, which fits the mold for industrial or warehouse districts. They also serve directly to customers, which fit the mold for restaurant districts (Beer: Is it zoned out?,

2013). As communities grapple with the presence of craft breweries, some localities work to shoehorn breweries into existing ordinances, which leads to the requirement of complex specialty permits and exceptions (Beer: Is it zoned out?, 2013). This can make the permitting process more daunting, however, so as cities seek to become more beer-friendly, they are working with city planners to create a space for breweries. An example of this is the city of Charlotte, North Carolina, in which city planners are partnering with breweries to understand brewery needs and create a text amendment for microbreweries. This process can help make proper permitting less daunting and open the door to a more beer-friendly city (Beer: Is it zoned out?, 2013).

Cities are also encouraged to work with breweries as they see the role craft beer can hold in economic development and urban revitalization. At the start of the craft beer boom, many breweries began to cluster on the margins of cities—areas where land or buildings were cheap, but where city residents could still easily visit—and that trend has continued. Fewer breweries have opened in bustling city centers, as those areas tend to be more expensive and more difficult to obtain the space needed for beer equipment (Wallace, 2019). Breweries that produce beer on site require large spaces to house brewing equipment, which makes industrial and manufacturing districts a popular area for breweries to open (Barajas et al, 2017; Nilsson et al., 2018; Somerville, 2013). In many cities, these districts are once-bustling areas of industry and activity, which have lain dormant as manufacturing has decreased and more businesses have moved out of urban areas (Nilsson et al, 2018; Somerville, 2013). These large, warehouse-style buildings can not only accommodate large brewing equipment, but they also provide large amounts of space for a lower cost. As these areas can be dilapidated or underused, rent or purchase price for warehouse districts tend to be lower than bustling urban

centers, and cities may offer incentives to open in these districts to encourage urban revitalization (Somerville, 2013; Beer: Is it zoned out?, 2013; Barajas et al, 2017).

Welcome to the Neighborhood: Neolocalism, Tourism, and Craft Beer Clusters

Craft breweries can become entangled in the rebrand of whole neighborhoods or districts, as cities seek to improve the reputation of previously dull or dangerous areas. As more breweries open, urban revitalization leads to increased housing costs previously low-income or affordable areas (Wallace, 2019). Once breweries begin to attract patrons, other businesses such as restaurants, shops, and more breweries (Nilsson et al, 2018) will come to the area. This growth can also lead to other forms of revitalization, such as the construction of new apartment buildings, young professionals purchasing and renovating old neighborhoods, and more (Somerville, 2013; Malone & Lusk, 2018).

Following the presence of craft breweries, neighborhoods can see individuals in their late 20s to early 40s, often college-educated, move into the area (Barajas et al, 2017). This is a reflection of the concept of neolocalism, a modern desire for local influence in goods, experiences, and other consumable products (Reid et al, 2014; Fletchall, 2016). It can be seen as a rejection of national or regional culture, instead focusing on the immediate surroundings (Nilsson et al, 2018), and it is oftentimes viewed by consumers as an authentic experience of an area (Fletchall, 2016). For individuals seeking a connection to community, breweries can provide a microcosm of the surrounding area or region. This arises through brewery stories, which can connect back to experiences in the community or local history, or beer names, which oftentimes tie back to the community through local stories or lore, or through ties to locations (Fletchall, 2016). Breweries can also work to give back to the community through charity

donations and partnerships with local organizations or be a landing space for locals, meaning that visitors to the area can learn a lot about the area from residents, or can receive recommendations for additional activities (Reid et al, 2014).

As neighborhoods redevelop, it is common for multiple breweries to open in the same general area, creating a brewery cluster. Craft beer consumers seek a wide variety of beer options and might be inclined to brewery hop—a term used to describe the act of going to multiple breweries in a short amount of time, sampling beers from each brewery (Nilsson et al, 2018), so having breweries geographically close to each other can make travel between businesses easier for patrons (Wolinsky, 1983). Geographic proximity and other local activities can also connect to craft beer tourism.

Scholarly Literature on Craft Brewing

Through this literature review, a baseline of existing knowledge regarding craft beer regulation and craft beer history was established. These topics are typically viewed through the lens of economics or history, although some address the relationship of regulation at different levels of government and social trends.

Existing literature addresses craft beer regulation through either a very wide or a very narrow lens. Trends for narrow categories of regulation have been covered on a national scale (Boarnet et al, 2011; Elzinga et al, 2015; Malone & Lusk, 2018; McCullough et al, 2019), or several regulation topics are discussed for a small geographic area (Wallace, 2019; Gely, 2015; Weiler, 2000; Baginski & Bell, 2011; Beer: Is it zoned out?, 2013; Fletchall, 2016). There are also scholars in fields outside of public administration that analyze the economic impact of legislation and the business perspective of regulation (Malone & Hall, 2017; Malone & Stack, 2017; McGahan, 1995;

Scott, 2013; Wolinsky, 1983). Other papers address brewery legislation in regard to its impact on economic development and business growth, analyzing the financial impact of these regulations as well as how regulations can encourage or deter small business development (Weiler, 2000; Barajas et al, 2017; Boarnet et al, 2011). The literature on finances and economy utilizes quantitative analysis and case studies to address brewery legislation and its relationships to public administration predominantly on a case-by-case basis, analyzing the impact of legislation on specific cities, states, or regions. Case studies are also used for a descriptive study or explanation of the current state of craft beer in a region.

Several papers chronologizing the history of brewery legislation in the post-Prohibition area have also been published (Cohran, 2019; Dighe, 2016; Elzinga et al, 2015; Frenndreis & Tatalovich, 2010; Kerr, 2005; Reid et al, 2014; Rorabaugh, 1981). These historical analyses of craft beer and its history utilize case studies and historical events to explain the trends of regulation and brewery openings across the country. Other scholars break down geographic or social trends (Baginski & Bell, 2011; Fletchall, 2016; Francioni, 2012; Malone & Lusk, 2018; Wallace, 2019) through both case study and quantitative analysis. The impact of legislation and regulation on city planning has also been addressed on an introductory level through city-level case studies (Weiler, 2000; Gely, 2015; Wallace, 2019), as well as how regional differences in legislation have led to differences in brewery growth and development in those regions (Elzinga et al, 2015; Frenndreis & Tatalovich, 2010).

While the relationship between craft breweries and economies is an important factor to consider from a public administration standpoint, it is also important to understand the “why” behind these regulations on craft breweries. Statewide regulations

dictate what localities and counties can and cannot do in terms of brewery production, distribution, and location, just as these regulations dictate what private companies—the breweries—can and cannot do. With the repeal of Prohibition, new regulations on alcohol production and distribution arose, creating new limits on the alcohol industry. Reasons for this regulation have been cited as ranging from public safety and concern for overconsumption of alcohol, to a need to push for urban revitalization or a greater sense of community through neolocalism.

Questions remain after the literature review, and there remains a gap in the literature related to how national and state regulations impact local governments, regulation, and craft breweries. A database regarding all existing craft beer regulation across all 50 states does not exist, and attempts to create a comprehensive view of regulation requires piecing together multiple sources. Additionally, craft beer studies have not been explored through the lens of public administration, although there are city-specific studies of specific legislation such as zoning. The literature also does not cover potential trends in deregulation. In many states where post-Prohibition legislation remains unchanged, craft breweries and advocacy groups are working to have regulations modernized and adjusted. Conversations around deregulation of this sort, however, are centered on the three-tier system in most literature. Answers to these questions can come from a connection of public administration and regulation, by addressing the reasons behind regulation as well as the reasons behind regulation removal.

The next chapter of this thesis describes the creation of a legislative database as well as three case studies. This database creates a foundation for addressing questions surrounding trends in regulation, regional similarities and disparities in regulation, and levels of regulation, and to establish a baseline for how many craft breweries exist across

the United States and what economic impact is seen in each state. The three case studies also dive deeper into the relationship between state and local regulation and localities on an economic, cultural, and policy level.

CHAPTER 3

DATA AND METHODS

To cover the complex nature of craft beer legislation, this study utilizes two different qualitative research approaches: a content analysis of legislation and regulation across all 50 states and the District of Columbia and case studies of three cities for a more in-depth analysis of the relationship between state and local legislation. The content analysis provides for the opportunity to compare states and understand how states vary in their approaches to craft brewing regulation. Information regarding the three case study cities—Birmingham, Alabama; Asheville, North Carolina; and Denver, Colorado—was also collected through research papers and recent news articles in order to gain a fuller picture of the role of legislation, economic development, and urban revitalization as they pertain to breweries, as well as how the state of craft breweries in these communities has changed in the last 10 years.

Establishing Scope of Study and Data Collection

With other policy topics, there is rarely a central repository that includes information regarding all 50 states' legislative actions, but the Brewers Association maintains a database of legislation pertaining to brewery regulations. It is organized by state and served as a starting point for data collection. Data from the Brewers Association was supplemented by news articles and literature related to craft brewing's origins and

alcohol regulation in the United States to establish a framework for other legislative categories and means of regulations to include in the content analysis.

The craft beer boom is most recognized as starting in the 2000s and picking up pace in the last 10 to 15 years (Brewers Association, 2020). The Brewers Association updates its database annually, but does not include data from previous years. As such, I considered the status of legislation at the start of the data collection process in summer 2020. At this time, most information pertained to 2019 data, including number of breweries and economic impact. Because I am interested in how regulation impacts craft breweries as well as what challenges breweries face based on regulation, I collected the number of craft breweries within a state and the economic impact of craft breweries within the state. The Brewers Association calculates economic impact of craft breweries based along the supply chain, which includes the impact of breweries, craft beer wholesalers, and retailers that sell craft beer. To aid in calculation, I also drew numbers from the U.S. Census regarding estimated 2019 population and estimated age breakdown for 2019 population in order to calculate economic impact per capita and economic impact per 100,000 residents aged 21 and up.

To understand the overall state of craft beer regulation as well as the processes and procedures regulated by state, I collected information regarding production limitations on beer and licensing information by state. This included topics addresses in the literature review, including alcohol level restrictions (Roth, 2019), homebrewing legality, and brewery categorization (Brewers Association, 2020). Homebrewing is cited as a prominent factor in entering the craft beer industry, with several craft brewers noting it as their entrance into the field. It leads individuals to understand the mechanisms of brewing, enhances their passion for it, and can often lead them to pursue it as a business,

or to pursue a job in the field (Dighe, 2016; Cohran, 2019; Weiler, 2000). While homebrewing is legal in all states at the time of this writing, the most recent changes in state legislation took place in 2013 (Dighe, 2016), so the year of homebrewing legalization was collected as well. To determine year of legalization, I started with information provided on the American Homebrewers Association website, which lists state statutes (2021), and then reviewed state statutes to determine the year of homebrewing legalization.

The Brewers Association's "State Laws" page provides information across several other categories of brewery regulation including: number of breweries; breweries per 100,000 adults of 21 years and older; manufacturing license type and barrel limit per license; franchise laws; growler laws; self-distribution laws; state excise tax rates; annual license fees; samples permitted; on and off premise sales; hours of operation restrictions; and serving age. Regarding franchise laws, growler laws, and self-distribution laws, as well as different license types, the Brewers Association provided the section of each state's law that referred to these regulations. I recorded that section of code and reviewed the state laws in order to categorize the data.

Brewery categorization and manufacturing license types also vary between states, so brewery license types and their definitions were analyzed for trends between categories and number of licenses. Manufacturing license type relates to state brewery categorization, and this was broken down into three pieces of data: number of brewery license categories, barrel production threshold per category; and the name(s) of each category. This information was used for further analysis of license categories based on the number of license types within each state. Data was also recorded for each state regarding brewer-wholesaler agreements, whether growler sales are permitted, and if

direct to customer sales were permitted. In regard to growler sales, information included whether breweries can sell growlers and whether retailers such as grocery stores can sell growlers. Direct to customer sales were broken into the categories of on-premise sales—meaning breweries providing pours of beer for consumption in the taproom—and takeaway sales of pre-packaged beer in cans and bottles. ABV restrictions were also broken into two categories, regarding production restrictions on alcohol by volume and any ABV caps for grocery store sales.

Three Cities, Three Stories: Case Study Selection

The selection of Denver, Colorado; Asheville, North Carolina; and Birmingham, Alabama as case studies was based on both research and news articles regarding craft brewing trends. The case studies were also selected to illustrate a more in-depth picture of trends in craft beer and craft brewing by exploring city and brewery collaboration, discussing the intersection of state and local regulation, and discussing community and brewery relationships. They also provide rich insight that legislation itself cannot.

Denver, Colorado was selected based on information in the literature review that indicated Colorado, in the last few years, had the highest number of breweries per 100,000 21+ adults in the country (Byce, 2017). Denver is also the home to larger, national breweries, which some authors say led to less restrictive legislation on state and local levels (Byce, 2017; Scott, 2001). Due to the high number of breweries in this area, some reporters have speculated about a potential “beer bubble” that could burst (Byce, 2017).

Asheville, North Carolina was recognized as Beer City USA for several years in a row, and the city has embraced beer tourism as a regular practice. Breweries are

highlighted on its website, as are beer clusters and brewery tour options. A case study on Charlotte, North Carolina unearthed in the literature review also showed collaboration between cities and breweries in regard to zoning laws (Beer: Is It Zoned Out?, 2013), which made this state an interesting case study for state and city collaboration with breweries.

Birmingham, Alabama was selected as it is in one of the last states to legalize homebrewing, in 2013, and one of the last to make direct to customer sales of to-go beers legal, in 2017 (Cohran, 2019; Malone & Stack, 2017). The number of breweries within the state has grown in the last 10 years, with many new breweries opening in the city of Birmingham. Loosening and changing regulations have also brought regional brands to the state (AL.com, 2020), and beer tourism and beer neighborhoods are becoming more common place (AL.com, 2020). A licensing mishap also led to a change in zoning regulations, wherein brewpubs were able to open in retail spaces (Swain, 2019).

In addition to data collected from the literature review and the initial content analysis, additional information from case studies came from statewide and local news sources in and around the case study cities. Beer industry websites, including Good Beer Hunting and the Brewers Association website, were also searched for relevant articles and/ or studies. I also made the decision to collect standardized data points to draw on similarities or differences between the cities. This information included: number of breweries per year from 2005-2020; presence of local craft beer organization (Y/N); number of brewery closures from 2005-2020; population from 2005-2020; mention of craft breweries on city website (Y/N); mention of craft breweries on state website (Y/N); and number of annual craft beer festivals in the city.

Additional information specific to each locality was also collected. In Birmingham, Alabama, this included a more thorough history of the city's relationship with craft beer and brewing, including the opening years and notable dates regarding long-standing breweries. I also gathered information on zoning regulations and how breweries are categorized, as well as the impact of these zoning laws. Collecting this information provided the additional qualitative data to address how state level regulation can impact local economies and craft breweries, as well as how local governments choose to apply state regulation. The state has made several changes to regulation of the craft brewing industry since 2013, and this information was collected at the state level and applied to the city of Birmingham. In Asheville, additional information regarding craft beer tourism tied to the Beer City USA signifier was collected, as well as zoning regulations. The city also conducted a survey of residents as a means to guide forward economic development and a downtown master plan. Feedback from this survey, as well as neighborhood-specific information for some of the larger beer neighborhoods was collected. In Denver, information was collected regarding the "beer bubble," or the high concentration of breweries within a small, as well as data on craft beer legislation regarding location and zoning. Information regarding the role of breweries in economic development and urban revitalization efforts was also collected. Recent legislation also allowed grocery stores to begin selling higher ABV beers, which were previously only available in liquor stores. Notes regarding this trend and the resulting impact were also made.

In the next chapter, I turn to the descriptive analysis of beer legislation trends based on my content analysis. Creating a database covering all 50 states and the District of Columbia, as well as multiple categories of legislation was a first step toward

determining what trends can be spotted from a bird's eye view of craft beer and brewing regulation. This includes understanding how different regions regulate beer distribution, at which level zoning laws are determined, and how breweries and their products may cross state lines or interact with different states. Following that, I delve into a qualitative analysis through the three case studies. These case studies allow for further illumination of the questions addressed by the quantitative analysis by incorporating a city-level view of regulation. Through the detail allowed in case studies, I discuss the impact of regulations such as zoning and distribution, and I introduce the ties regulations hold with local governance through government-business collaboration, tourism, and economic development.

CHAPTER 4

ANALYSIS

Chapter 2 of this thesis detailed the history of craft beer and brewing, as well as the changes of brewing legislation over the years, and the previous chapter discussed data and information collection for this thesis. This chapter will detail the current state of regulation that impacts brewing and breweries, including what states are regulating and what challenges breweries face. This is accomplished through a content analysis of brewery regulation and descriptions of the current state of legislation, as well as three case studies that look at how craft breweries are affected by and interact with local legislation. Through this content analysis, this thesis aims to establish a more thorough understanding of the variations in craft beer legislation and the differences between states, as well as establish a foundation for future research into the state of craft beer legislation.

Table 2 includes a few basic details regarding breweries in the United States. This table shows information from all 50 states and the District of Columbia, when available, including the years that homebrewing and brewpubs were legalized and the number of breweries in each state as of 2019. Brewpub legalization marks the first year that breweries were able to operate taprooms wherein patrons could drink beer. Prior to this, breweries were able to produce beer but not serve it on-site. Homebrewing legalization is also included, as it is considered an indicator for the craft brewing movement. While homebrewing was legalized at the national level during Jimmy Carter's presidency, some

states legalized homebrewing at the end of Prohibition and others did not legalize until the 21st century.

Table 2: Year of homebrewing and brewpub legalization and number of breweries by state as of 2019.

State	Year Homebrewing Legalized	Year Brewpubs Legalized	No. Of Breweries (2019)
Alabama	2013	1992	51
Alaska	1989	1988	45
Arizona	1978	1987	127
Arkansas	1995	1991	42
California	1978	1983	907
Colorado	1986	1988	425
Connecticut	1996	1989	104
Delaware	1998	1991	27
District of Columbia	NA ¹	1991	12
Florida	1980	1987	329
Georgia	1993	1995	111
Hawaii	1972	1994	24
Idaho	1999	1987	73
Illinois	1998	1987	284
Indiana	1933	1993	192
Iowa	1971	1988	105
Kansas	1949	1987	59
Kentucky	1978	1985	69
Louisiana	2010	1989	40
Maine	1978	1987	133
Maryland	1977	1988	112
Massachusetts	1993	1986	175
Michigan	1997	1992	400

Table 2 continued

State	Year Homebrewing Legalized	Year Brewpubs Legalized	No. Of Breweries (2019)
Minnesota	1985	1987	196
Mississippi	2013	1999	14
Missouri	1995	1990	140
Montana	1978	1999	92
Nebraska	1935	1988	55
Nevada	1978	1991	45
New Hampshire	1998	1988	91
New Jersey	1991	1993	127
New Mexico	1981	1985	94
New York	1978	1984	423
North Carolina	1973	1985	333
North Dakota	1995	1991	22
Ohio	1978	1986	311
Oklahoma	2010	1992	55
Oregon	1933	1983	311
Pennsylvania	1998	1988	401
Rhode Island	1933	1992	33
South Carolina	1996	1994	88
South Dakota	1997	1991	33
Tennessee	1997	1991	108
Texas	1983	1993	341
Utah	2009	1988	42
Vermont	1998	1988	68
Virginia	1972	1985	290
Washington	1933	1982	423
West Virginia	1978	1991	28
Wisconsin	1934	1986	205
Wyoming	1979	1992	41

All states legalized brewpubs within a 20-year period from 1982 at the earliest to 1999 at the latest. The first five states to legalize brewpubs were Washington, Oregon, California, New York, and Virginia and did so between 1982 and 1985. All of these states now have hundreds of breweries—California has the most with 907 breweries (2.3 breweries per capita), Washington and New York both have 423 (5.6 and 2.2 breweries per capita, respectively), Oregon has 311 (7.37 per capita), and Virginia has 290 (3.4 per capita). In comparison, the last five states to legalize brewpubs were Hawaii, South Carolina, Georgia, Montana, and Mississippi. These states legalized brewpubs between 1994 and 1999, and all five states have fewer than 120 breweries. Georgia legalized brewpubs in 1995 and has 111 breweries (1.05 per capita), which is the most breweries among the last five states to legalize brewpubs. Hawaii and South Carolina legalized brewpubs in 1994 and have 24 and 88 breweries, or 1.7 per capita each. Montana and Mississippi were the last states to legalize brewpubs, in 1999, and have 92 (8.6 per capita) and 14 (0.5 per capita) breweries.

Homebrewing is said to be an indicator for the craft brewing movement, as many craft brewers start their work as homebrewers and then move on to opening a business. When compared to the legislation regarding brewpubs, the spread on homebrewing legalization varies more widely, with an 80-year gap between the first and last state to legalize homebrewing. The first states to legalize homebrewing did so immediately following the repeal of Prohibition, while others waited until after the Cranston Act in 1978. The final five states to legalize homebrewing did so in the last 15 years, between 2009 and 2013. The District of Columbia permits homebrewing, but the year that this became legal is unclear; therefore, it appears in the table as “NA.”

The states of Oregon, Rhode Island, Indiana, and Washington were the first four to legalize homebrewing, in 1933, while Mississippi and Alabama were the last, in 2013. Among the first four states to legalize homebrewing, Washington and Oregon have hundreds of breweries—423 and 311, respectively—while Rhode Island has 33. Per capita, Rhode Island has 3.1 breweries, about half that of Washington or Oregon. In total, six states legalized homebrewing in the 1930s (Wisconsin in 1934 and Nebraska in 1935), and one legalized it in the 1940s (Kansas in 1949). Following Kansas, there was a 20-year gap before the next round of legalizations. Fifteen states legalized it in the 1970s, with nine states legalizing homebrewing in 1978—the same year as the Cranston Act. After that, six states legalized homebrewing in the 1980s, 17 legalized it in the 1990s, and the final five states legalized homebrewing between 2009 and 2013.

Among the first 10 states to legalize homebrewing, six states have hundreds of breweries and four have fewer than 60. Washington has the most with 423, and Hawaii has the least with 24. The last five states to legalize homebrewing all have 55 breweries or fewer and fewer than 1.5 breweries per capita. Oklahoma has the most, with 55 breweries and 1.39 breweries per capita, and Mississippi has the fewest, with 15 breweries and 0.47 breweries per 100,000.

Table 3 includes information regarding number of breweries per state, population, population that is 21 years or older, breweries per 100,000 residents, and breweries per 100,000 residents who are 21 years or older. This information helps establish a baseline of the state of craft brewing in each state, as well as a comparison between number of breweries and number of breweries per capita. Gathering information regarding the number of breweries per 100,000 residents of legal drinking age creates the opportunity to explore the similarities or differences in brewery distribution based on population

composition. All numbers are based on 2019 counts or the U.S. Census's 2019 population estimate.

Table 3: Brewery count and demographic information by state.

State	No. Of Breweries (2019)	2019 Population	2019 Population 21+	Breweries 100,000 (2019)	Breweries per 100,000 21+ adult
Alabama	51	4,903,185	3,610,411	1.040	1.413
Alaska	45	731,545	508,000	6.151	8.858
Arizona	127	7,278,717	5,326,027	1.745	2.385
Arkansas	42	3,017,804	2,193,534	1.392	1.915
California	907	39,512,223	28,951,651	2.295	3.133
Colorado	425	5,758,736	4,246,197	7.380	10.009
Connecticut	104	3,565,287	2,677,604	2.917	3.884
Delaware	27	973,764	729,887	2.773	3.699
District of Columbia	12	705,749	541,844	1.700	2.215
Florida	329	21,477,737	16,459,065	1.532	1.999
Georgia	111	10,617,423	7,621,958	1.045	1.456
Hawaii	24	1,415,872	1,027,937	1.695	2.335
Idaho	73	1,787,065	1,265,169	4.085	5.770
Illinois	284	12,671,821	9,345,768	2.241	3.039
Indiana	192	6,732,219	4,876,222	2.852	3.937
Iowa	105	3,155,070	2,290,198	3.328	4.585
Kansas	59	2,913,314	2,067,047	2.025	2.854
Kentucky	69	4,467,673	3,274,461	1.544	2.107
Louisiana	40	4,648,794	3,372,430	0.860	1.186
Maine	133	1,344,212	1,046,315	9.894	12.711
Maryland	112	6,045,680	4,448,162	1.853	2.518
Massachusetts	175	6,892,503	5,226,918	2.539	3.348
Michigan	400	9,986,857	7,442,160	4.005	5.375
Minnesota	196	5,639,632	4,121,631	3.475	4.755
Mississippi	14	2,976,149	2,143,184	0.470	0.653

Table 3 continued

State	No. Of Breweries (2019)	2019 Population	2019 Population 21+	Breweries 100,000 (2019)	Breweries per 100,000 21+ adult
Missouri	140	6,137,428	4,516,347	2.281	3.100
Montana	92	1,068,778	797,288	8.608	11.539
Nebraska	55	1,934,408	1,370,363	2.843	4.014
Nevada	45	3,080,156	2,276,722	1.461	1.977
New Hampshire	91	1,359,711	1,048,799	6.693	8.677
New Jersey	127	8,882,190	6,617,975	1.430	1.919
New Mexico	94	2,096,829	1,525,994	4.483	6.160
New York	423	19,453,561	14,662,735	2.174	2.885
North Carolina	333	10,488,084	7,669,435	3.175	4.342
North Dakota	22	762,062	542,826	2.887	4.053
Ohio	311	11,689,100	8,643,137	2.661	3.598
Oklahoma	55	3,956,971	2,827,766	1.390	1.945
Oregon	311	4,217,737	3,199,715	7.374	9.720
Pennsylvania	401	12,801,989	9,652,375	3.132	4.154
Rhode Island	33	1,059,361	799,853	3.115	4.126
South Carolina	88	5,148,714	3,803,974	1.709	2.313
South Dakota	33	884,659	628,773	3.730	5.248
Tennessee	108	6,829,174	5,048,136	1.581	2.139
Texas	341	28,995,881	20,295,508	1.176	1.680
Utah	42	3,205,958	2,125,039	1.310	1.976
Vermont	68	623,989	478,174	10.898	14.221
Virginia	290	8,535,519	6,228,362	3.398	4.656
Washington	423	7,614,893	5,637,045	5.555	7.504
West Virginia	28	1,792,147	1,366,784	1.562	2.049
Wisconsin	205	5,822,434	4,318,243	3.521	4.747
Wyoming	41	578,759	420,270	9.800	9.756

As of 2019, California was the state with the most breweries with 907. While Mississippi is the state with the fewest breweries (14), Washington D.C. has the fewest

overall with 12. Mississippi also has the lowest breweries per 100,000 residents (0.47), and Vermont has the most breweries per capita (10.9). When comparing breweries per 100,000 residents and breweries per 100,000 residents of 21 years and older, the ranking of states varies slightly. The five states with lowest breweries per capita—Mississippi, Louisiana, Alabama, Georgia, and Texas—remain in spots 50 to 45, respectively, for both statistics. The five states with the highest breweries per capita—Colorado, Montana, Wyoming, Maine, and Vermont—also remain in the top five for both statistics. Maine and Vermont remain 2nd and 1st, respectively, for breweries per capita (9.894 and 10.898) and breweries per capita for 21 and up (12.711 and 14.221). Colorado, Montana, and Wyoming, however, shuffle spots. Colorado is 5th for breweries per capita at 7.380, but fourth when age is taken into consideration, at 10.009. Montana is 4th per capita (8.608) but third for 21 and older (11.539). Wyoming also falls from 3rd (9.800) to 5th (9.756) when age is restricted to 21 and older. In total, nine states rise in the rankings of breweries per 100,000 when accounting for age, while 10 drop in rankings. The remaining 39 stay at the same level.

Table 4 covers the economic impact of breweries by state, broken down into economic impact per capita, economic impact per 100,000 residents of 21 years or older, and average economic impact per brewery. This information was included to provide an understanding of how breweries and the craft brewing industry can impact state economies. The economic impact was provided by the Brewers Association and is calculated as a total impact across the supply chain, from breweries to wholesalers to retailers. This number also includes non-beer sales in breweries or brewpubs, including food or merchandise (Brewers Association, 2020). Population information is based on the 2019 U.S. Census estimate, and number of breweries is based in 2019.

Table 4: Economic impact of craft beer and craft brewing industry by state.

State	No. Of Breweries (2019)	2019 Economic Impact (millions)	Econ. Impact Per Capita	Econ. Impact Per Capita 21+	Average Econ. Impact Per Brewery (millions)
Alabama	51	858	174.988	237.646	16.824
Alaska	45	332	453.834	653.543	7.378
Arizona	127	1234	169.535	231.692	9.717
Arkansas	42	525	173.968	239.340	12.500
California	907	9661	244.507	333.694	10.652
Colorado	425	3353	582.246	789.648	7.889
Connecticut	104	849	238.129	317.075	8.163
Delaware	27	430	441.585	589.132	15.926
District of Columbia	12	227	321.644	418.940	18.917
Florida	329	3818	177.765	231.969	11.605
Georgia	111	2035	191.666	266.992	18.333
Hawaii	24	313	221.065	304.493	13.042
Idaho	73	438	245.095	346.199	6.000
Illinois	284	3376	266.418	361.233	11.887
Indiana	192	1742	258.756	357.244	9.073
Iowa	105	1085	343.891	473.758	10.333
Kansas	59	583	200.116	282.045	9.881
Kentucky	69	872	195.180	266.303	12.638
Louisiana	40	969	208.441	287.330	24.225
Maine	133	668	496.945	638.431	5.023
Maryland	112	956	158.129	214.920	8.536
Massachusetts	175	2124	308.161	406.358	12.137
Michigan	400	2598	260.142	349.092	6.495
Minnesota	196	2241	397.366	543.717	11.434
Mississippi	14	344	115.586	160.509	24.571
Missouri	140	1286	209.534	284.743	9.186
Montana	92	498	465.953	624.617	5.413
Nebraska	55	600	310.172	437.840	10.909
Nevada	45	594	192.847	260.901	13.200
New Hampshire	91	506	372.138	482.457	5.560
New Jersey	127	1810	203.779	273.498	14.252
New Mexico	94	391	186.472	256.226	4.160
New York	423	4863	249.980	331.657	11.496
North Carolina	333	2805	267.446	365.738	8.423
North Dakota	22	267	350.365	491.870	12.136

Table 4 continued

State	No. Of Breweries (2019)	2019 Economic Impact (millions)	Econ. Impact Per Capita	Econ. Impact Per Capita 21+	Average Econ. Impact Per Brewery (millions)
Oklahoma	55	699	176.650	247.192	12.709
Oregon	311	2201	521.844	687.874	7.077
Pennsylvania	401	5556	433.995	575.610	13.855
Rhode Island	33	247	233.159	308.807	7.485
South Carolina	88	905	175.772	237.909	10.284
South Dakota	33	245	276.943	389.648	7.424
Tennessee	108	1384	202.660	274.161	12.815
Texas	341	5424	187.061	267.251	15.906
Utah	42	477	148.785	224.466	11.357
Vermont	68	366	586.549	765.412	5.382
Virginia	290	1866	218.616	299.597	6.434
Washington	423	2032	266.846	360.473	4.804
West Virginia	28	289	161.259	211.445	10.321
Wisconsin	205	2379	408.592	550.919	11.605
Wyoming	41	195	336.928	463.987	4.756

The average economic impact across all states and DC is \$1.625 billion per state, with an average economic impact per capita of \$280.01. When age is considered, the average economic impact per capita moves up to \$379.79 per 100,000 adults of legal drinking age. Additionally, the average economic impact per brewery is \$10.81 million. In comparison, the median economic impact is \$905 million per state and \$245.09 per capita/ \$333.69 per 100,000 21+ adults suggesting that states with the highest economic impact may skew the average upward. The median impact per brewery is \$10.65 million.

Wyoming has the lowest economic impact, with 41 breweries and a \$195 million (\$336.93 per capita) impact, while California has the highest at \$9.66 billion (\$244.51 per capita) with 907 breweries. Mississippi and its 14 breweries have the lowest total economic impact per capita—\$115.59—and a total economic impact of \$344 million, and Vermont has the highest per capita—\$586.55—and a total economic impact of \$366

million, with 68 breweries. Comparatively, if average impact per brewery is considered, many states that fall on the lower end of total economic impact have a higher per brewery impact. Mississippi breweries have an average impact of \$24.571 million, which is more than five times the impact of the average New Mexico brewery (\$4.160 million). Of the five states with the highest average economic impact per brewery—Mississippi, Louisiana, D.C., Georgia, and Alabama, Georgia has the most breweries at 111. Alabama comes next, with 51 breweries, Louisiana has 40 breweries, Mississippi has 14, and D.C. has 12. While this table does not show how per brewery impact changes with the number of breweries in the state, it provides a snapshot of how gaining or losing one brewery may impact the industry's economic impact within the state.

The difference between economic impact per 100,000 residents and economic impact per 100,000 residents of legal drinking age is also interesting to note, as accounting for age changes where most states fall regarding economic impact. The states with the five highest economic impact per capita—California, Pennsylvania, Texas, New York, and Florida—differ from the states with the five highest economic impact for residents 21 years and older—Colorado, Vermont, Oregon, Alaska, and Maine. The same can be said for the lower end of the scale. Wyoming, D.C., South Dakota, Rhode Island, and North Dakota have the lowest per capita impact, while Mississippi, West Virginia, Maryland, Utah, and Arizona have the lowest impact when considering age.

Table 5 offers a look at common regulations and how many states impose those regulations. Regulations are broken into three broad categories—growlers, sales, and ABV. This is to show the connection between different regulations and to offer comparisons between regulations that fall into the same categories. The first two regulations regard the sale of growlers, which are refillable containers that can be

purchased as breweries and filled up at the tap. These tend to hold a larger quantity of beer than cans or bottles, up to 64 ounces, although size can vary between breweries. According to the Alcohol and Tobacco Trade Bureau, the difference between a “growler” and a “bottle” is that bottles are filled ahead of sale, while growlers are filled at the time of sale (2021). The second two categories are sales allowed from breweries, including on-site sales—beers sold at the brewery intended for on-site consumption—and take away sales—packaged beers purchased on site for off-site consumption. The third set of regulations regard ABV restrictions, including alcohol by volume restrictions on production and on sales. Additionally, data included in this table was pulled from all 50 states and the District of Columbia. For the two sales regulations—on-premise sales permitted and take away sales permitted—some states did not clearly fall within a “Yes” or “No” category. In these situations, the state was not included in either tally and was instead left out of the table.

The source data for this table included the Brewers Association’s State Legislation website, as well as state laws. The Brewers Association breaks growler sales in to three broad categories—brewpubs, manufacturers, and retailers. In some instances, it appeared that states were categorized as not allowing sales under a manufacturer license because they do not have a manufacturer license. In order to avoid confusion, and because license types and restrictions vary between states, growler sales were categorized into two broader categories for more clarity. Manufacturers and brewpubs were condensed into one category, and retailers were left as a singular category. In this table, “brewery” is used to encompass any form of craft brewery that produces beer on site, up to 60,000 barrels. A retailer is an entity that is licensed to sell alcoholic beverages, such as a grocery store or retail liquor store.

Table 5: Brewery regulations for growler distribution, sales, and alcohol by volume restrictions.¹

	Regulation category	Description	No. of States		List of States*
			Y	N	
Growlers	Growlers permitted brewery	Breweries permitted to sell growlers for off-premise consumption	51	0	
	Growlers permitted retailer	Retailers permitted to sell growlers for off-premise consumption	37 ^{2,3}	14	No: CA, CO, IL, KS, ME, MN, NH, NM, ND, OK, RI, UT
Sales	On-premise sales permitted	Breweries permitted to sell beer for on-premise consumption	47	1	No: KS
	Take away sales permitted	Breweries permitted to sell beer for off-premise consumption	45	3	No: FL, MS, WV
ABV ⁴	ABV restrictions	Alcohol by volume (ABV) limited for beer produced in-state	9	42	Yes: AL (13.9), GA (14), ID (16), MS (8), NH (14), NC (15), SC (17.5), SD (14), WV (12)
	ABV cap for grocery stores	Alcohol by volume (ABV) restrictions on beers sold at grocery stores	8	43	Yes: ID (16), KS (6), MT (16), OH (21), OK (15), TN (8), UT (5), VT (16)

¹In situations wherein not all states are counted, there was often a variation in how that law was decided. These were marked as "depends" in the original dataset because they are states where restrictions may vary depending on local ordinances.

²Prior to 2020, Indiana did not permit retail sale of growlers. Permission to sell growlers was announced by the governor in 2020, but has not been codified into law.

³ Minnesota only allows growler sales if a brewery produces less than 20,000 barrels per year. After that threshold, growler sales are not permitted.

⁴ For states that have ABV limits, that limit is mentioned in parentheses.

Regarding growler sales for breweries, all 50 states and the District of Columbia permit sales. For some states, this includes sales under a manufacturer license and under a brewpub license, while others only permit sales for smaller breweries that fall under a brewpub license. The allowance of growler sales at retailers, however, is less inclusive. Across the U.S., 14 states do not permit this form of growler sales. Once again, the definition of retailer may vary between states, but it generally means a place that is permitted to sell alcoholic beverages but not to produce those beverages. Common examples would be grocery stores or liquor stores that sell beer, but do not produce the beer on site. While those retailers are permitted to sell pre-packaged alcoholic beverages in bottles and/or cans, they are not permitted to fill growlers.

These categories show that a vast majority of states permit some form of growler sales. While the table does not include the years in which growler sales became permitted, many states have modified regulations to permit more widespread sales of growlers in the last decade. The trend of growler sales may continue to spread, as some states consider loosening or modifying restrictions on alcohol sales during the COVID-19 pandemic, either permanently or temporarily. Additionally, some states continue to restrict which growler sales are permitted. In Maine, for example, growler sales are only permitted at breweries when the growler has a brewery's logo (Lauter, 2018). Growlers are typically printed with a brewery or retailer's logo, so this means a craft beer consumer would need to either purchase a new growler or make sure to bring a brewery-specific growler in order to fill it with beer.

Growler sales are only one way for consumers to receive beer or for breweries to make money. The next two rows in the table reference what sales are allowed from breweries. These categories do not include all 50 states and D.C., as some states regulate

sales in a way that made them uncategorizable. For some states, this meant that sales were restricted on a local level, rather than state level. For others, this meant that sales were restricted based on license type—sales are permitted at brewpubs, but not breweries, for example. This section is divided into two common types of beer sales—on-premise sales and takeaway beer sales. On-premise sales include when a brewery can provide cups of beer to purchase and drink on-site, while takeaway sales include the ability to sell beer in pre-packaged containers for consumption off-site. It is helpful to note that in regard to takeaway sales, this is different from growler sales, as takeaway sales include pre-filled beer cans and bottles; growlers, on the other hand, are filled to order.

As of 2020, Kansas is the only state where on-premise sales explicitly are not permitted. According to Kansas state law, microbreweries are able to produce alcohol and sell it for off-premise consumption under their microbrewery license. In order to sell beer for consumption on-site, however, they must also obtain another license as a club or drinking establishment to sell alcohol directly to customers (Handbook for Microbreweries, 2021). While breweries tend to obtain a club or drinking establishment license, and are therefore able to sell beer for on-site consumption at their breweries, this state is one example of the complexities of licensing and regulation that can befall breweries.

Three states do not allow for to-go sales of alcohol under brewery licenses: Florida, Mississippi, and West Virginia. The level of restriction on to-go beer sales, however, varies. Florida breweries face a similar regulation to Kansas breweries, in that they are required to obtain a different license in order to sell cans of beer to their customers. In 2014, a state law allowed breweries to begin selling growlers to customers as a limited exception to the three-tier system, but at the time that did not include canned

beer. In order to sell beer directly to customers for off-premise consumption, Florida breweries must obtain a vendor license as well (Brewers Law, 2020). West Virginia faced a similar limitation on takeaway beer sales, although changes brought about by the COVID-19 pandemic allowed—at least in a temporary capacity—for breweries to ship or deliver their beer to customers (Brilliant Stream, 2020). Mississippi also changed some of its laws during the COVID-19 pandemic. In 2019, Mississippi permitted breweries to sell a max of 10 percent of the beer produced on site. Once they hit that limit, they could no longer sell directly to customers and instead had to restrict container sales to the three-tier system. The Governor signed a bill into law in 2020, in the midst of the COVID-19 pandemic, removing this restriction (Wilson, 2020). While the Sales categories address big-picture regulation, the year 2020 and the COVID-19 pandemic show that legislation regarding craft brewing is far from set in stone.

Different forms of alcohol by volume restrictions also vary state to state. This table lists two forms—ABV restrictions, meaning restrictions on ABV levels for beer and ABV cap for grocery stores, meaning ABV caps on what beers can be sold within grocery stores. When beers exceed this cap, most states then require the higher ABV beers are sold in liquor stores or package stores. There are nine states that restrict ABV levels for what beers can be produced: Alabama, Georgia, Idaho, Mississippi, New Hampshire, North Carolina, South Carolina, South Dakota, and West Virginia. These states also specify different ABV limits. South Carolina's is the highest at 17.5% ABV, and Mississippi is the lowest at 8% ABV.

There are also eight states that restrict ABV levels of beers sold from grocery store shelves. These states include Idaho, Kansas, Montana, Ohio, Oklahoma, Tennessee, Utah, and Vermont. If a state restricts the ABV of beer produced in the state, and grocery

stores can sell beer up to the highest permitted ABV in the state, they are not counted as having an ABV cap for grocery stores. Of the eight states that cap permitted ABV in grocery stores, Ohio has the highest at 21% ABV, and Utah has the lowest at 5% ABV.

Table 5 provides a brief glimpse into some of the regulations faced by breweries, and individual states provide insight into the complications of those regulations. While this table does not include all forms of brewery regulation across the country, it captures a snapshot of some of the regulations that can directly impact breweries and their financial bottom line. Growler regulations have the potential to impact how consumers interact with breweries, as growlers enable patrons to take home a larger quantity of one beer to drink or to share with others. Other sales restrictions can impact how breweries profit from their beers, as on-premise sales not only allow visitors to taste beer before purchasing it but also tend to have a higher profit margin than packaged beers. Additionally, takeaway sales are one way that breweries can sell directly to consumers, rather than only selling off-premise beers through the three-tier system. Finally, ABV restrictions can impact what types of beers are made within a state as well as where consumers can find their beers.

Table 6 includes information about the number of license types that relate to breweries within the state. License types dictate how a brewery is categorized and can impact a variety of business factors.

Table 6: Number of brewery license types specified in each state.

No. of License Types	Description ¹	No. of States	List of States
1	NA	0	--
2	Type 1: Brewing with production limits Type 2: Brewing without production limits	8	AL, AK, DC, GA, MS, NV, OK, RI
3	Type 1: On-premise brewing and the presence of a restaurant Type 2: Brewing limited to 60,000 barrels per year Type 3: Brewing without production limits	18	AZ, CA, CO, CT, HI, ID, KS, MA, MI, NE, NH, ND, OR, SC, UT, VT, WY
4	Type 1: On-premise brewing and the presence of a restaurant Type 2: Brewing limited to 60,000 barrels per year Type 3: Brewing without production limits Type 4: Specialty license	20	FL, IL, IN, IA, KY, LA, ME, MD, MO, MT, NM, NY, NC, OH, PA, TN, SD, WA, WV, WI
5	License types tend to be specified by production level, rather than production capabilities or presence of a restaurant. Can also include a specialty license.	5	DE, MI, NJ, TX, VA

¹ This description is generalized for illustrative purposes; not all states are categorized this way.

Most commonly, this includes limitations on production—often by way of a minimum number of barrels produced and a maximum number of barrels produced by the brewery. The verbiage identifying license types varies by state, and even when two states use the same name for a license, their production limits can vary greatly. Due to this variety, license types were categorized by number of licenses in order to look for trends and commonalities between states, rather than by license name. The majority of states

have either three or four license categories for breweries, while only eight states have two categories, and five states have five categories.

When a state has three license categories for breweries, these generally break down to include one license type that permits limited on-premise brewing and the presence of a restaurant, one license type that permits brewing limited to 60,000 barrels per year, and one license type that permits brewing with no specified barrel limits. One state that breaks from this pattern is Kansas, which as specified during discussion of the previous table, requires a special club license for alcohol sales—even at breweries. This state has one Manufacturer’s license, which does not limit production; a Microbrewery License, which requires production between 100 and 30,000 barrels; and a Restaurant and On-Premise Drinking Establishment License. For states with four license types, most states include one license type that permits a restaurant, one that limits production to “microbrewery” or “small brewery” levels, and one that permits large scale brewing with no maximum production level. Microbrewery or small brewery licenses have varying barrel limits across states. The fourth category of license, however, varies between states. Some states, such as Indiana and Louisiana, include a specific license for “Out of State” brewers. Others, such as Kentucky, have a specific Brew-on-Premises License that limits the amount of beer produced by each adult in a household.

The few states with only two license categories—Alabama, Alaska, Georgia, Mississippi, Nevada, Oklahoma, and Rhode Island, along with D.C.—have much broader license categories. D.C. and Oklahoma’s two license types have no barrel limits on production, but the remaining six states have one license type that does not limit production and one that has a specified production limit. The licenses without production

limits are named either manufacturer licenses or brewer's licenses across all eight states, while six of the eight states put production restrictions on brewpub licenses.

The five states with five license categories—Delaware, Minnesota, New Jersey, Texas, and Virginia—have a wider variety of categorization. Virginia, for example, names license types based on license fees and production limits. Minnesota, on the other hand, categorizes breweries based off their abilities. One license—the Brew Pub License and Brew Pub Off Sale License—allows for the manufacture of beer and the presence of a restaurant, but it limits on-site production and off-site sales. This state also has the Brewer Off-Sale License, which allows for wholesale sales of beer as long as it falls within 20,000 and 25,000 barrels; and a Tap Room on Sale License that allows for on-premise sales of beer as long as fewer than 250,000 barrels are produced.

Across the states, there appear to be similar trends in categorization. Differences in verbiage for license types and differences in restrictions per license type, however, can lead to confusion between states. Some states also permit local governments to further categorize or label brewery types. Additionally, there does not appear to be a correlation between number of breweries and number of license types. New Jersey, for example, has 1.4 breweries per 100,000 people and five license types, while Vermont has 10.9 breweries per 100,000 people and three license types. While the table shows how brewery licensing varies state to state, it does not delve into how number of license types affects number of breweries or how license specifications, such as barrel limits, impact number of breweries. These are questions that could be addressed with future analysis.

The content analysis sought to provide a foundation of regulation for brewing and craft beer throughout the United States based on landmark legislative changes, common regulations on breweries and beer sales, and categorization of license types. In the last 15

to 20 years, the number of craft breweries have grown significantly in the United States, and there are now more than 8,000 breweries across the country. The distribution of breweries, however, varies greatly state to state, just as regulation varies greatly between states. Post-Prohibition, much alcohol regulation was left in the hands of the states, and the complexity of brewery regulation reflects that. It took several decades before legislation to legalized homebrewing and brewpubs took hold throughout the country, with a nearly 30-year span for brewpubs and an 80-year span for homebrewing, as seen in Table 2, and the lingering effects of some Prohibition-era legislation can still be seen in the regulations discussed in Table 5. States can restrict on-premise and off-premise sales for breweries, and regulation can impact which beers are produced and where they are sold based on alcohol by volume levels. As the data show, no two states are alike in how they regulate breweries, and the complexity of the regulation and categorization of breweries across the United States is complex. This thesis looks mainly at state-level regulation, however, a lot of nuance in regulation takes place in the connection between state and local regulation. In the next section of this chapter, three case studies explore how three cities manage regulation as it relates to brewery location, zoning, economic development, and urban revitalization.

A Tale of Three Cities

Craft breweries have been recognized as economic powerhouses in formerly downtrodden areas, and they can be seen as the first step toward revitalization of urban areas (Barajas et al, 2017; Wallace, 2019). Cities, however, sometimes struggle with where to permit breweries, as their business model includes aspects of both manufacturing and retail, and sometimes of food service (Beer-Is it zoned out?, 2014). If

the craft beer boom continues and new breweries continue to open across the United States, relevant policy may continue to arise or be modified. This not only includes state-level legislation as discussed in the first part of this chapter, but also how those state regulations inform local ordinances. From a public administration perspective, this can include tax legislation, zoning regulations, distribution legislation, and more. The three case studies in this chapter—Birmingham, Alabama; Asheville, North Carolina; and Denver, Colorado—address area of craft beer legislation that appears on a local level as well as at the intersection of state and local government in order to provide an understanding of craft beer and craft brewing, as well as its impact on cities and partnerships with communities, is analyzed.

Research into the topic of craft beer legislation is frequently undertaken through the form of case studies or a lens focused on one aspect of legislation. The content analysis of craft beer legislation from earlier in this chapter compiled data from all 50 states and sought to explain craft beer trends across the country and understand the types of legislation that exist. While the content analysis focused on state-level legislation with a few notes on city-level regulation, this section takes an in-depth approach by combining information about state-level and city-level regulations in order to expand upon the trends of neolocalism, zoning collaboration, and urban revitalization in cities with brewing industries. The three cities discussed in this chapter are recognized for their burgeoning or already robust craft brewery scene and provide an opportunity to dive deeper into the tie of public administration and craft beer.

The Magic City: Birmingham, Alabama

The city of Birmingham, Alabama is the most populous city in the most populous county (Jefferson County) in the state of Alabama. According to the 2010 census, the city had around 212,237 residents, and the county was home to more than 600,000 residents. This city, once recognized for its steel and iron industry, became recognized for a new form of industry in the 2010s—craft beer. As a state, Alabama trailed most of the nation in legalizing homebrewing, brewery taprooms and to-go beers from taprooms (Cohran, 2019; Malone & Stack, 2017) in 2013, 2011 and 2017, respectively. Despite this timeline, the city of Birmingham was recognized as the fastest growing beer market in the country in 2015 (Beshears, 2015). The city had a handful of small breweries open and close in the 1990s, before the recognized “craft beer boom,” and all of those breweries closed before the early 2000s (Velasco, 2018). The city’s beer boom is sometimes credited as starting around 2008, when Good People Brewing Company first started brewing beer (Velasco, 2018).

Brewing background

In 2008, craft beer was not well known in the city of Birmingham, and few restaurants or stores sold it. However, there was one group advocating for craft beer and more brewery-friendly legislation from behind the scenes. Free the Hops, a grassroots organization geared toward bringing high quality beer to the state of Alabama, was founded in 2004 and has worked to spread the word about craft beer since its founding (Free the Hops, 2020). The organization also advocated successfully for legislative changes, including the bills that legalized beers with higher than 6% alcohol by volume (Alabama Legislature, HB631 2007), homebrewing, taprooms, and to-go beer sales. Free

the Hops' advocacy for stronger beer, increased container size, better distribution opportunities, and loosened location restriction has been recognized as a reason more breweries have come to the Birmingham area (Velasco, 2018; Whitley, 2015).

Good People is often the starting point in modern tellings of Birmingham's craft beer scene. It opened in 2008, and as the city's oldest existing brewery, accomplished other firsts in Birmingham, the state of Alabama, and the southeast. It was the first brewery in the Southeast to can its beers, and the first craft brewery to acquire another brewery in the city, when it purchased Avondale Brewing Company in 2017 (Velasco, 2018). This unique merger also faced its challenges, as despite having the same owners, the breweries had to produce each other's beers on site in order to sell them in the taproom (Eisenberg, 2017). Good People also exemplifies the potential impact of craft breweries, as other well-known Birmingham landmarks grew around the brewery's building. Soon after Good People opened, the city of Birmingham invested in renovations in the same neighborhood. Railroad Park, a 19-acre green space that includes a walking trail, performance space, water features, and more, opened a few blocks away from Good People in fall 2010 (Spencer, 2010). Regions Field, a minor league baseball stadium, opened across the street in 2013 (Crenshaw, 2013). The area has continued to grow and now includes multiple restaurants, high-end apartments, and other amenities. This community growth surrounding a brewery is a common narrative used in explaining the urban revitalization possibilities of craft beer (Barajas et al, 2017; Wallace, 2019).

The number of breweries in Birmingham has continued to grow from one in 2008 to 13 licensed breweries in 2020, by the author's count. The variety of brewery type has also increased to include multiple brewpubs and microbreweries, two client brewers, and Good People, the city's one regional brewery. Good People moved from a microbrewery

to regional brewery label due to its higher volume of output, which exceeds the state's microbrewery cap of 25,000 barrels (Velasco, 2018). The majority of these breweries are Birmingham-based, but two brewpubs—Monday Night Social Club and Back Forty-Birmingham—are additional locations from the Atlanta-based brewery Monday Night Brewing and Gadsden-based brewery Back Forty. In addition to breweries, the city of Birmingham is home to two craft beverage producers—distilleries Dread River and Redmont Distilling. Redmont opened in 2015 and was the city's first distillery since prohibition (Pierre, 2019), and Dread River distills its own liquors in addition to producing a few craft beers (Pierre, 2019; Stuart, 2019).

Legislative updates

The city of Birmingham's history of alcoholic beverage regulation can be traced back to 1907, when the Alabama legislature passed a law enabling counties to prohibit alcohol sales. From 1908-1911, Jefferson County outlawed alcohol sales before a statewide ban took effect again in 1915. Even following Prohibition's repeal in 1933, the state remain dry until 1937 (Whitley, 2015). Brewing started to make a comeback in the 1990s, as the Alabama Brewpub Act of 1992 allowed for brewing to take place and for breweries to open in historic sites and in counties where beer had been brewed in the past (Whitley, 2015). This regulation remained in place until 2016, when updated legislation enabled brewpubs to open outside of historic buildings, historic districts, or economically distressed areas (Berry, 2016).

Other legislative changes have increased brewery freedoms in the state. In 2009, the alcohol by volume restriction for beer was increased from 6% ABV to 13.9% ABV (Whitley, 2015). In 2011, breweries were allowed to open taprooms. In 2012, updates

meant beer containers could be larger than 16 ounces. In 2013, homebrewing was legalized (Whitley, 2015; Velasco, 2019). In 2016, breweries gained the ability to sell up to 288 ounces of to-go beer per customer per day (Techo, 2016). These changes, as well as nationwide legislation such as the Craft Beverage Modernization Act, allowed greater opportunities to craft breweries and brewpubs in the state (Velasco, 2019). The ability to open a taproom, for example, enables a brewery to sell beer to customers for on-site consumption—an action that produces a significant amount of revenue for breweries and allows customers to form a relationship with the brewery (Velasco, 2019). The ability to sell to-go beers from the taproom also opens revenue streams, as those sales exist outside of the three-tier system and allow for a higher profit margin on sales (Techo, 2016). In 2021, new legislation was proposed to allow for at-home delivery of alcohol (Alabama State Legislature, SB126). This legislation has received industry support, as well as the support of Birmingham-based grocery delivery service Shipt (Ross, 2021).

Zoning and building regulations

While most regulation on breweries in Birmingham comes from state-level laws, the city of Birmingham regulates where breweries can open based on its zoning regulations. In 2015, the city added brewery definitions to its zoning codes, defining craft breweries by the following standards:

- *Brewery:* Any building used for the production of beer that manufactures more than 40,000 barrels per year, with a barrel containing 31 U.S. liquid gallons. A brewery, actively and continuously engaged in the manufacture of alcoholic beverages on the manufacturer's licensed premises, may conduct tastings or samplings on the licensed premises, and for that purpose give away or sell

alcoholic beverages manufactured there for consumption on only the premises where manufactured.

- *MicroBrewery*: Any building used for the production of beer that manufactures less than 40,000 barrels per year, with a barrel containing 31 U.S. liquid gallons. A micro-brewery, actively and continuously engaged in the manufacture of alcoholic beverages on the manufacturer's licensed premises, may conduct tastings or samplings on the licensed premises, and for that purpose give away or sell alcoholic beverages manufactured there for consumption on only the premises where manufactured.
- *Brew Pub*: An establishment, meeting the qualifications of a brew pub under the State alcoholic beverage control laws in Title 28, Chapter 4A of the Code of Alabama 1975, as amended, where beer is actively and continuously manufactured or brewed, in a quantity not to exceed 10,000 barrels in any one year, for consumption on the premises or for sale to any designated wholesaler licensee for resale to retail licensees; and which contains a restaurant or otherwise provides food for consumption on the premises.

The three definitions offered by the city of Birmingham categorize breweries based on production by way of barrel limits. They also specify what can be done at those breweries, including sales of alcohol for on- and off-premise consumption, and the ability to sell beer through a wholesaler. The city also offers definitions for distilleries and artisanal distilleries, which can produce up to 1,000 barrels of liquor per month. A craft beverage producer can be designated as a form of brewery and distillery.

According to the most updated zoning regulations, published in January 2021, the city provides guidance on brewery location, facility size, and more in its regulations. A

brewery's distinction dictates in which zones it is permitted to operate. All forms of brewery and distillery are permitted to open in light manufacturing, heavy industrial, and planned manufacturing districts, or in Mixed Use Developments with an approved conceptual plan. Brewpubs can open in Mixed Use-Medium, Mixed Use-High, Mixed-Use Downtown, Planned Recreational, and General Commercial districts as long as there is no outdoor storage, all beer production takes place inside, and 10,000 barrels or less are produced annually. This definition is in alignment with other city's categorization of brewpubs. This level of brewery tends to produce less beer on-site, as its overall sales also include food sales. Microbreweries are allowed in Mixed Use-High and Mixed-Use Downtown districts or Planned Recreational districts under the conditions that there is no outdoor stage, the facility is less than 40,000 square feet, and less than 40,000 barrels a year are produced.

Until 2019, however, brewpubs were not permitted to open in general commercial districts. This zoning change arose when True Story Brewing Company opened in a retail in the Crestwood Neighborhood of Birmingham. The brewery received its business license and approval to build out in a retail space, but was unable to fully open when expected due to the fact that brewpubs were not allowed in retail spaces. After working with the Alabama Brewers Guild and the city of Birmingham, however, this was updated in 2019 (Swain, 2019), and brewpubs became a permitted use in the General Commercial district (City of Birmingham Ordinance No. 19-157).

Beer tourism, neolocalism, and revitalization

As legislation changes and the craft beer scene develops in Birmingham, the city has experienced urban revitalization as breweries move into neighborhoods, and it has

seen beer tourism increase. Good People Brewing's role in revitalizing the Railroad Park area of Birmingham is oftentimes discussed in news articles, blog posts, and books about brewing in the state. Other breweries, however, have been cited as the first resident in other areas needing revitalization. Back Forty Beer Co. was the first tenant at Sloss Docks, a warehouse near historical landmark and iron smelting plant Sloss Furnaces (Godwin, December 2017). This was Back Forty's first satellite location outside of its original city of Gadsden, Alabama, and one goal of bringing the brewery to the area was to revitalize the use of the warehouses and create an environment ripe for redevelopment (Godwin, December 2017). Birmingham District Brewing Co. was one of the first tenant in another redevelopment project, the Birmingham Electric Building Co. (Godwin, November 2017). This mixed-use development also includes multiple restaurants, a workout studio, and a music venue. In 2015, Cahaba Brewing Company also moved to an empty, 51,000-square-foot building in an industrial park (Phillips, 2015) and a newer brewery—Ghost Train Brewing Company—moved into Cahaba's former location. Regarding the move, the brewery's owner said they hoped it would be a step toward revitalizing the neighborhood (Phillips, 2015).

Tourism is also a revitalized part of the conversation. As more breweries have opened within the city, more brewery-related businesses have opened as well. As of 2020, there were several companies and events related to craft beer, including two annual beer festivals—the Magic City Brewfest in the summer and the Birmingham Winter Beer Festival in the winter. There are also pubcycles, which allow groups of people to “cycle” between breweries in the city. These mobile tours can be seen most weekends traveling between breweries as one driver discusses the various breweries and their connections to the city. Birmingham also added pedal bus and pedal bus services definitions to the

municipal code in 2017 (City of Birmingham, Ordinance 17-48). The state and city travel and tourism websites also cite craft breweries alongside restaurants as reasons to visit the city.

As visitors or residents tour around breweries, they are also able to experience the concept of neolocalism, a modern desire for a local flair in food, goods, and drinks (Reid et al, 2014; Fletchall, 2016) can be seen in Birmingham breweries through their beer names, historic locations, and regular community events. Avondale Brewing Company, the city's second brewery, has a flagship beer named after Miss Fancy, an elephant that once lived in the city-owned Avondale Park just a few blocks away. Cahaba Brewing Company is named after the river that flows through and around the city of Birmingham, and the brewery regularly promotes conservation efforts through both its branding and charitable donations. Even new breweries, such as Monday Night Brewing, give nods to the city's history through taproom decorations. These elements come together to allow brewery-goers to learn more about their cities and communities.

Beer City USA: Asheville, North Carolina

The city of Asheville, North Carolina is located in Buncombe County and has a population just above 90,000 in 2019, (U.S. Census Bureau, 2020). It is located in the Blue Ridge Mountains, and retains a reputation for outdoor activities and adventures. In the last 20 years, it has also become known as a craft beer destination in the United States. The city, which has received the "Beer City USA" moniker—a title based on an Examiner.com poll—in 2009, 2010, 2011, and 2012 before the competition was retired in 2014, is now home to 33 Breweries within the city limits, and nearly 50 in the metropolitan area (Hetter, 2019). It is a city that promotes its beer culture similarly to its

hiking culture, per posts on the “Explore Asheville” website, and one that boasts one of the highest concentrations of breweries in the country.

Beginning the brewery boom

Asheville, North Carolina saw its first brewery open in 1994, when Oscar Wong opened Highland Brewing Company. This brewery was the first in the city since Prohibition, and the third in the state, and some say that brewery sparked the craft beer renaissance in the city (Craft Beer & Brewing, 2020). The city is now home to more than 30 breweries, a concentration of breweries that is 7.5 times the national average (Roth, 2017). This collection of breweries also includes large locations of nationally distributing craft breweries such as New Belgium and Sierra Nevada (Kessler, 2020). As more breweries pop into the area, they are also seeking to tap into the beer tourism demographic—a group of young professionals who seek out experiences and craft beer on their visits (Nilsson et al, 2018; Barajas et al, 2017).

One reflection of the city’s brewery scene is in the 2017 sale of Wicked Weed Brewing sale to Ansheuser-Busch InBev (ABInbev). Wicked Weed got its start in Asheville in 2012 but grew to comprise four locations in five years (Eisenberg & Kiser, 2017). ABInbev is the world’s largest brewer and encompasses brands such as Budweiser, Corona, and others (ABInbev, 2020). In 2016, ABInbev closed a \$100 billion merger deal with SABMiller, bringing together the world’s two largest beer companies and bringing the ABInbev share of the market up to 45 percent (Nurin, 2016). The company’s purchase of Wicked Weed pulled it out of the craft brewery definition, although the brewery maintains an emphasis on craft beverage production and community focus on its website (Wickedweedbrewing.com, 2020). It also demonstrated

the power some craft beer brands have been able to wield. As these breweries grow and attract national attention, national brands sometimes call upon them with deals that include more resources, funding, and more (Eisenberg & Kiser, 2017).

Beer clusters and beer tourism

Looking on Google maps, the beer neighborhoods within Asheville, North Carolina are easy to spot. The search of “breweries in asheville, north carolina” turns up a map with more than a dozen pins on top of each other, and once the viewer zooms out, it is easy to see that in some neighborhoods the city has a brewery on every corner (Google Maps, 2020). For a visitor, this means one car ride can mean walkability between a handful of breweries, restaurants, and AirBnBs. And on the city’s website, this brewery scene remains a feature to highlight. On the Explore Asheville Website, visitors can find information on brewery tours, beer tastings, and more (2020). There is also a North Carolina Beer Month and Asheville Beer Week, both of which receive mention (Explore Asheville, 2020). The tourism scene, however, does not stop there. The city is also home to more than 10 annual beer festivals, although some festivals are brewery-specific rather than city-wide.

Regarding craft beer tourism, beer clusters such as the one seen in the South Slope Brewing District of Asheville—a one-mile radius that boasts eight breweries—can promote tourism. This district was once the location of several industrial and railroad cites, but now breweries, restaurants, and local shops have taken over storefronts (RomanticAsheville.com, 2020). Just north of the South Slope district is DARN—the Downtown Asheville Residential Neighbors—which boasts an additional four breweries in another half block. While clustering of breweries is common in industrial districts—an

area where space to house brewing equipment is bountiful and historical prices may have been lower (Wallace, 2019; Barajas et al, 2017)—brewery clusters are also common as they can attract more visitors (Nilsson et al, 2018).

Craft beer enthusiasts often seek a wide variety of styles and experiences, and if they are seeking out beer tourism on a trip, it makes sense that they would seek out a location with multiple breweries options in close proximity. Neighborhoods such as South Slope allow visitors to “brewery hop” by foot, while the city of Asheville as a whole enables visitors to visit a wide variety of breweries with—at most—a 10-minute car ride to just outside city limits. While some economic theory would suggest that higher competition would mean lower profit margins, these Asheville breweries saw the opposite. Many businesses in the area saw business increase as more breweries moved in (Patrick, 2014). When geographical proximity makes it easier to travel between breweries, patrons are more likely to visit those neighboring breweries, making brewery clusters beneficial to the businesses as well as the visitors (Wolinsky, 1983). These brewery clusters have also spurred new business opportunities, including companies that host brewery walking tours, cycling tours between breweries, tour buses to the city, and more. As tourism increases, other businesses may flock to the neighborhood, leading to urban revitalization and economic development (Somerville, 2013; Malone & Lusk, 2018).

Economic development and planning

Recognition of the role craft breweries play in tourism and economic development can be seen on the official City of Asheville website, as well as on the Explore Asheville tourism website, the state’s tourism website, and the official state

website. The Economic Development Coalition of Asheville-Buncombe County even has a page dedicated to Craft Beer Manufacturing (2020), which features the city's history of craft beer and emphasizes the benefit of a concentrated industry cluster. According to a 2018 document produced by the Economic Development Coalition, breweries, wineries and distilleries are a strong part of the region's economy. More than 10 million visitors travel through the Asheville-metropolitan area annually, and the state of North Carolina sees a \$3.8 billion economic impact from the craft beverage (Economic Development Coalition of Asheville-Buncombe County, 2018), and in 2016, breweries created around 2,500 jobs in Asheville and contributed around \$205 million in tax revenue (Economic Development Coalition Releases Contribution Analysis of Brewery Industry in Asheville Region, 2017).

These jobs expand outside of beer consumption and taprooms, however. As visitors cited the pull of breweries and restaurants as a reason to visit the area, the city saw the influence of breweries along the supply chain (Arnaudin, 2019). Job growth in advanced manufacturing—a category that includes beverage manufacturing, motor vehicle parts, and plastic products—outpaced health care and hospitality sectors. The city also saw the development of tech start-ups geared toward craft breweries, including brewery website designer Craftpeak, and nationally recognized companies that brought yeast and malt—two necessary brewing ingredients—into the area (Arnaudin, 2019).

In 2010, the Economic Development Coalition for Asheville-Buncombe County and the Asheville Area Chamber of Commerce also developed the Asheville 5x5 plan. This plan set out to add 5,000 new jobs to the area and bring in \$500 million in capital investment within five target clusters. The plan was later updated, and the 2025 AVL 5x5 plan notes the benefits of projects such as New Belgium Brewing's taproom, including

“good for people, good for place, and good for prosperity”. New Belgium Brewing is one of the country’s largest craft breweries, and opened a taproom and production facility in Asheville’s River and Arts District in 2016. The \$175 million facility employs around 150 workers (Dahl, 2015; Raabe, 2012) and was a factor in “catalyzing revitalization and reinvestment in the River Arts District” (2025 AVL 5x5). As New Belgium set to open, the city provided \$500,000 in infrastructure improvements to the area and \$3.5 million in tax reimbursements over the course of seven years. Following that time period, the city estimated taxes paid by the brewery to be \$551,000 annually (Forbes, 2012). In the rest of the document, however, breweries are not listed as the target market or focus for economic development.

Economic growth and impact, however, do not mean that craft beer is always welcomed with open arms. According to a 2019 survey of Asheville residents that gained 905 responses, some citizens have concerns regarding the high concentration of breweries (Open Town Hall, 2019). The survey ran from August to September of 2019 as a mode of resident feedback on an updated Downtown Master Plan, and some responses included comments about “too many breweries” or “too many drunk tourists.” Others said that breweries and the high number of tourists meant the city lost its small-town feel. Overall, 20 of the 905 responses mentioned craft breweries specifically, and alcohol was mentioned an additional eight times. As of early 2021, updates to the Downtown Master Plan were not published on the city’s website. The original document from 2009, however, cites the importance of balancing the needs of residents and tourists in order to retain “what makes Asheville Asheville.”

The Mile-High City: Denver, Colorado

Of the three case studies outlined in this thesis, Denver, Colorado has the oldest craft beer history. The city has a population of around 705,000 and is the most populous city in the state of Colorado. Its craft beer history, while not the longest in the country, dates back to 1988. The city has seen a beer boom in the last 20 years, growing from 10 craft breweries in the late 2000s to around 70 in the late 2010s, and it has the highest proportion of breweries per 100,000 adults ages 21 and older (Byce, 2017). The city also stands out as the home of national brewer Coors Brewing Company, which some cite as an influence on the state of Colorado's beer regulations. The city's relationship with brewing, as well as the influx of craft brewers in the last 20 years, poses an interesting case study regarding early influence, urban development, and more.

A history of beer and what it brews

The state of Colorado's history with beer begins long before the craft beer boom, and even before Prohibition. Coors Brewing Company, now recognized as a national "macrobrewery," opened in Golden, Colorado in 1873. Coors Brewery is still located in Golden, which is about 15 miles outside of Denver, and is the largest single-site brewery in the world (visitgolden.com, 2020). Coors Brewing survived Prohibition and even continued distributing beer to some speakeasies in the city of Denver, and due to the brewery's location, more beer is produced in the metro Denver area than anywhere else in the country (Denver Beer History, 2020).

The influence of Coors Brewing can also be seen in the beer and brewing regulations across the state and within Denver. Following Prohibition, while other states left Prohibition-era restrictions untouched, Coors advocated for legislative changes. This

led to beer-friendly laws that have been able to attract and sustain high numbers of breweries (Boyd, 2017). The state also has one of the lowest beer excise taxes in the nation, at \$0.08 per gallon (State of Colorado, 2020). The lowest excise tax in the state is in Wyoming, at \$0.02 per gallon, and the highest is in Alaska at \$1.07. The median excise tax is \$0.20 per gallon. As the craft beer trend escalated, craft breweries were able to open under these same relaxed restrictions rather than use resources to advocate for legislative changes. Despite this relatively low-level of regulation, until 2019 Colorado retained a restriction on ABV level for beers sold in grocery stores. Beers on grocery store shelves had a maximum ABV of 3.2%, and any higher alcohol content beers were only permitted in liquor stores (Krugel, 2019). Breweries and craft beer consumers advocated for this restriction to lift, saying that it limited accessibility of craft beers and made it more difficult to purchase favorites.

When observing patterns of the craft beer trend, the highest concentration of breweries exists on the west coast, with number of breweries slightly decreasing as you travel east. Colorado, however, remains a state with the highest number of breweries in the country (Reid et al, 2014). The state and city of Denver retain relatively lax regulation on breweries, enabling breweries to open a taproom in almost any location as long as they hold a liquor license and only serve their beer (Colorado Department of Revenue Division of Liquor Enforcement, 2020; Klemair & Murray, 2014). For the most part, breweries and taprooms are unmentioned in Denver zoning regulations. In 2014, the freedom to open taprooms across the city raised some concerns, as citizens noted that brewery taprooms did not require a review of noise and capacity concerns prior to approval. A counterargument was presented at the time, noting that breweries closed

earlier than most bars and operated as neighborhood establishments (Klemair & Murray, 2014), which according to the argument, made this lack of review a moot point.

Economic development and urban revitalization

The beginnings of craft beer in Denver also had governmental ties. Wynkoop Brewing Company, the city's first craft brewery, was founded in 1988 by four men, including John Hickenlooper (Denver.org, 2020). Hickenlooper would go on to be elected Denver's mayor in 2003, and he now serves in the United States Senate. At the time Hickenlooper and his business partners opened Wynkoop Brewing Company, he saw an opportunity to mimic the revitalization efforts seen on the west coast and in the Pacific Northwest (Weiler, 2000). The property purchased for Wynkoop Brewing is now worth about 100 times its 1988 value, and the area around that brewery—known as “LoDo Denver”—has seen a resurgence in business and brewery activity (Weiler, 2000).

The city has continued to encourage this form of revitalization through a sort of beer-oriented development, wherein breweries are incentivized to enter new neighborhoods with the hopes of encouraging urban redevelopment (Reid & Gatrell, 2017). And while the city's 70 breweries would highlight a successful attempt at attracting new breweries, some consider this beer boom to be a potential beer bubble. In a 2015 survey conducted by the University of Colorado Boulder, breweries cited “Lack of Space” as the number one challenge to their business. Taxes and regulations, however, were tied for seventh.

The city's highest concentration of breweries is within the River North Arts District, which is also home to many restaurants, bars, and other entertainment areas. The area, however, also carries a history of homelessness and high crime rates. Outside of the

city, breweries can still find some more affordable spaces to open a brewery and were once able to stand out from the crowds located farther within the city (Byce, 2018). In recent years, however, larger brands and breweries also began moving into the space—an action that put pressure on smaller breweries and could potentially impact a craft brewery’s ability to open affordably. Examples such as the River North Arts District are also accompanied by a decreasing amount of space. As more breweries move to the area, fewer buildings are on the market (Byce, 2017). The price of property is going up, and available properties are often located in historic districts. As these areas become revitalized, there is also a greater push toward preservation of that history, making it illegal to change the outward aesthetic of buildings (Byce, 2017).

The challenges faced by new or prospective breweries eyeing the Denver, Colorado area raise a question of the “beer bubble” and if that bubble is set to pop anytime soon. As the city hosts around six beer festivals per year, as well as national craft beer conferences, it appears that beer tourism and craft beer consumption remain popular attractions to Denver. The tipping point, however, remains to be seen.

A wonderful fact to reflect upon

Within each of these case studies, there is a discussion of how regulation not only impacts craft breweries at the state level, but also how those breweries and those regulations can impact the city wherein they reside. The cities of Birmingham, Asheville, and Denver are at different stages of a city-level craft beer boom, and each of these cities has, at some level, a reputation for craft beer and craft brewing, even as the number of breweries and distribution of breweries varies. The cities have different approaches to zoning regulation, however, and they have also seen breweries move into dilapidated

areas and spur some level of urban revitalization. Despite their differences in development, each city also has some level of its history reflected in the state of its breweries.

For Birmingham, the city reflects the Prohibition-era legislation that lasted until 2013, but a vibrant brewery tour and beer community reflects a passion for the industry. In Asheville, the intermingling of breweries and local restaurants or shops within neighborhoods reflects a city that encourages tourism for food and drink, but also supports local artisans and retailers. In Denver, the expanse of the craft beer boom reflects a lack of regulation as well as a state history entrenched in brewing. These reflections show not only how breweries intertwine with the surrounding community, but also how state and local legislation can intertwine.

In a comparison of the city of Birmingham and Denver, it is possible to see the influence of legislation on breweries as a business, as well as to see the potential for a cultivated relationship between city and business. As cities look toward regulation of craft breweries, they can consider which steps may lead to more businesses opening, or which may lead to other urban revitalization projects. Many new projects in Birmingham and Denver have been anchored by breweries opening as they move into an area, renovate old buildings, and draw in a crowd of millennial consumers seeking out a local experience.

Within the city of Denver, a lower level of regulation has led to a larger influx of breweries, likely attracted by a lower excise tax, more freedom in location and operation, and other regulatory categories. This created a heavily saturated market, and the question remains to be seen if the number of breweries can remain steady, continuing to attract visitors and other development, or if the scales will tip. If the so-called craft beer bubble

does burst in the city, the economy would be left to grapple with empty storefronts, a decrease in tourism revenue, and other factors. While further study would be needed, the city can represent a contrast to the heavy regulation on craft breweries within the Southern United States, posing the question of how regulation might moderate growth and prevent a bubble, while also encouraging development and innovation.

When considering all three cities, it is possible to visualize a variety of zoning challenges. In Birmingham, as breweries are explicitly mentioned in zoning codes, and their potential locations are well-defined based on brewery size. The story of True Story Brewing, however, also highlights how even clear definitions can lead to challenges and a need to adapt existing code. Denver, on the other hand, approaches zoning similarly to brewery regulation--there is very little restriction. Breweries are able to open in most areas of Denver, but have settled mainly in larger spaces that accommodate brewing equipment before the brewery trend moves closer to the city center. In Asheville, breweries also face fewer zoning restrictions than those in Birmingham, however, economic development initiatives are considering the future role of breweries. As a city, Asheville provides an opportunity to explore how breweries can be perceived by residents and/or incorporated into economic development plans. The city of Asheville saw craft breweries move into the city several years prior to the craft beer boom in Birmingham, and large craft brewery clusters continue to attract tourists. However, as a city that is able to recognize the economic impact of breweries through tourism, job development, and economic diversification, the city of Asheville also grapples with the balance of tourism and urban revitalization versus citizen buy-in and passion for community. The balance between a neolocalism experience for visitors, and an authentic community for residents, remains to be seen.

Concluding comments

The goal of this thesis is to highlight the trends of craft beer legislation across the country, and that discussion also requires a recognition of the differences in regulation within cities and states. Overall analysis of these trends highlights how, as regulations on craft beverage production was reduced, the number of wineries and craft breweries in a state or region increased. The fact that some states altered regulations decades apart is reflected in the difference in the number of breweries per state, as well as the amount of regulation remaining per state. This content analysis also introduces the complexity of craft beer regulation within the United States, as restrictions on craft beer production and sales, as well as categorization of breweries can vary widely by state. These complexities are further reflected within cities recognized for their craft beer markets, as regulation changes open the doors for more breweries and/or more order as they open.

CHAPTER 5

CONCLUSION

In 2016, Creature Comforts Brewing Company in Athens, Georgia was, according to some laws, permitted to offer free alcohol—without a tour—during events that were promotional or educational by nature. According to other laws, however, the brewery was not permitted to give away alcohol, nor was it permitted to sell alcohol that was not accompanied by a tour (Aued, 2016). Around that same time, the brewery was unable to sell beer to customers for consumption on or off the premises, and any consumer-based sales of its beer were grounded in a three-tier system involving the brewery, a wholesaler, and a retailer. While this story depicts a complex intermingling of regulations dealt with by one brewery, it is not a unique experience. As the United States repealed Prohibition in 1933, the next step in the process—reviewing, revising, or removing Prohibition-era regulations on alcohol production—was left in the hands of the states. As a result, alcohol regulation—and more specifically, regulation related to craft brewing—across the country began to vary across state lines and across regions. Some states opted to repeal regulations within the decades following the repeal of Prohibition, while others left regulations on the books until the 21st century.

The state of brewery regulation remains a complex and fluid issue. As knowledge of craft breweries continues to increase, and the number of breweries does the same, and states continue to grapple with the complexities of regulating an industry that fits into categories of food service, manufacturing, alcohol production, and tourism. In order to

add to understanding of craft brewing legislation through a public administration lens, this thesis sought to answer several research questions, including:

1. What is the current status of brewery regulation in the United States?
2. What processes or practices are states regulating? Based on those regulations, what challenges might breweries have?
3. How do local governments interpret and apply state regulations, and how do those regulations impact local economies?

There is more research to be completed on the topic of craft brewing legislation and its impact on states and cities, as well as how the two entities interact while regulating the craft brewing industry. As a result of content analysis of legislation, licensing types, and economic impact, as well as case studies exploring zoning, economic development, urban revitalization, and craft beer tourism, greater insight into this topic has been achieved.

Question 1

The first question this thesis sought to address is a broad understanding of the current state of regulation as it relates to craft breweries and the craft brewing industry. This was accomplished through a content analysis of some common forms of regulation, including legislation legalizing homebrewing and brewpubs—two common entry points to craft brewing and beer production (McCullough et al., 2019; Cohran, 2019; Weiler, 2000)—as well as regulations on sales of craft beer through growlers, in taprooms, and at grocery stores. Three case studies also illustrated how state-level policies can translate to application within city limits, and how those policies impact breweries, economic development, and urban revitalization. Together, these analyses highlight the complexities and the nuances of the state of craft beer regulation in the United States.

A glimpse at the legalization of homebrewing and brewpubs showed how the trend of regulation related to beer production has traveled throughout the country. Homebrewing, an act that was legal prior to Prohibition but left out of the repeal of Prohibition (McCullough et al., 2019), slowly became a recognized, legal practice over the course of 80 years. Brewpubs, on the other hand, were a more modern practice and were legalized in less than a 30-year period in the United States. Similar patterns can be seen in other forms of regulation, as some states removed Prohibition-era legislation more than half a century ago, while others only revised laws in the last 15 years. While the different forms of regulation will be discussed in the next section, this disparate pattern of removing or revising regulations has left a complex web of brewery regulation in the United States.

There appear to be some regional trends, with Southern states retaining regulations for longer than states in the Pacific Northwest, but regulation continues to vary from state to state. Brewery licenses are one example of the nuances in regulation. While 18 states have three license types for breweries, no two states within that range have identical licensing structures. These licenses tend to fit a general pattern of one brewpub license, one microbrewery license, and one brewery license without production limits. The names and production limits of these licenses, however, varies between states. In one state, a brewpub license could allow for 20,000 barrels of production each year, while in another state, a brewpub license could cap production at 10,000 barrels. The number of licenses also varies between states—another example of how differently states can approach regulation. Some states choose to use up to five categories of license type in order to regulate based on production limits or specialty licenses such as an “Out of State Producer.” But when seeking a pattern in these five license types, each state has its own

approach to organization and regulation. Within the brewing industry, this can impact how breweries interact across state lines or how they open secondary or tertiary locations. And from a standpoint of regulation, it is important to understand the degrees of regulation included in each of these licenses.

Outside of name and license type, these licenses each hold different permissions. Brewpub licenses, for example, are widely used for breweries that also have a kitchen or food production on-site, even if production limitations differ between states. Other licenses, such as microbrewery licenses, might only hold permissions for craft beer production—not sales. Depending on the state, a brewery license might allow the manufacture of craft beer, but other licenses might be necessary to sell beer on-site, to sell beer for off-site consumption, or to provide other services. The state of permissions held in each license also varies by state.

These examples reflect the complexity of the state of brewery regulation throughout the United States. Through sometimes subtle and sometimes drastic differences, each of the 50 states and the District of Columbia have taken a different approach to brewery regulation. While some changes, such as homebrewing legalization, have now swept across the nation, other regulations remain in patches across the country. In addition to understanding the differences in regulation patterns, it is important to understand what states are regulating.

Question 2

As Question 1 answered, the topic of regulation across the states is complex and, in truth, difficult to cover comprehensively. The second research question sought to understand the processes and practices regulated by states, as well as the challenges

breweries may face. Understanding a few levels of regulation helps to represent how different states approach regulation and how that can impact the challenges faced by states and breweries. Each state regulates different aspects of brewing and the brewery supply chain. This difference reflects the fact that after Prohibition, states were left to decide how to regulate alcohol sales and production. Some of these regulations were wide-sweeping, while others have slowly phased out across the country. The three-tier system, which mandates that beer sales must move through the brewery, a wholesaler, and then a retailer before reaching the consumer, is seen in most states even though there is not a federal mandate for such a system (Scott, 2013). Other regulation, such as alcohol by volume restrictions on production, only exist in a handful of states.

Table 5 in Chapter 4 illustrates how regulation can vary across states. Growler sales, for example, are a form of beer sales that until the 2010s was legal in some states but not permitted in others. And while all breweries are now able to sell growlers in some capacity, some states limit how breweries can fill growlers (for example, Maine requires breweries only fill growlers that bear their brewery's logo), or place production limits on breweries that hope to fill growlers (for example, Minnesota only permits growler sales at breweries producing less than 20,000 barrels per year). Other states regulate how breweries are able to sell to consumers. Kansas, for example, is the only state that explicitly states that a microbrewery license does not permit beer sales for on-site consumption. Instead, these breweries must obtain an additional license that permits alcohol sales and consumption. Florida, Mississippi, and West Virginia, on the other hand, allow for on-site consumption but regulate how breweries can sell beer for off-site consumption.

Alcohol by volume, or ABV, restrictions also highlight challenges related to production and sales for alcohol. In Alabama, ABV was restricted to 6% until 2007. This limited the types of beers that could be produced, as some beer styles have ABV levels higher than 6%, and restricted what beers could be sold within the state. While 2007 was toward the start of the craft beer boom, other craft breweries that were established across the United States were selling beer across state lines and across the country. This ABV restriction, however, meant that certain beers and beer brands would not make their way to Alabama's shelves. Once the ABV restriction was raised to 13.9%—a level that accommodates more beer styles—more breweries began to open in Birmingham and in Alabama, as the variety of beers they could produce increased. Colorado, on the other hand, represents how a different form of ABV restriction can impact breweries. As recently as 2018, grocery stores in Colorado were only permitted to sell beer up to 3.2% ABV. Any higher alcohol content, and the beer would be sold only in liquor stores (Kruegel, 2019). This was repealed in January 2019, after breweries and craft beer fans advocated for a greater variety of beers outside of liquor stores. For breweries, removing an ABV restriction in grocery stores means more consumers may see beers on the shelves and either find a new brewery or make an impulse purchase of an old favorite, whereas beer purchases were previously relegated to trips specifically to liquor stores. These growler and ABV restrictions are one example of how state legislation can impact how consumers obtain craft beer and/or how they interact with breweries. The three-tier system is a broad-level regulation on beer distribution, taking it through a wholesaler before it moves from brewery to retailer, but smaller regulations can dictate where residents purchase their beer as well as the profit margins for beer sales.

From a state perspective, the level of regulation and licensing is a complex case. While brewing has been around since the founding of the United States, craft breweries are a relatively recent phenomenon. Large, national breweries or “macrobreweries” such as MillerCoors or Anheuser Busch did not previously inquire about opening taprooms and welcoming customers to drink on-site, while beer is manufactured in a neighboring room. This leaves states not only managing Prohibition-era regulations on systems such as the three-tier system, but also considering which level of regulation can keep order in an alcohol-related industry while also encouraging the economic development of small businesses that have a tie to the community.

From an industry perspective, the level of regulation and licensing may impact where breweries open or how many breweries exist in a state. When there are a lot of restrictions, or a complex state of regulation, states may have difficulty attracting new breweries. This is reflected by Creature Comforts’ second location, which is opening in California rather than Georgia due to the state of regulation in Georgia and the Southeast. For breweries seeking to open additional locations, brewery licenses can also impact how and where breweries open. When moving across state lines, the difference in brewery categorization can lead to challenges. Additionally, breweries may choose to not move from a state with few restrictions (such as Colorado) to a state with heavier restrictions (such as Mississippi).

Question 3

While post-Prohibition regulation of alcohol was left in the hands of the state, it is not only related to state legislatures. The third research question seeks to address the difference in levels of regulation, as well as how state regulations are applied by local

governments and how they impact local economies. Local governments grapple with regulation of craft breweries as it relates to where they are permitted to open, how they may be taxed, what hours they can operate, and more. The case studies presented in Chapter 4 explore some of these levels of regulation, as well as the interactions between communities and breweries.

An overarching regulation that relates back to state law is that of dry counties. While states can dictate overall distribution management through license types and requirements and through the three-tier system, 39 states also allow counties to be a “dry county,” meaning there is no alcohol sales allowed. This is one way that municipalities can regulate alcohol sales and distribution, or lack thereof, on a local level. Many states also allow local governments to dictate hours and days of operation, meaning that a city can dictate opening or closing hours, establish or prohibit Sunday alcohol sales, and more. Moving away from sales, however, cities can also dictate where breweries can open.

Through planning and zoning regulations, cities can establish and modify the areas in which breweries can operate. In the city of Birmingham, different types of breweries are specified in zoning regulations and face different restrictions. Brewpubs, for example, often occupy the smallest amount of space, have the lowest level of production, and include an on-site space for food production. They are able to open in the most areas within city limits. Breweries, however, face more restrictions on where they can open, as they require more space and oftentimes have higher levels of production. While zoning regulations have changed in recent years, both at a state and local level, Birmingham has seen a recognizable pattern of brewery openings. Similar to Asheville and Denver, Birmingham had its first breweries open in former manufacturing or

industrial spaces, which were oftentimes unused and offered a large amount of space for a lower price. Since regulations have changed and lifted, more breweries and brewpubs have moved into mixed-use areas and commercial districts.

In contrast, Asheville and Denver do not specify brewery types in their planning and zoning regulations. These cities also saw breweries start in manufacturing or industrial districts, as well as undeveloped areas, before they moved into more commercial districts. However, lower levels of zoning regulation have been noted as a reason for the high number of breweries within these cities. Asheville and Denver both have distinctive brewery neighborhoods, which include a small expanse of land with several breweries clustered in the same area. This has brought about its own challenges, as Asheville works to balance tourism for visitors and a community culture for residents and Denver ponders at what level it reaches the tipping point of too many breweries. Looking at these three cities, it is possible to see how zoning regulation can help organize and contain growth within a community, but also possible to see how a lack of zoning regulation may encourage more breweries to come to the city.

These cities also show how breweries beget more breweries. Regarding economic development and urban revitalization, brewery openings trend along a similar pattern—breweries open in underdeveloped areas where rent is cheaper, oftentimes into industrial districts where large warehouses can accommodate the size of brewing equipment. Once a few breweries become established, and in cases such as Birmingham, regulations are changed, those breweries can open the doors for new breweries to also open or move to the area. This is sometimes called a brewery cluster, wherein multiple breweries open within a small area and thereby promote brewery tourism as patrons can walk between breweries to sample a variety of beers. Breweries are also cited as a popular attraction for

young professionals and millennials as they come to cities seeking a local experience. Craft breweries can promote neolocalism, as they connect back to the stories of a city and its history, while also providing a space for locals and tourists to congregate. These levels of economic influence from the craft beer industry, through tourism, urban revitalization, and overall economic impact, can influence how local governments interact with breweries. Some may choose to enter partnerships with larger craft breweries, as Asheville did with New Belgium, or may choose to work with breweries on zoning regulations and licensing to simplify the process of opening a new location.

Just as regulations between states varies, regulation between localities also varies and tends to add complexity to the discussion of brewery regulation. Moving forward, understanding regulations at the state and local level, as well as how those levels of government interact, can help cities and states choose the most beneficial paths forward for industry regulation.

Study limitations

This thesis sought to explore the state of craft beer regulation in the United States through a broad lens and descriptive analysis of legislation, in addition to through focused case studies on three cities. While a foundation of knowledge is present in this thesis, there were also several study limitations.

One limitation arises from the complexity of terminology in craft brewing and craft beer regulation. As each state selects its own license types and definitions for specific breweries, and those definitions can range significantly between states, it can be difficult to establish a clear picture of brewery types and brewery regulations across the country. Some generalizations can be made, but it is difficult to balance a discussion of

such trends while also explaining the complexities of regulation. In the future, an exploratory study creating a standard book of terms and explaining how those terms are selected, as well as which brewery categories or regulations fit into those terms, would be helpful.

Another limitation is the scope of this study. Brewery regulation covers more than just the license types or growler, sales, and ABV regulations discussed in this thesis, and while data was initially collected regarding other regulations, it did not fit into this thesis. Other topics of regulation, including tax rates, hours of operation, presence of dry counties, and alcohol delivery could pose interesting topics of study. This thesis is also limited as it only covered three case studies. Each city that has craft breweries faces a unique blend of state and local regulation, as well as a different consumer base and community spirit. The three cities highlighted in this thesis showed some similarities between cities and brewery regulation, as well as differences in how state and local regulation interact, but their three stories do not encompass the full view of craft breweries in the United States. Moving forward, further case studies could highlight other unique challenges or opportunities presented by state and local regulation or local collaboration with breweries.

This thesis is also approached as a qualitative study that describes the state of craft brewing and draws some connections between themes and regulations. This approach provides a foundation of knowledge, however it does not provide information regarding statistical significance or relationships between different regulations and number of breweries. Moving forward, running a regression analysis on level of restriction and number of breweries, or completing other calculations could help create a greater knowledge base on these topics.

Future research

This research is only a starting point for a study of craft breweries through a lens of public administration, and through this study, several questions for future research arose. These questions and topics can further address how public administrators can understand brewing legislation and how it impacts their communities.

Economic impact of breweries

Information is available as to how the brewery supply chain—from ingredients to production to grocery store sales—impacts state economies, and it is possible to break out the average economic impact brought about by each brewery. A further analysis of this information across several years, however, might lend understanding to how the number of breweries relates to per brewery impact. Understanding the level of impact per brewery, as well as at which point the return per brewery dips, can provide guidance on future brewery development and regulation.

This can also provide insight into the tipping point of too many breweries. Looking at the case study of Denver, Colorado, it is possible to see speculation regarding a potential beer bubble. This brings up the question of how much regulation is necessary to stimulate economic development or urban redevelopment without overtaking the economy.

Tax rates

Tax rates are a common topic of discussion regarding economic development and the creation of new businesses, and within craft beer regulation, tax rates vary widely between states. During preliminary research for this thesis, state excise tax rates and

annual license fees were recorded as numerical values, and any rate differences were noted. Excise tax rates for breweries ranges between \$0.06 per gallon and more than \$1.00 per gallon depending on the state, and some states choose to use a graduated excise tax that changes depending on level of production. It would be interesting to look at how the type of tax rate (either a set level or a graduated tax rate) as well as the level of excise tax impact number of breweries within a state. An analysis of tax rates could also relate back to the Craft Beverage Modernization and Tax Reform Act by way of analyzing tax rates over a certain time period and determining how these rates have changed.

Relationships between regulations

This thesis explored how different regulations exist within states but did not explore the connections between regulations or the connections of regulations to the number of breweries within a state. Future research could explore the connection of homebrewing legislation to number of breweries through a regression analysis or could explore how level of regulation relates to economic impact of breweries. An analysis of different forms of legislation and the number of breweries within a state could also be a step toward determining if some regulations have a greater impact than others on number of breweries that open within a state.

Impact of breweries on tourism

Craft breweries are recognized as an industry that has the potential to attract tourists for both a neolocal experience and for the beers. It would be interesting to further analyze the economic impact of breweries in states to determine how much breweries impact tourism numbers, as well as how that impacts overall economic development.

This information and these calculations could also lead to future research understanding partnerships between local governments and breweries, understanding the level of tourism within states, and understanding how regulation factors into those numbers.

Future impact on urban revitalization, gentrification

Breweries can be seen as an engine of economic development or urban revitalization, but local governments also should consider the long-term impacts of revitalization through breweries. Future research could analyze how breweries have changed the face of communities both in the face of redevelopment and in the face of gentrification. Breweries tend to attract millennials and young professionals that are mainly white and middle class, and as breweries move into underdeveloped areas, they can push out lower income families as cities seek to revitalize. As governments seek an understanding of overall regulation, an understanding of the long-term trends of gentrification can also inform zoning or regulatory decisions.

Impact of COVID-19

During the course of this present research, the COVID-19 pandemic swept through the world and the United States, bringing about new challenges regarding regulation of breweries. Many states grappled with a desire to preserve small businesses and restaurants and had to consider which adjustments to take-away sales and distribution would be acceptable. At the time of this thesis, some information regarding loosening restrictions on alcohol sales was available, but a comprehensive picture was not possible. As more information comes to light, the COVID-19 pandemic and its impact on the state of legislation would be an interesting topic for future research.

Such research could explore which states chose to loosen regulations regarding to-go alcohol, whether by allowing restaurants to sell to-go beer or by allowing breweries to sell more beer for to-go purposes. This research could also explore the topic of alcohol delivery through grocery orders and through beverage distribution companies such as beer of the month clubs or direct from brewery sales. In addition to recording changes, future research could also look at the longevity of some of these changes. Many states crafted emergency orders to create temporary changes to production and distribution, but some have decided to make permanent those changes. As the COVID-19 pandemic continues to develop and create a new normal, these regulations may also continue to ebb and flow.

Crafting an understanding

As an industry, the craft brewery movement has been on the rise since the early 2000s and, as of publication of this thesis, does not appear to be stopping. Moving forward, policy makers at the state and local level must understand the overall craft beer industry as well as its relationship to communities and the economy in order to regulate it in a way that meets state and local needs. While complex and seemingly ever-changing, craft beer regulation provides insight into how regulation can impact economic development, urban revitalization, and promotion of community culture, and it highlights the importance of understanding the ties between state and local legislation. This thesis is one step toward understanding the industry through a lens of public administration, and an opportunity to look forward to new questions and further research.

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