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PERCEPTION AND PLAY: CONSUMER PERCEPTIONS OF CRAFT BREWERIES  
AND THE IMPACTS OF TOURISM EXPENDITURES ON ECONOMIC HEALTH

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A Thesis  
Presented to  
the Graduate School of  
Clemson University

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science  
Applied Economics and Statistics

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by  
Anne Elizabeth Wade  
May 2022

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Accepted by:  
Dr. R. David Lamie, Committee Chair  
Dr. Michael Vassalos  
Dr. Jairus Rossi

## ABSTRACT

This thesis evaluates two different strategies local leaders use to support and grow their economies. The first evaluates how residents from across the American South view and understand their experience of local craft breweries. The second evaluates the effects of direct tourism spending and direct tourism tax receipts on important measures of resident well-being in the twenty-three county Western North Carolina region.

The first chapter in this thesis evaluates the overall consumer perception of the growing craft brewing industry within the states of Kentucky, South Carolina, North Carolina, Tennessee, Alabama, and Louisiana and what factors affect this perception. It uses data from the Local Food System Vitality Survey distributed by the University of Kentucky with assistance from Clemson University, North Carolina State University, and the University of Arkansas to evaluate and draw important conclusions on residents' perceptions of their local food systems. The idea of consumer perception forms the foundation of this chapter, which describes the way that consumers think about and contextualize their interaction with a product or products. In this case, the perception is of local craft breweries. This analysis is ultimately useful because it allows for a deeper and greater understanding of the ways in which local residents perceive craft breweries in their communities. With these perspectives, local leaders and craft brewery owners alike have the opportunity to understand their strengths and their weaknesses.

The second chapter in this thesis evaluates the effects of direct tourism spending and direct tourism tax receipts on important measures of resident well-being in the twenty-three county Western North Carolina region. In this case, the measures of well-

being are the number of Supplemental Nutrition Assistance Program (SNAP) benefit recipients, the estimated number of people in poverty (i.e. below the federal poverty line), and the number of employed persons (i.e. receiving taxable income from employment) in the twenty-three county region that makes up Western North Carolina from 1999 to 2019.

This thesis emphasizes the ways that a growing industry, in this case both craft breweries and tourism broadly, affects people and their experiences. These chapters view the relationship between local peoples and their local industries as paramount, with the ultimate goal of evaluating both perception (of craft breweries) and effect (of tourism expenditures). Within the complicated world of economic development, it is important to understand these relational aspects of growing industries and to evaluate how changes in an economic ecosystem affect the most vulnerable. Thus, this thesis offers a look at two pieces of the larger economic development story in these regions in order to shed light on a complicated and ever-interconnected web of relationships with the hope that these insights can lead to informed growth in these two important and ever-evolving industries.

## DEDICATION

This thesis is dedicated to Jodie and Jonathan Wade, for listening when I needed it, and to Anne and Wallace Bembry for believing in me when I couldn't believe in myself.

## ACKNOWLEDGMENTS

This thesis would not exist without the help and general kindness of my committee members Dr. Lamie, Dr. Vassalos, and Dr. Rossi. Their wisdom and guidance helped make this project, and I could not be more grateful. I'm also grateful to the United States Department of Agriculture for funding the Local Food Vitality Indexing Project and the Southern Heritage Crops Project of which I was a grateful part for my two years at Clemson University. I would be remiss to exclude my additional thanks to Dr. Claudia Schmidt of Pennsylvania State University for her help and assistance. Finally, I am grateful to the Jackson County Public Library for offering me the perfect space to write and dream for so many years.

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## CHAPTER ONE

### INTRODUCTION

The power and possibility of tourism as a tool for economic development has recently re-entered the national consciousness. In the aftermath of the Covid-19 pandemic, the United Nations declared the industry as “one of the world’s most important economic sectors (Guterres, 2021).” When widespread restrictions slowed the world to a standstill in early 2020, the tourism sector plummeted to new lows, with people becoming unemployed and businesses facing incredible losses on a global scale (Guterres, 2021). An industry that the world once took for granted took center stage as a litmus test of global recovery. With this level of importance being placed on the idea and industry of tourism, by global and local leaders alike, it is important to understand how people in tourism-centered communities view aspects of the industry and experience its effects.

For example, craft brewing has emerged as an important industry for tourism development in the last decade. Beer tourism, specifically, has become increasingly popular recently in regions already known for beverage production (Hall & Sharples, 2003; Slocum, 2015). Additionally, food and beverage trails are considered a dominant form of cultural and food tourism by experts (Ilbery & Kneafsey, 1998; Knollenberg et al., 2021). The idea is then that these experiences of food and of beverages are what draw people in as tourists to craft breweries. They seek out the novelty of an experience that is tied into the local culture. Thus, craft breweries are inherently intertwined with tourism

and tourism development, making it an important topic to study and understand as the industry develops and expands.

For clarity, craft breweries are defined as being “small,” meaning they produce six million barrels of beer or less in the span of a year and “independent,” meaning that at least 75% of the business is owned privately. As of 2020, there were 8,884 craft breweries in the United States. For reference, in the year 2000, there were only about 1,500 craft breweries in the United States (Brewer’s Association, 2021).

In this thesis, I address the broad questions of how local residents view these craft breweries and how increases in tourism spending, often prompted by these new additions, affect the same local residents. The overall question being: how do changes to the tourism industry affect the lives and perceptions of the people already living in an area? This question is especially interesting when looking at the American South which has seen “rapid growth this decade” according to the U.S. Census Bureau, with most of the increases in population due to in-migration from other parts of the United States (2021). Thus, with a growing population, possibly fueled by new businesses and improved tourism-centered outreach, it is important to understand the perceptions and experiences of the local residents.

The second chapter of this thesis utilizes an ordered logistic regression to evaluate the overall consumer perception of the growing craft brewing industry within the states of Kentucky, South Carolina, North Carolina, Tennessee, Alabama, and Louisiana and what factors, both demographic and other, affect this perception. It uses data from the Local Food System Vitality Survey distributed by the University of Kentucky with help from

Clemson University, North Carolina State University, and the University of Arkansas to evaluate and draw important conclusions on consumer perception of craft breweries. The idea of consumer perception forms the foundation of this chapter, which describes the way that consumers think about and contextualize their interaction with a product or products. In this case, the perception is of local craft breweries. This analysis is ultimately useful because it allows for a deeper and greater understanding of the ways in which local residents perceive craft breweries in their communities. With these perspectives, local leaders and craft brewery owners alike have the opportunity to understand their strengths and their weaknesses.

The third chapter of this thesis looks at the tourism industry more broadly. It uses a multiple regression approach to evaluate the effects of direct tourism spending and direct tourism tax receipts on important measures of resident well-being in the twenty-three county Western North Carolina region. In this case, the measures of well-being are the number of SNAP (Supplemental Nutrition Assistance Program) benefit recipients, the estimated number of people in poverty (i.e. below the federal poverty line), and the number of employed persons (i.e. receiving taxable income from employment) in the twenty-three county Western North Carolina region from 1999 to 2019. This chapter attempts to explain the complicated relationship between the recent increase in tourism expenditures in the region and the experience of the most vulnerable local residents.

These two projects both connect to the ways in which local leaders use economic development strategies to develop and grow their communities and economies. Several different frameworks for economic development have emerged in recent years; most of

which encourage communities to tap their “comparative economic advantages” and “community capitals” along with “encouraging the start-up of new firms” and “mobilizing community members” as both entrepreneurs and advocates. All of these goals, from all of these different sources, align directly with the increasing growth of both the craft brewing industry and the tourism industry in Western North Carolina and the United States more broadly (*SET Overview*, 2022; Flora & Flora, 2008; Kretzmann & McKnight, 1993; Hustedde, Shaffer, & Pulver, 2005).

All of these economic frameworks center themselves around broad ideas of development via relationship. For example, the SET Methodology from USDA Rural Development emphasizes the participation of local residents and leaders in economic development planning (*SET Overview*, 2022). Other methodologies like the Community Capitals Framework by Flora and Flora (2008) state that resilient and healthy communities are those that emphasize balance, not overdevelopment of one sector or another. The Asset Based Community Development methodology continues this trend by emphasizing the importance of building relationships and connections between community members, agencies, and businesses of all sorts (Kretzmann & McKnight, 1993).

Like these development methodologies, this thesis emphasizes the ways that a growing industry, in this case both craft breweries and tourism broadly, affects people and their experiences. These chapters view the relationship between local peoples and their local industries as paramount, with the ultimate goal of evaluating both perception (of craft breweries) and effect (of tourism expenditures). Within the complicated world of

economic development, it is important to understand these relational aspects of growing industries and to evaluate how changes in an economic ecosystem affect the most vulnerable. Thus, this thesis offers a look at two pieces of the larger economic development story in these regions in the hopes that it can shed light on a complicated and ever-interconnected web of relationships with the ultimate goal that these insights can lead to informed growth in these two important and ever-evolving industries.

## CHAPTER TWO

### CONSUMER PERCEPTIONS OF CRAFT BREWERIES IN THE AMERICAN SOUTH

#### Introduction

Today, it is nearly impossible to pass through any town or city without encountering at least one craft brewery. The craft brewing industry has grown significantly in recent years, with the number of breweries increasing greatly post-2010 (Brewer's Association, 2021). As of 2020, there are close to 8,884 craft breweries in the United States. For reference, in the year 2000, there were only about 1,500 craft breweries in the United States (Brewer's Association, 2021). When broken out into categories, brewpubs and microbreweries, the upward trend continues to be apparent. Brewpubs, defined as being restaurant/brewery hybrid locations where 25% or more of the beer sold is brewed in-house, have increased from 1,068 locations in 2000 to 3,219 locations as of 2020 (Brewer's Association, 2021). Similarly, microbreweries, defined as being locations which produce 15,000 barrels of beer each year or less, increased from

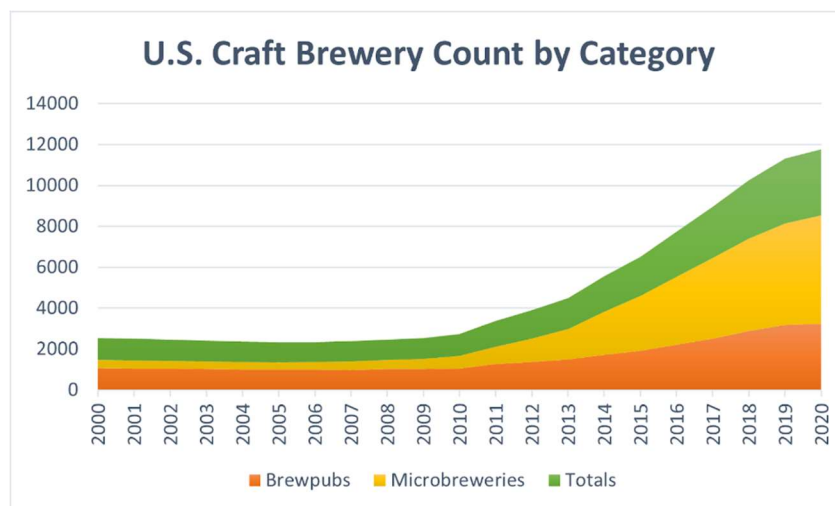


Figure 2.1. U.S. Craft Brewery Count by Category (Source: Brewer's Association)



405 locations in 2000 to 1,854 locations in 2020 (Figure 2.1). These trends illustrate a growing consumer desire for craft beer across the U.S. and makes this topic an especially interesting and timely one to study and understand.

It is not only consumers that have recently developed a greater interest in microbrewing. The brewing powerhouses have taken notice as well. According to *The Guardian*, as of 2020 approximately 78% of the beer consumed by Americans was created by four major companies: Anheuser-Busch, Molson-Coors, Constellation Brands, and Heineken N.V. (Figure 2.2). These companies hold immense market power and have recently expanded into the craft beer industry. Anheuser-Busch, in particular, acquired seventeen formerly independent craft breweries between 2011 and 2020 (including the likes of Goose Island, 10 Barrel Brewing, and Devil’s Backbone Brewing) (2021). The craft brewing industry is not dominated by large companies in the same way as the beer market broadly. Only 32% of the market is dominated by large companies. In fact, Molson Coors only controls 13% of the market, while the rest of the market share is



Figure 2.2. U.S. Beer Market 2020 (Source: *The Guardian*)



Figure 2.3. U.S. Craft Beer Market 2020 (Source: *The Guardian*)

dominated by the Boston Beer Company, Sierra Nevada, and Kirin Holdings Co (Figure 2.3) (2021).

The history of the craft brewing industry in the United States is one of incredible and impressive growth over time. It demonstrates a deep consumer interest in consuming unique products and shows how small businesses can thrive, even in a market increasingly dominated by large conglomerates. The story of craft brewing illustrates the great potential for small producers to create distinctive and completely unique products that appeal not only to a wider audience, but also to a very hyper-local one.

The growth of the craft brewing industry in recent years raises a number of important questions concerning consumer market demand. First, why do consumers like craft beer? In particular, what attributes of craft brewing products interest them the most? Do they like the unique taste experience of these products? Or, do they come to microbreweries and/or brewpubs for reasons beyond just an interest in beer? For example, might a consumer enjoy a local brewpub for its food or for the entertainment

opportunities provided (like local music or trivia events)? Or, do they seek out craft breweries for the sense “community” they might get from spending time in a locally owned and operated establishment? What are consumers willing to pay for the experience of a local craft beer establishment? While these questions are not directly addressed in this analysis, they add important context to the conversation around consumer perception.

Beyond these broader questions concerning consumer demand are more narrow questions for local communities to consider. One question is, what do consumers think about the craft breweries in their area? Do they see these establishments as meeting their needs or is there still “room for improvement?” Or, do they feel as if their local establishments only appeal to tourists and not to them, the local community? Is there an optimal balance between meeting local residents’ needs and those of tourists?

This chapter answers some of these questions by using data from the Local Food System Vitality Survey distributed by the University of Kentucky with help from Clemson University, North Carolina State University, and the University of Arkansas in the states of Kentucky, South Carolina, North Carolina, Tennessee, Alabama and Louisiana. This paper evaluates the overall consumer perception of the growing craft brewing industry within these states and what factors affect this perception. This analysis extends the literature on consumer perception of craft breweries by focusing in on the growing and developing industry in detail.

## **Literature Review**

### *Defining “Craft Breweries”*

In the context of this study, the definition of a craft brewery is borrowed, in part, from Antonietta Baiano's (2021) description of the term in "Craft Beer: An Overview." In this article, Baiano defines a craft brewery as "a brewery able to produce low volumes of beer with the addition of nontraditional ingredients." In this sense, craft breweries are defined by a set of characteristics that generally include a small size, an independent structure, and the use of traditional brewing practices (Baiano, 2021).

As Baiano notes, there are a number of definitions of "craft beer" and "craft breweries" throughout the world. One interesting element that is mentioned in a number of texts, summarized well by Slocum et al. (2017), is that the craft brewing industry is "cooperative rather than competitive" in many circumstances. Furthermore, as Slocum et al. (2017) mention, many craft breweries are "content to improve their own practices behind the scenes, helping out fellow brewers whenever asked." Thus, it appears that in addition to being small, being independent, and following traditional brewing practices, one important element of the definition of a "craft brewery," at least in some cases, is an element of cooperation amongst brewers.<sup>1</sup>

One final element of "craft beer" and "craft breweries" is the element of geography. In *The Geography of Beer: Regions, Environments, and Societies*, Dr. Mark Patterson and Dr. Nancy Hoalst-Pullen argue that beer production relies heavily on ingredients but even more so on the "localism" of beer style varieties (Patterson & Hoalst-Pullen, 2020). These authors also argue that many of the region's preferences are

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<sup>1</sup> While this is not always true, there is evidence that networks for collaboration among breweries exist and are useful to all parties involved. For example, see the brewer's guilds that exist across states and localities and encourage cooperation among their members.

related to the region's particular history and culture (Patterson and Hoalst-Pullen, 2020). So, in addition to being small, being independent, following traditional practices, and being relatively cooperative, there is also a part of the definition of a craft brewery that depends on the geography, culture, and history of the region in which it is operating.

This paper relies on this broader definition of craft brewing (incorporating independence, traditional practices, relative cooperation, and geography) while also incorporating the definition used by the Brewer's Association. The Brewer's Association defines an American craft brewer by using two distinct measures. First, the brewer must be "small," meaning that they produce six million barrels of beer or less in the span of a year.<sup>2</sup> Second, the brewer must be independent meaning that "less than 25 percent of the craft brewery is owned or controlled (or equivalent economic interest) by a beverage alcohol industry member that is not itself a craft brewer (2021)." Thus, the definition of craft brewing in this study relies on cultural and geographical elements while also incorporating important numerical measures.

### *Defining Local*

One extremely important term to define when considering craft brewing is the term "local," as definitions tend to vary widely. Some scholars define local in terms of distance from a given location (i.e. Adams & Adams, 2011; Chambers et al., 2007; Khan & Prior, 2010), or driving time (i.e. Zepeda & Leviten-Reid, 2004). In other cases,

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<sup>2</sup> This six million number is somewhat controversial in the brewing community. It was created by the Brewer's Association as a sort of "protection" against companies like Anheuser-Busch claiming to be a "craft" brand. Some brewers do not agree with this definition, but it is useful in drawing a line between "beer" and "craft beer" and will be used as such in this paper. See Fisco (2019) for more details on the controversy.

“local” is defined through the lens of emotional and social contexts, rather than by distance. For example, Selfa and Qazi (2005) found that many consumers in Washington state defined “local” as being “selling or giving food to friends, neighbors, and community members.” To these consumers then, the relational aspect of “local” is just as important as measures of distance. Other authors found similar results when surveying members of their own communities. For example, Wägeli and Hamm (2012) found that consumers in Germany considered “local” to be a personal term, that connected with their inherent perception of themselves and their place of residence that was “hard to define,” as it was seemingly rooted in an entirely ineffable emotion. Finally, in another strand of the literature (i.e. Wägeli & Hamm, 2012; Selfa & Qazi, 2005), local is defined through the use of political boundaries (states, provinces, counties, etc.).

In the end, there is no perfect definition for the term “local.” Rather, it is a complicated idea that contains within it measures of distance, complicated emotions, and political boundaries. Within the survey instrument developed for this project, the definition of local was deliberately left up to the respondent. Thus, the definition of local, in this case, relies more on each individual’s perception of what local means to them; meaning, it could be defined by physical distance or by a feeling.

### *Brewery Trends*

According to the Brewer’s Association, modern U.S. craft brewing began in the 1960s and evolved significantly over time. Homebrewers in the 1970s started the modern movement by creating beer with ingredients that were different from those contained in widely-available commercial beers. The first “craft breweries,” using the modern

definition opened across the United States throughout the 1980s.<sup>3</sup> New York's first craft brewery, and the nation's first by the modern definition, William S. Newman Brewing Co. opened in 1981 (Sparhawk, Baldwin, & Storey, 2020). The Real Ale Co. was Michigan's first craft brewery and it opened in 1982. Other craft breweries opened across the U.S. from Massachusetts to California throughout the 1980s. The expansion continued into the 1990s, with many states gaining their first craft brewery in the early 90s. Notably, Palmetto Brewing, South Carolina's first craft brewery, opened in 1994. By 1996, there were officially 1,000 craft breweries in the United States (Sparhawk, Baldwin, & Storey, 2020).

As the new millennium dawned, the craft brewing industry continued to grow. The Brewer's Association itself was founded in 2005 by merging two existing associations: The Brewer's Association of America and the Association of Brewer's. Additionally, the first American Craft Beer Week was held in 2006 (Sparhawk, Baldwin, & Storey, 2020).

The 2010s marked the true expansion of the industry. In 2014, the industry expanded significantly as volume produced by craft brewers jumped eighteen percent higher than in 2013 (Sparhawk, Baldwin, & Storey, 2020). By 2016, there were five times the number of craft breweries in the United States as there were in 1996. The Smithsonian Institute even hosted an exhibit called "The American Brewing History Initiative" at the National Museum of American History that outlined the importance of

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<sup>3</sup> The modern definition of craft brewing is a brewery that produces six million barrels of beer or less and has less than 25% of its ownership in the hands of an industry member who is not a craft brewer.

beer and brewing in the United States throughout time (2021). By 2018, there were over 7,000 craft breweries in the United States and by 2020 there were over 8,000.

### *Consumer Perception*

Consumer perception describes, simply, the way that consumers think about and contextualize their interaction with a product. This product could be an item, like a tomato in a grocery store, or, it could be an experience, like a trip to the grocery store. Studies of consumer perception generally attempt to encapsulate the thoughts and feelings of consumers about specific industries and products. Starting at the turn of the millennium in 2000, articles concerning consumer perception of local food started to increase steadily. In the literature, there are three distinct categories of result contained within the consumer perception methodology: demographics, knowledge and information, and specific attitudes (Feldmann & Hamm, 2015).

Economists began to focus their attention in earnest on consumer perception of food systems around the turn of the millennium (2000), but they were outpaced by other social scientists who were writing about the topic before them. One excellent example of this is development sociologist Dr. Elizabeth Barham, who wrote in detail on subjects concerning consumer perception and reaction to food labels, noting that consumer perception and buying behaviors could be shaped by the addition of labels that appealed to a buyer's morality and ethics (Barham, 2002). Barham also wrote about the development and consumer perception of sustainable agriculture in both the United States and France (Barham, 1999). This goes to show that while economists were slowly



warming up to the idea of linking consumer perception and food systems, other social scientists were studying similar subjects and generating their own results.

Feldmann and Hamm note, in their 2015 literature review on the topic of consumer perception of local food systems, that there have been many and multiple studies that attempt to quantify and evaluate this complex topic. Most, if not all of these studies, gather demographic characteristics (like age, race, sex, etc.) and attempt to understand how these characteristics impact the perception that a consumer might have about a specific industry or product (Feldmann & Hamm, 2015). The end goal of most of these studies is to identify specific demographic factors that affect consumer perception and to offer business owners and marketers a greater understanding of who enjoys their product, who does not, and who still needs to be informed about the product. Within the realm of local food and food systems, several studies already exist that detail the usefulness of the consumer perception methodology.

Beyond demographics, some authors orient their studies around consumer knowledge and information-seeking behavior. In these cases, the authors attempt to “examine the influence of information and knowledge on consumers’ attitudes and purchasing behavior (Feldmann & Hamm, 2015).” Other authors seek answers to why consumers form specific attitudes towards products. For example, some attempt to understand how familiarity with a product might affect the attitude a consumer forms towards a specific product or experience (Feldmann & Hamm, 2015).

Zepeda and Li (2006) and Åsebø et al. (2007) found that demographic characteristics were not significant determinants of consumer perceptions of grocery store

offerings in the United States and of farmers markets in Norway, respectively.

Conversely, authors like Khan and Prior (2010) determined that in Greater Birmingham and Wolverhampton in the UK, there were significant effects of demographic factors on consumers' perceptions of locally produced food. An excellent additional example comes in the form of Racine et al. who, in 2013, demonstrated that “white families, lower income families, families living in rural areas, families with children who ate 5 or more servings of fruits and vegetables per day, and families with children in poor health” were more likely to buy more local produce and thus, likely have a better perception of local produce.

One excellent example of interesting results concerning consumer knowledge and information of food-related products is “Organic and Local Food Consumer Behaviour: Alphabet Theory” by authors Zepeda and Deal (2009). They argue that many organic food shoppers are influenced to buy local and organic products, in part, by their personal values and norms. In their study, they found that consumers drawn to local and organic foods were often doing so because of information they had previously gathered, specifically concerning the presence of pesticides on non-locally sourced and/or non-organic produce.

Finally, some authors offer useful perspectives on the impact and importance of specific attitudes in determining consumer perception results. One of the most important, and most mentioned, attitudes was a desire for specific product qualities like freshness or taste (Feldmann & Hamm, 2015). For example, Bond et al. (2008) used factor and cluster analysis to determine preferences for fresh produce traits and product attributes. They

also determined a series of important market segments (Bond, Thilmany, & Bond, 2008). Other articles like “Discovering Niche Markets: A Comparison of Consumer Willingness to Pay for Local (Colorado Grown), Organic, and GMO-Free Products” used multiple bounded probit analysis to determine consumer preference for locally grown, organic, and GMO-free potatoes. They found that beyond taste, consumers' attitudes towards products branded as “Colorado grown” were overwhelmingly positive and led to a higher willingness to pay (Loureiro & Heine, 2002). Carpio and Isengildina-Massa (2009) conducted a similar study evaluating consumer willingness to pay for locally grown products in South Carolina and found that South Carolina consumers were willing to pay a premium for produce and animal products labeled as “locally grown.”

In the end, there is abundant research on the topic of consumer perception and abundant results that demonstrate the usefulness of this methodology. It is clear from the research that there are several different ways that consumers interact with products and experiences. Research illustrates the importance of understanding what shapes consumer perceptions within the realm of food and food systems, whether it be demographics, knowledge, attitudes, or some combination of all three. In this study, demographics and knowledge form the primary points for understanding and quantifying consumer perception using data from the Local Food System Vitality Survey. In the following section, this data source will be explained in further detail.

## **Data**

### *Understanding the Local Food System Vitality Survey*

The Local Food System Vitality Survey was developed as a consumer survey. Respondents were selected from fifteen regions of various sizes, some as small as a rural municipality, others as large as a multi-county region, around the U.S. South which were pooled and segmented by population. “Small” regions were defined as having a population under 100,000, “medium” regions were defined as having populations between 100,000 to 500,000, and “large” regions had more than 500,000 residents. These regions were chosen based on the expertise of extension agents and local university faculty in each state. To be surveyed, each region needed to demonstrate some level of local food activity and interest, and there needed to be local interest in LFS development from community members and leaders (Rossi & Woods, 2021).

**Table 2.1** Communities Surveyed with Populations

<b>Community Code</b>	<b>Location</b>	<b>State</b>	<b>Population</b>
1	Greenville/Spartanburg/Anderson	SC	400,000
2	Columbia	SC	550,000
3	Catawba/York	SC	280,000
4	Louisville	KY	771,000
5	Edgecombe/Nash	NC	68,000
6	Little Rock / Pulaski	AR	431,000
7	Baton Rouge	LA	600,000

8	Nashville	TN	1,000,000
9	Knoxville	TN	555,696
10	Montgomery	AL	265,000
11	Raleigh	NC	800,000
12	Chapel Hill	NC	200,000
13	Durham	NC	350,000
14	Boyd	KY	47,000
15	Clark	KY	36,000

Respondents were recruited using mailed surveys (1,500 per identified region), online recruitment using Dynata (an online survey service), and in-person events where surveys were distributed (limited to regions with poor broadband access). Paper survey respondents were selected using publicly accessible databases for each community, parish, or urban region. In the end, there were more than 4,000 usable responses received using these varying methods (Rossi & Woods, 2021).

There are three important aspects to the Local Food System Vitality Survey: evaluating vitality, performance, and awareness. The first and perhaps most important aspect is vitality. In this survey, a system is assumed to possess vitality if it is strong, variable, and active. Thus, systems with high vitality will possess robust food resources, market channels, support programs, and community engagement. This can include items

like farmers markets, grocery stores, restaurants, breweries, as well as many others. Systems with high vitality will have robust market channels and opportunities for access that extend beyond specific demographic groups and reach as much of the community population as possible (Rossi & Woods, 2021).

Performance, in this case, measures how well different aspects of the food system meet the needs and expectations of community residents. This is an extremely variable measure because it is directly impacted by the experiences of residents both within and outside the food system. Thus, in order to be considered a well-performing system, the LFS will need to meet or exceed the composite needs of the community (Rossi & Woods, 2021).

The final aspect of the survey is awareness. If residents are consistently unaware of the food activity that occurs in their community, it is difficult to argue there is vitality in the local food system. For example, a community may have a number of excellent farmers markets that offer a wide variety of fresh produce, but if those markets are only known of and attended by a small sector of the community with specific demographic characteristics, it would be difficult to assume vitality. In this survey, a system is assumed to possess vitality if community residents can and do participate in a wide and diverse set of activities centered around local food (Rossi & Woods, 2021).

There appears to be a clear gap in evaluating food systems from diverse perspectives. Some indices assess marketing and production indicators alone (Ricketts et al., 2006). Others focus on indicators drawn from secondary data like the number of CSAs, number of farmers markets, number of certification schemes, and number of

producer entries in local food directories (Benedek & Balázs, 2014; Strolling of the Heifers, 2019). Still others center themselves around stakeholder relationships and system stability (Worstell & Green, 2017). While useful, these indices tend to use secondary data which might not capture the true nuances of the ever-complicated web of relationships that are the foundation of local food systems. Thus, there is room for the important work done in the Local Food System Vitality Survey, which collects data directly from residents (Rossi et al., 2018).

## **Methods**

### *Ordered Logistic Regression*

The method of analysis in this project was ordered logit using STATA software. Williams argues that when an outcome is ordinal (meaning that “the relative ordering of response values is known but the exact distance between them is not”) methods other than Ordinary Least Squares are required (Williams, 2016). In this case, the Local Food System Vitality Survey asked participants to rate the performance of various local food system elements on a scale of “don’t know” to “excellent.” The specific variable of interest and our primary focus in this case, the perception of craft breweries, was ranked from “don’t know” to “extremely poor” to “poor” to “average” to “good” and, finally, to “excellent.” The survey also assessed important demographic characteristics of respondents.

For the sake of this analysis, all responses labeled “don’t know” by respondents were removed. It was assumed that those respondents that did not have enough information to make an informed judgment on the performance of the necessary food

system elements were not useful in this analysis of consumer perception. The variables used in the ordered logistic regression included perceptions of other local food system elements apart from craft breweries (e.g. farmers markets, community supported agriculture, food trucks, local restaurants, and food festivals) interests in diverse and quality food products, interest in local food systems, demographic characteristics, and, finally, the size of the respondent's community. These variables were chosen because of their perceived relationship to perception of craft breweries, in that, someone that enjoyed craft breweries might also have a positive perception of other food system elements like farmers markets, restaurants, and food trucks. Variables that considered quality and diversity were included because it could be that consumers that desire local, quality, and diverse products might seek out and better enjoy a craft brewery. The assumption being that there might be a correlation between the kinds of people who enjoy craft breweries and those that seek out and engage with other parts of the local food system.

Ordered logistic regression analysis was utilized in this case to offer information on the relationships between consumer perception of craft breweries and other consumer characteristics and interests. In this case, a significant variable illustrates either a positive or negative effect on consumer perception of craft breweries. A positive effect would show that a person with certain characteristics (like age, sex, or income) or interests (like an interest in farmers markets or consumer supported agriculture) is more likely to rate craft breweries as performing better. The marginal effects are also calculated in this analysis, further demonstrating the strength and degree of the relationship between consumer perception and other consumer characteristics and interests.



The variables included in the analysis of consumer perceptions of craft breweries are: consumer perceptions of local farmers markets, restaurants, community supported agriculture, food trucks, food diversity, food festivals, food quality, buying campaigns (campaigns encouraging the purchase of local food), and retail all measured on a Likert scale from 1 to 5 (i.e. “extremely poor” to “poor” to “average” to “good” to “excellent.”). Other variables assessed demographic details like sex (either male or female), age, income, the number of years the person had been a resident of their community, and the general size of the respondent’s community (either rural, urban with less than 500,000 residents, or urban with more than 500,000 residents). The final variable included in the analysis assessed respondent interest in the local food system (where 0 = not interested, 1 = somewhat interested, and 2 = very interested). These variable definitions are included in table 2.2.

**Table 2.2** Variable Definitions

<b>Variable</b>	<b>Abbreviation</b>	<b>Description</b>
Consumer perception of craft breweries	Brew	Consumer perception of local craft breweries: Likert scale from 1 to 5.
Consumer perception of farmers markets	Fmkt	Consumer perception of local farmers markets: Likert scale from 1 to 5.
Consumer perception of restaurants	Rest	Consumer perception of local restaurants: Likert scale from 1 to 5.
Consumer perception of community	CSA	Consumer perception of community supported agriculture: Likert scale from 1 to 5.

supported agriculture		
Consumer perception of food trucks	Truck	Consumer perception of local food trucks: Likert scale from 1 to 5.
Consumer perception of the importance of availability of diverse food products	Diverse	Consumer perception of the importance of availability of diverse food products: Likert scale from 1 to 5.
Consumer perception of local food festivals	Fest	Consumer perception of local food festivals: Likert scale from 1 to 5.
Consumer perception of the importance of availability of quality food products	Quality	Consumer perception of the importance of availability of quality food products: Likert scale from 1 to 5.
Consumer perception of local buying campaigns	Campaign	Consumer perception of local buying campaigns: Likert scale from 1 to 5.
Consumer perception of local grocery stores	Retail	Consumer perception of local grocery stores: Likert scale from 1 to 5.
Years as a resident	Yrs_resident	Number of years respondent has been a resident of their community.
Sex	Sex	Dummy variable, 0 = female, 1 = male

Age	Age	Age of consumer.
Income	Income	Consumer income level. 12.5 = \$0-\$24,999 37.5 = \$25,000-\$49,999 62.5 = \$50,000-\$74,999 87.5 = \$75,000-\$99,999 112.5 = \$100,000-\$124,999 137.5 = \$125,000-\$149,999 162.5 = \$150,000-\$174,999 187.5 = \$175,000-\$199,999 250 = \$200,000 and up
Interest in local food system	Lfs_interest	Interest in local food system. 0 = Not interested 1 = Somewhat interested 2 = Very interested
Size	Size	Size of community. 0 = Urban, less than 500,000 residents 1 = Rural, non-urban 2 = Urban, more than 500,000 residents

After the removal of all responses that included “don’t know,” there were 1,288 usable observations. The minimum and maximum for each variable measured on the Likert scale was 1 and 5, respectively. The average standard deviation among these variables was close to 1. The average mean was close to 3.5. For the variable measuring each respondents’ number of years as a resident in their community, the responses ranged from .5 to 25 with a mean of approximately 17. Further explanation of the summary statistics of the variables included in this analysis are available in table 2.3.

**Table 2.3** Summary Statistics

Variable	Observations	Mean	Standard Deviation	Min	Max
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Brew	1,288	3.548137	1.105547	1	5
Fmkt	1,288	3.738354	1.050706	1	5
Rest	1,288	3.877329	0.9561554	1	5
CSA	1,288	3.265528	1.08145	1	5
Truck	1,288	3.339286	1.109657	1	5
Diverse	1,288	3.467391	0.9818202	1	5
Fest	1,288	3.458075	1.120459	1	5
Quality	1,288	3.802019	0.940546	1	5
Campaign	1,288	3.046584	1.094311	1	5
Retail	1,288	3.906832	0.9130071	1	5
Yrs_resident	1,288	16.80163	9.493549	0.5	25
Sex	1,288	0.351708	0.4776889	0	1
Age	1,288	43.62034	16.41004	19	85
Income	1,288	80.03688	57.65282	12.5	250
Lfs_interest	1,288	1.341615	0.5600598	0	2
Size	1,288	0.717391	0.8695534	0	2

The ordered logistic regression equation is described below:

$$Pr(outcome_j = i) = Pr(\kappa_{i-1} < \beta_1 x_{1j} + \beta_2 x_{2j} + \dots + \beta_k x_{kj} + u_j \leq \infty) \quad (1)$$

Where  $u_j$  is assumed to be logistically distributed in ordered logit. Using this methodology, it is possible to estimate the coefficients  $\beta_1, \beta_2, \dots, \beta_k$  together with the

cutpoints  $\kappa_1, \kappa_2, \dots, \kappa_{k-1}$ , where  $k$  is the number of possible outcomes.  $\kappa_0$  is taken as  $-\infty$ , and  $\kappa_k$  is taken as  $+\infty$  (2021).

The marginal effects for each variable were calculated in order to better understand the effect of a one unit change in the independent variables on the dependent variable, perception of craft breweries. Like the ordered logistic regression, this analysis took place in STATA.

The marginal effects equation is described below:

$$E[y|x] = B_0 + B_1x$$

$$\delta E[y|x] \delta x = B_1 \quad (2)$$

## Results

The results of the ordered logistic regression are included in table 2.4. The marginal effects are included in table 2.5.

**Table 2.4** Ordered Logistic Estimation

Brew	Coefficient	Std. error	p>z	
Fmkt	0.2367643	0.0703832	0.001	*
Rest	0.3632403	0.0762559	0	*
CSA	0.1545342	0.0687976	0.025	*
Truck	0.6178205	0.0664496	0	*
Diverse	0.113506	0.0815357	0.164	
Fest	0.2002153	0.0668215	0.003	*

Yrs_resident	0.0018172	0.0058107	0.754	
Quality	0.2135738	0.0820035	0.009	*
Campaign	0.1062123	0.0689443	0.123	
Retail	-0.0311168	0.0760895	0.683	
Sex	-0.0055431	0.1141006	0.961	
Age	0.005417	0.0034819	0.12	
Income	0.0011904	0.0009579	0.214	
Size				
1	-0.5070564	0.1546969	0.001	*
2	-0.0392039	0.1257184	0.755	
Lfs__interest				
1	0.2771441	0.262317	0.291	
2	0.4861969	0.2741879	0.076	

\*= significant at the 95% level.

**Table 2.5** Marginal Effects for Significant Variables

<b>Variable</b>	<b>dy/dx</b>	<b>Std. error</b>	<b>p&gt;z</b>
Fmkt			
1	-.0106677	.0032622	0.001
2	-.0122697	.0037179	0.001
3	-.0163139	.0048595	0.001
4	.0098255	.0029413	0.001
5	.0294259	.0087892	0.001
Rest			
1	-.0163663	.0036493	0
2	-.018824	.0041376	0
3	-.0250285	.0052232	0
4	.0150741	.0033104	0
5	.0451448	.0094667	0
CSA			
1	-.0069628	.0031338	0.026
2	-.0080084	.0036118	0.027

3	-.0106479	.0047706	0.026
4	.006413	.0029416	0.029
5	.0192061	.0085255	0.024
Truck			
1	-.0278368	.0036463	0
2	-.0320171	.0039514	0
3	-.0425699	.0047271	0
4	.0256389	.0034658	0
5	.0767849	.0080779	0
Fest			
1	-.009021	.0030796	0.003
2	-.0103757	.0034936	0.003
3	-.0137955	.0046722	0.003
4	.0083087	.0028556	0.004
5	.0248835	.0083066	0.003
Quality			
1	-.0096229	.0037517	0.01



2	-.0110679	.0042807	0.01
3	-.014716	.0057131	0.01
4	.0088631	.0034828	0.011
5	.0265437	.0101853	0.009
1. Size			
1	.0246688	.0082041	0.003
2	.0283664	.009333	0.002
3	.033065	.0097138	0.001
4	-.0270612	.0098599	0.006
5	-.059039	.0170557	0.001

These results offer an interesting perspective on the relationship between consumer perception of craft breweries and consumer perception of other food system elements. None of the demographic variables included (age, sex, or income) were significant at the 95% level. Many of the non-demographic variables were significant at the 95% level. Perception of farmers markets, restaurants, community supported agriculture, food trucks, and festivals were all significant. These results suggest that people who rated farmers markets, CSA, food trucks, and festivals as “good” or “excellent” were more likely to rate craft breweries as also being “good” or “excellent.” Additionally, these results demonstrate that those consumers who rated their local

product quality as “good” or “excellent” were more likely to rate their perception of local craft breweries similarly. The marginal effects further illustrate where the relationship between these variables start to change. For example, we see that the variable for “farmers markets” is negative up to “3,” which is equivalent to “average” on the Likert scale. This means that there is a positive relationship between those that rate farmers markets as “average,” “good,” and “excellent” and those that rate craft breweries similarly. The marginal effects offer a deeper look at the relationship between each variable and consumer perception of craft breweries.

One final interesting aspect of these results were that rural communities were more likely to rate their perception of their local craft breweries as “extremely poor,” “poor,” or “average” as compared to their counterparts in smaller urban areas (with less than 500,000 residents). This is notable because the other variable for size, which included urban areas with more than 500,000 residents, was not significant at the 95% level, meaning that they did not have answers that were significantly different from people in smaller urban areas.

## **Conclusions**

This chapter utilizes an ordered logistic regression to evaluate the overall consumer perception of the growing craft brewing industry in specific regions within the states of Kentucky, South Carolina, North Carolina, Tennessee, Alabama and Louisiana and what factors, both demographic and other, affect this perception. It uses data from the Local Food System Vitality Survey distributed by the University of Kentucky with help from Clemson University, North Carolina State University, and the University of

Arkansas to evaluate and draw important conclusions on perception. The idea of consumer perception forms the foundation of this chapter, which describes the way that consumers think about and contextualize their interaction with a product or products. In this case, the perception is of local craft breweries. This analysis is ultimately useful because it allows for a deeper and greater understanding of the ways in which local residents perceive craft breweries in their communities. With these perspectives, local leaders and craft brewery owners alike have the opportunity to understand their strengths, their weaknesses, and the areas in which they still need to improve.

The results of this analysis indicate that there is a relationship between consumer perception of other food system elements and perceptions of craft breweries within communities across the American South. It appears that people who already have positive perceptions of other local food system elements carry over this goodwill to their local craft breweries. According to this analysis, demographic elements like age, sex, and income were not significant. What is more important, apparently, is the relationship that a consumer already has with their local food system. These results seem obvious on the surface, of course those that already enjoy fresh and local food would enjoy local craft breweries, but also demonstrate that those who engage with their local food systems, broadly, tend to have a better perception of them as a whole.

For example, it appears that people with an interest in local food trucks also appear to have a better opinion of craft breweries. This might indicate that these sorts of institutions draw in similar types of people, specifically, people that are interested in good food and, perhaps, unique experiences. Similarly, it appears that people with

interests in community supported agriculture and farmers markets have better opinions of craft breweries. This might illustrate that people who enjoy fresh, organic, or unique products find themselves also interested in the offerings at a local craft brewery. In addition, it appears that those who prefer quality goods are finding them at their local craft brewery, which demonstrates that these local establishments are attracting those quality-concerned customers.

Also interesting to note are the variables that were not seen to be statistically significant in this analysis. Demographics were not generally significant and neither were items like local buying campaigns or the number of years as a resident. These offer a useful look at what factors truly impact a consumer's perception of their local craft brewery. It does not seem to matter whether or not the person is a long-time resident of a community or not. Meaning, perhaps, that craft breweries are doing a good job of marketing themselves to new residents and old residents alike. Additionally, it does not appear that local buying campaigns affect consumer perceptions of craft breweries. This might indicate room for improvement for these campaigns, or might indicate that breweries draw a crowd less interested in "buying local" and more interested in good products and a good experience.

These results also illustrate that more rural communities view their local craft breweries as performing poorer than their counterparts in more urban communities. This is an interesting result because it indicates room for growth for these rural craft breweries. These rural communities clearly have people that know about craft breweries, but they view them as being subpar in some way. This is an area that might warrant

further study, as it would be interesting to understand why people in more rural areas perceive their local craft breweries as not providing what they want. A useful area of future study might be to evaluate what rural consumers see as lacking in their local breweries and perhaps offer this information to these institutions so that they can better please their clientele.

Additionally, it might be interesting to note if tourists have different perceptions of craft breweries than do local residents. Potentially, a survey distributed to tourists or visitors might offer an interesting perspective on the differences in perception between those who live in a place and those who are simply there to visit. It would be interesting to note if tourists have a higher or lower perception of craft breweries and, perhaps, what specific aspects of craft breweries they like over others. The best outcome would, of course, be that both tourists and locals appreciate the local craft breweries similarly, but, it would be interesting to note if their opinions differed and how this might figure into intentional community and economic development efforts to optimize local quality of life.

One other potentially interesting area of study would be to evaluate consumer perceptions of these local food system elements in a post-Covid world. Because this survey was completed before the onset of widespread Covid-19 restrictions in 2020, it would be interesting to survey or interview these same consumers to see if their perceptions were changed by their experience during the pandemic. These results might indicate how local food systems responded to the pandemic and how their consumers

responded to these changes. For instance, did the local brewery become more/less important during pandemic?

This study was likely limited by geography. Because these surveys were only distributed in targeted regions in the American South, it is likely that results would differ if distributed in other parts of the United States, as the culture and attitudes toward alcohol might be different. Additionally, this study would likely benefit from moving beyond the United States to the international community, where the history of brewing and general cultural norms around alcohol are different. The Local Food System Vitality Survey shows great promise in evaluating consumer perception and would be useful in evaluating interest and perception of communities beyond US borders.

There is also a potential within this analysis for a sort of response bias. The analysis found that there was a relationship between people who viewed other food system elements positively and those that viewed local craft breweries positively. It is possible that this relationship exists because those that were most likely to respond to the survey were those that had strong feelings about local food systems in general; thus, making it more likely that they would respond positively to questions about food system elements. Fortunately, some of this bias is likely offset by the inclusion of the variable “local food interest” in the regression analysis, but there remains some potential for it to exist.

Overall, this study offers an important look at the ways in which people in the American South perceive their local craft breweries. These results indicate that there are people that are engaged with the local food system and thus, perceive many of its

individual elements positively. This analysis suggests a relationship between local food systems and craft brewing. Knowing this creates a host of opportunities for further linking the two groups. One policy suggestion that comes out of this work is that these different elements of the food system might benefit from further cooperation with one another. If consumers enjoy both craft breweries and farmers markets, why not create a space where both can benefit? This could be at a location like a festival supporting local food-centered businesses or through a collaboration with local farmers to contribute locally produced, unique ingredients. With this new information, there is hope that local political leaders, entrepreneurs, and business owners can move forward with the knowledge that there is still much to be done in the world of local craft brewing.

## CHAPTER THREE

### THE EFFECTS OF DIRECT TOURISM EXPENDITURES AND TAX RECEIPTS ON MEASURES OF ECONOMIC HEALTH IN WESTERN NORTH CAROLINA

#### Introduction

Western North Carolina is, and has been, growing in both population<sup>4</sup> and popularity.<sup>5</sup> This fact is seemingly undisputed by everything from Census data to local testimonials. For much of its history, Western North Carolina has been defined by its rural status and natural beauty, but recent years have illustrated just how important this region is to North Carolina's overall economy. North Carolina's westernmost region is made up of twenty-three counties, with most being classified as being "rural" by the U.S. Census Bureau's definition (meaning that there is a population density of 250 people per square mile or fewer). This region is known as the "mountain" region of the state, as

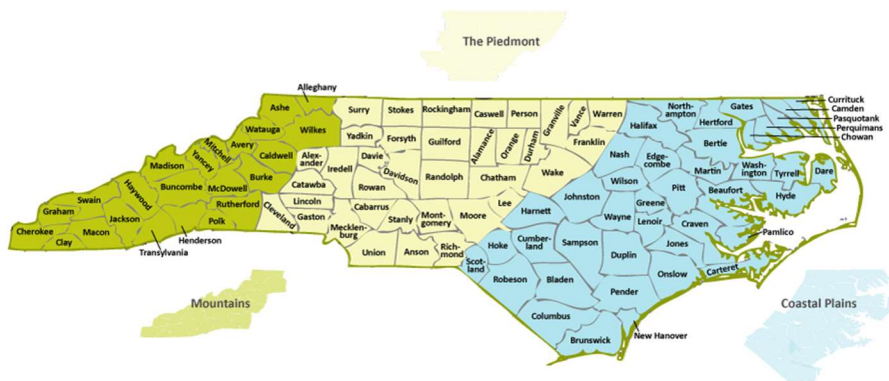


Figure 3.1. North Carolina Regions (Source: NCPedia)

<sup>4</sup> Between the years of 1999 to 2019, the western counties grew, on average, 15% according to US Census data.

<sup>5</sup> For example, see articles like "Newcomers drive Asheville population growth" from the Asheville Citizen Times (Cronin, 2015).



opposed to the central piedmont region and the coastal plains that border the Atlantic Ocean (Figure 3.1).

Almost every county in this twenty-three-county region has seen population growth from the turn of the millennium to the present, due primarily to in migration from other parts of the United States (Figure 3.2). Along with population growth, there has been a significant increase in almost every county in the region in the amount of direct

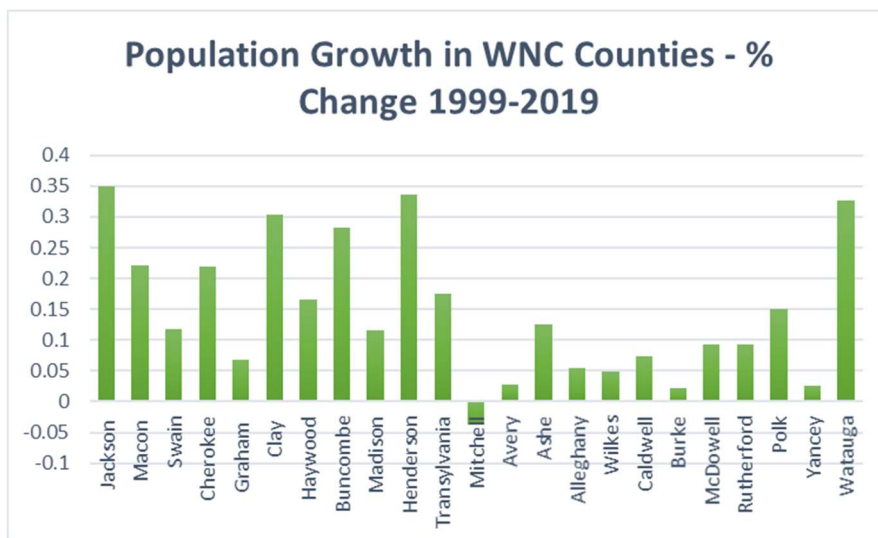


Figure 3.2. Population Growth in WNC Counties - % Change 1999-2019 (Source: Author’s calculations)

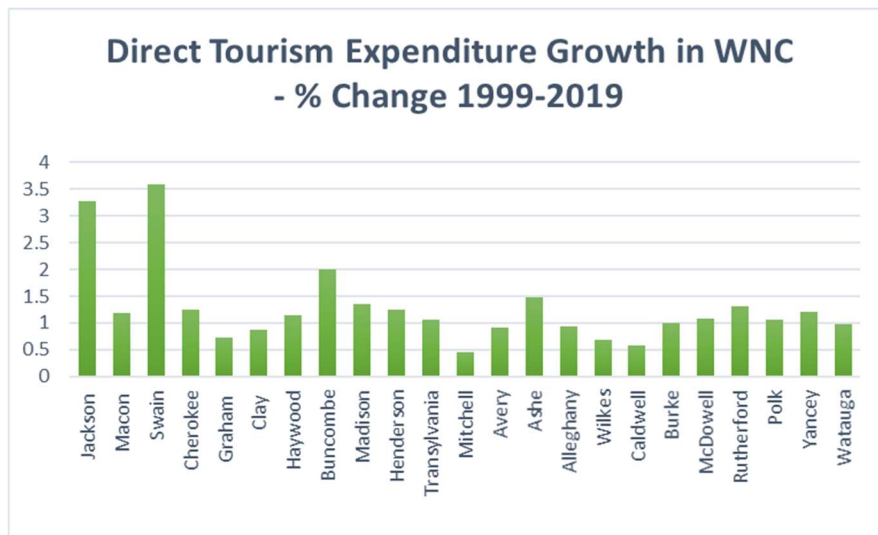


Figure 3.3. Direct Tourism Expenditure Growth in WNC - % Change 1999-2019 (Source: Author’s calculations)

visitor spending, meaning that these mostly rural areas are seeing a large increase in tourism-related expenditures (Figure 3.3).

It is important to understand the definition of the term “tourism.” In this paper, the definition comes from the United Nations World Tourism Organization in 2008 which states that: “tourism is a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes (Westcott and Anderson, 2020 ).” Thus, in this paper, tourism is simply defined as a temporary movement of people not from the Western North Carolina region into the Western North Carolina for the purpose of enjoyment or business.

As an example of the extraordinary growth of tourism in the WNC region, take the westernmost Cherokee County, a county whose 2019 population was only 28,708. From 1999 to 2019, direct tourism spending in this county increased by over 120%, meaning that tourism in Cherokee County not only increased, but did so substantially. Additionally, in the year 2018, tourism generated approximately 390 jobs in Cherokee County and generated \$5.43 million in combined state and local taxes. Impressive numbers like these are not uncommon across the WNC region. For example, in the same time period, nearby Jackson County saw 1,890 jobs and \$20.84 million in combined state and local taxes generated by tourism (*2018 Yearly Tourist Activity by County*, 2018). Moreover, in the western counties the tourism industry ranks, consistently, as one of the top three employment categories for residents in the region (*Tourism Economic Fast Facts*, 2020).

Despite this, Western North Carolina still maintains, to some degree, a reputation for poverty. Western North Carolina falls squarely into the swath of land that stretches from Northern Mississippi all the way to New York called “Appalachia.” Most people when hearing the term associate Appalachia with images of coal-smudged faces or bearded men with banjos living in barely-habitable hovels. While this image is patently untrue in many cases, there is a lingering legacy of poverty in the Appalachian region. This legacy is shaped and formed by the experience of the Appalachian people who were exploited by large timber and coal companies throughout the 1900s, leading, in many cases, to debt and disadvantage. According to the Appalachian Regional Commission, Appalachian poverty rates range from 6.5% to 41.0%, with the average being 16.3%. The U.S. average is 14.6%. When averaged, poverty rates in Western North Carolina are close to 15.7% (*Poverty Rates in Appalachia*, 2020).

How then is it simultaneously true that these western counties are growing, are experiencing increases in direct tourism spending, and are still seeing poverty rates above the national average? Common logic would imply that greater spending in a region would imply better economic situations for everyone. In fact, some local leaders and local residents alike have recently stated that increasing tourism to their part of the western region is an economic development goal for the future (*Opt-In: The Regional Vision*, 2014). Interestingly, the data shows that, on average, the percentage of people below the federal poverty line in Western North Carolina increased by twelve percent over the twenty-one year period from 1999 to 2019, increasing alongside tourism expenditures in

the region. The question is then; how do increasing tourism expenditures affect the residents of Western North Carolina?

This paper answers an important part of this very broad question. It uses a multiple regression approach to evaluate the effects of direct tourism spending and direct tourism tax receipts on important measures of resident well-being in the twenty-three county Western North Carolina region from 1999 to 2019. In this case, the measures of well-being are the number of SNAP (Supplemental Nutrition Assistance Program) benefit recipients, the estimated number of people in poverty (i.e. below the federal poverty line), and the number of employed persons (i.e. receiving taxable income from employment). This is vital for understanding the relationship between increasing amounts of tourism spending and overall economic health in the ever-growing Western North Carolina region.

## **Literature Review**

### *Economic Development Strategies and Their Relationship to Tourism*

The field of economic development offers an important look at the way that local governments and communities react to and incentivize tourism in their regions. Glen Pulver (2005) identified five important economic development strategies that, if followed, he believed would lead to greater development within an area. These five general strategies are:

1. Attracting new basic or export employers.
2. Capturing existing markets.
3. Encouraging the start-up of new firms.

4. Helping existing firms become more efficient.
5. Using aids and programs from broader levels of government.

According to Hustedde, Shaffer, & Pulver (2005), many local leaders and governments focus their attention on attracting export employers. In the case of economies depending on tourism, the export is the experience. This means that the export employers in these communities are businesses like hotels, restaurants, attractions, and retail shopping centers. Hustedde, Shaffer, & Pulver (2005) add an important layer to the conversation surrounding export employers by arguing that these employers only make up one part of the possible story of economic growth in a region. This perspective offers an excellent introduction into the way that local leaders think about the effect of tourism on their economies but complicates the narrative by demonstrating that tourism exports do not, on their own, create a necessarily healthy or well-balanced economy (Hustedde, Shaffer, & Pulver, 2005).

Other economic frameworks similarly center themselves around broad ideas of development via relationship and balance. For example, the SET Methodology from USDA Rural Development emphasizes the participation of local residents and leaders in economic development planning, with the ultimate goal being to create a balanced, cooperative economy based on regional cooperation and comparative advantage (*SET Overview*, 2022). Also, similarly to Pulver, the Community Capitals Framework by Flora and Flora (2008) states that resilient and healthy communities are those that emphasize balance, not overdevelopment of one sector or another. The Asset Based Community Development methodology continues this trend by emphasizing the importance of

building relationships and connections between community members, agencies, and businesses of all sorts (Kretzmann & McKnight, 1993).

These strategies form the foundation upon which modern economic development thought is built, and these strategies encapsulate the ethos that drives leaders within tourism economies; thus, it is important to evaluate and understand them as a part of the overall literature surrounding tourism development and growth. Specifically, it is important to note how these methodologies shape the ways that local leaders frame their conversations around tourism development. These methodologies also offer a useful look at how tourism alone only plays one part in a larger story surrounding development and how using it, by itself, as a driving economic force might lead to an unbalanced economy.

#### *Tourism as an Indicator of Economic Growth*

The primary question presented in the literature surrounding tourism and its relationship to economic growth is: do increased tourism numbers and higher levels of tourism spending truly indicate economic growth in an area or region? Certainly, it seems beneficial to have more people spending more money, but are there truly economic advantages to a tourism economy? Additionally, if there are advantages, what are they and how would they be quantified? And, to whom do the benefits accrue and who pays any associated costs? Overall, the questions surrounding the relationship between tourism and economic growth center around whether or not tourism expenditures create opportunities for growth and whether or not these opportunities are sustained over time, which is important when considering the question of how tourism expenditures affect communities and their residents in Western North Carolina.

Some country-level studies support the idea that the number of tourists visiting a region correlates directly with growth in GDP (Sequeira & Nunes, 2005; Easterly & Kraay, 2000; Pigliaru & Lanza, 2003). These studies find that countries with greater numbers of tourists have higher growth and employment rates than similar countries around them. These results seemingly contradict the traditional theories surrounding the idea of economic growth, in that it would generally be expected that tourism-based communities would be less innovative and thus, display lower growth than their neighbors who possess economies of scale and/or possess a well-developed advanced technology sector (Parrilla et al., 2007; Aghion & Howitt, 1992; Grossman & Helpman, 1991). Additionally, it is often assumed that because tourism economies tend to be smaller, there is an upper limit to their growth potential (Parilla et al., 2007; Liu & Jenkins, 1996). Despite this, Easterly and Kraay (2000) show convincingly that there is some relationship between tourism growth and increases in GDP.

The next question in the literature seems to be; if tourism leads to economic growth will this growth persist? Some authors favor the export-led growth hypothesis which states that tourism growth leads to long-term growth because the increased income from the tourism sector allows a region or area to import more capital goods or basic inputs which, in turn, over time leads to a greater production of local goods and services. This leads to impressive capital accumulation which then leads to long-term economic growth (McKinnon, 1964; Poirier, 1995; Nowak, 2007; Chew, 2012). An additional part of the export-led hypothesis is that tourism creates additional income through efficiency

increased by competition between differing locations offering similar experiences (Bhagwati & Srinivasan, 1978).

Despite this evidence, there are authors that argue that tourism does not lead to long-term economic growth. They assert that there are diminishing returns to wealth increases and there are important drawbacks to specialization. Specifically, that specialization leads to reduced efficiency in the production of goods and services (Parrilla et al., 2007). For example, Jung and Marshall (1985) illustrate that export-led tourism economies do not experience long-term growth in all cases. In their study of tourism economies in 37 countries, they found that only four countries saw any kind of long-term growth.

Baumol (1967) argues that specializing in tourism restricts long-term growth by limiting productivity. Baumol groups economies into two specific categories; technologically progressive, where innovation, capital accumulation, and scale economies lead to a cumulative rise in output per unit of labor, and just simple “activity economies” which can only experience sporadic increases in productivity (Baumol, 1967). The only real difference between the two groups is labor. In a technologically progressive economy, labor is a part of the creation process. In an “activity” economy, labor can be a final product. To Baumol, tourism economies are “activity economies” and will not increase in productivity, meaning, of course, that any growth in the economy is not sustainable in the long-term.

Overall, the literature surrounding the relationship between tourism and economic development illustrates that there is evidence that tourism economies experience



economic growth, but perhaps not in the way that some economic developers would expect. Evidence shows that tourism economies often see some GDP growth and experience the advantages of specialization. While there is no consensus on whether or not tourism creates long-term economic growth, there does seem to be an important relationship between tourism growth and economic growth in communities across the globe. Thus, it is important to understand the ways in which tourism growth affects even small tourism-centered regions like Western North Carolina.

#### *Job Development and Distribution*

The question of employment is an important one when considering the impacts of tourism on an economy. It seems plausible that more tourists would mean more jobs for local residents, but the reality is slightly more complicated. For example, Wagner (1997) found that despite high tourism expenditures in the Guaraqueçaba region of Brazil, a significant portion of the funds went directly to absentee business owners and only generated one new job for every 233 days spent by tourists in the region. Similarly, Romão et al. (2016) found that even after tourism recovery from the 2008 financial crisis, the Algarve region in Portugal continued to experience rising unemployment, despite the fact that tourism numbers were as high as they were before the crisis.

Dwyer and Forsyth (1998) determined that the effects of tourism expenditures on employment depend on certain underlying factors. These underlying factors include the existing causes of unemployment, the efficiency of the labor market, the labor intensiveness of the market, and government fiscal policy. They state that increases in tourism expenditures and numbers will not alter unemployment if the existing

unemployment is structural or regional in nature because exchange rate changes will offset any gains to the tourism industry (Dwyer & Forsyth, 1998). In simple terms, this means that the net employment impacts of tourism will depend on factors outside of the tourism industry itself. These cases seem to indicate that tourism and employment have a complicated and nuanced relationship.

Despite the nuanced relationship between job creation and tourism illustrated in the literature, the idea of “tourism boosting” for the sake of new and better jobs lingers in economic development strategies. Marcouiller (2007) argues that even if jobs are created by the tourism sector, they are often low-wage, limited opportunity jobs that only sustain living standards for those in the lower income classes. He compares these low-income jobs to the previous primary industries in rural America like agriculture, forestry, and mining and finds the newly-created tourism jobs to be lacking in terms of both income and opportunity for advancement. Similarly, Goodall (1987) notes that the developing tourism industry in the United Kingdom centers around low-paying, highly-seasonal jobs which offer little opportunity for advancement. Thus, the literature seems to suggest that even if tourism expenditures create jobs, they might not be the kind of jobs that truly benefit local residents in the long-run.

### *Regional Tourism Studies*

While there are no known detailed studies of the impacts of tourism on the Western North Carolina region over time, there was a study conducted in the late 1990s that attempted to quantify the effects of tourism on labor and other economic growth indicators in the Smoky Mountain Gateway Communities, including Gatlinburg/Pigeon

Forge, Tennessee, and Cherokee, North Carolina. This study demonstrated results that are consistent with those found in other parts of the literature; that tourism has a complicated and varied relationship with job creation and economic development. Using census data and ordinary least squares regression techniques along with interviews with local residents, the author of this study determined that “tourism is unacceptable as a development strategy” in the mountain gateway region. His results showed that while total income levels increased in the region, other indicators of economic health including the number of people below the federal poverty line, the number of high school dropouts, and the number of people enrolled in food stamps also increased. (Tooman, 1997).

The author found that both unemployment and enrollment in social welfare programs increased in counties that turned their primary development strategy to tourism in this region. The author also saw an increase in the number of high school drop-outs in these communities in the time periods where tourism expenditures increased. The ultimate conclusion by the author was that the growing tourism economy increased property values, removed from circulation useful farmland (reducing economic diversity), and only created low-wage, seasonal jobs that did not offer long-term economic security (Tooman, 1997). All of these factors, he believed, led to the increases in unemployment, enrollment in social welfare programs, and dropout rates. Even so, since there is no clearly-defined “control group” where either no efforts were made at tourism development or other economic development strategies were deployed, it is not likely fair to say that focusing on tourism was ultimately a poor strategy. In fact, it may

have been the strategy resulting in the best amongst a set of possible alternative strategies.

Tooman's work offers an important look at why it is important and useful to evaluate the effects of tourism expenditures on vulnerable populations. Tooman argues that while it is useful to look at the effects of tourism on macroeconomic indicators like income and general employment growth, it is equally important to evaluate the distributional effects of tourism expenditures on social-welfare indicators. Doing this offers a vital perspective on the indirect consequences of increased expenditures. This methodology is endorsed by economists like Kaldor, Hicks and Scitovsky (2021) who argue with the creation of their "compensation principle" that it is important to evaluate any changes in social welfare which benefit some but might unintentionally harm others. This principle also states that if overall welfare increases do harm to any party, if they, the harmed party, are "compensated" in some way for their loss, then a policy can be considered "good." Thus, a focus on vulnerable populations within evaluations of tourism effects is important in order to determine the distributional and, possibly, indirect effects of increased tourism expenditures.

A study conducted in North Carolina's Eastern region evaluated resident perceptions of tourism development (Byrd et al., 2009). While not an analysis of the direct impact of increasing tourism expenditures on local residents, it does offer a look at the ways in which changes in the tourism industry affect residents in their own words. This study showed that residents had a more negative perception of tourism development than local government officials. In their study, the authors found that these residents rated

tourism as a net negative to their communities at a much higher rate than did government officials . This study indicates that local residents in North Carolina communities do have an understanding that increasing tourism impacts their lives, and that, at least some of them, see this impact as being negative rather than positive.

While other studies on the impacts of tourism on the North Carolina state level are limited, there is evidence that the North Carolina state government views tourism as an important part of their strategic plan for the future. In fact, the North Carolina Department of Commerce’s 2021-2023 Strategic Plan includes an entire section devoted to growing tourism and awareness of the state of North Carolina. This objective, titled Objective 1.6, has several milestones set as guidelines for future development. These include milestones concerning increasing the number of visitors, increasing visitor expenditures, increasing North Carolina-centered marketing, and increasing the number of jobs in the tourism and entertainment sectors (*NC Department of Commerce Strategic Plan 2021-2023*, 2021). Importantly, these objectives illustrate a growing commitment to increasing tourism and tourism expenditures in North Carolina and exemplify the need for studies like Tooman’s and Byrd’s which evaluate how these changes impact local residents’ perceptions and experiences. In all, the economic objectives of the North Carolina state government are important in understanding why the kind of analysis used in this thesis is necessary. The following section outlines, in detail, where the data from this project was found and how it was used to evaluate the effects of increasing tourism expenditures on vulnerable members of the Western North Carolina population.

## **Data**

### *Tourism Expenditures Data*

Direct tourism expenditure and direct tax receipt data were obtained from Visit NC, which is a unit of the Economic Development Partnership of North Carolina, for all twenty-three Western North Carolina counties from the years 1999 to 2019. These data were generated by Tourism Economics and the U.S. Travel Association on behalf of Visit NC. The data were generated using a myriad of sources from Tourism Economics historical data which included employment data, wages by county, hotel occupancy taxes, lodging performance data, sales tax data (from the NC Department of Revenue), business sales by industry, gasoline price data, international inbound traveler visits and expenditures (from Tourism Economics and National Travel & Tourism Organization), and Aviation-related spending for visitors based on airport and passenger data (individual airports) from the early 1990s to today (*Travel Economic Impact Methodology for North Carolina*, 2021).<sup>6</sup>

### *Economic Data*

The economic data used in this analysis was collected from the U.S. Census Bureau and the U.S. Bureau of Labor Statistics. To access this data, the author used the Federal Reserve Economic Data (FRED) system. The data were collected from the years 1999 to 2019, as the 2020 census data was not yet available for use at the time of

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<sup>6</sup> The county numbers used in this analysis were generated by Tourism Economics using the Input-Output (I-O) model from IMPLAN (*Travel Economic Impact Methodology for North Carolina*, 2021). For more information, see “Travel Economic Impact Methodology for North Carolina,” 2021.

analysis. Additionally, this excluded the outlier 2020 year which was impacted greatly by the Covid-19 pandemic.

## Methods

Following Tooman (1997), this chapter uses a modeling regression technique to estimate the effect of tourism-related expenditures on three specific measures of economic health in the Western North Carolina region. The indicators of interest are the number of SNAP (Supplemental Nutrition Assistance Program) benefit recipients, the estimated number of people in poverty (i.e. below the federal poverty line), and the number of employed persons (i.e. receiving taxable income from employment) in the twenty-three Western North Carolina counties from 1999 to 2019. Other variable indicators of economic health are included in the models in order to understand what other factors, beyond tourism expenditures, might impact these poverty measures. Variable definitions and source details are provided, where necessary, in Table 3.1. Summary statistics are included in Table 3.2.

**Table 3.1** Explanatory Variable Definitions and Source Details

<b>Variable</b>	<b>Abbreviation</b>	<b>Description</b>	<b>Data Source</b>
Employed Persons	Employed Persons	Persons who, during the reference week (the week including the 12th day of the month), did any work as paid employees.	U.S. Bureau of Labor Statistics
Population	Population	Population by county per year.	U.S. Census Bureau, Annual Estimates of the Population for Counties

Estimate of People of All Ages in Poverty	Estimate of People of All Ages in Poverty	Estimate of people of all ages living below the federal poverty line by county by year.	U.S. Census Bureau, Small Area Income and Poverty Estimates
Direct Visitor Spending Estimate	DVS	Money spent by non-residents in each county by year (in millions of dollars).	Visit North Carolina by Tourism Economics
Direct Visitor Local Tax Receipts Estimate	DVLocalTax	Taxes collected from non-residents in each county by year (in millions of dollars).	Visit North Carolina by Tourism Economics
Rural	Rural	Dummy variable, 0 = urban (population density of 250 people per square mile or greater), 1 = rural (population density of 250 people per square mile or fewer).	U.S. Census Bureau
Before 2008	Before2008	Dummy variable, 1 = before 2008, 0 = in or after 2008	
Number of SNAP Benefit Recipients	Number of SNAP Benefit Recipients	Number of people receiving benefits from the Supplemental Nutrition Assistance Program by county by year.	U.S. Census Bureau, Small Area Income and Poverty Estimates
Number of New Private Housing Structures Authorized	NewHousing	The total number of building permits for all structure types by county by year. Structure types include 1-unit, 2-unit, 3-unit, 4-unit, and 5-unit or more.	U.S. Census Bureau, Housing Units Authorized By Building Permits

In this analysis, there were 483 usable observations. The minimum and maximum values for each variable are included in table 3.2. These numbers vary greatly because of the difference between the extremely small rural counties and the more urban Buncombe



and Henderson counties. Further explanation of the summary statistics of the variables included in this analysis are available in table 3.2.

**Table 3.2** Summary Statistics

<b>Variable Name</b>	<b>Observations</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Min</b>	<b>Max</b>
Employed Persons	483	21089.12	23692.82	2804	137569
Population	483	45933.04	47847.25	7874	262049
Estimate of People of All Ages in Poverty	483	6789.7	6705.65	1079	42765
Direct Visitor Spending Estimate (millions of dollars)	483	109.5674	164.5434	7.88	1294.25
Direct Visitor Local Tax Receipts Estimate (millions of dollars)	483	15.20072	56.35452	0.72	404.56
Rural	483	0.9130435	0.282064	0	1
Before 2008	483	0.4285714	0.495385	0	1
Number of SNAP Benefit Recipients	483	5516.033	6174.116	414	41500
Number of New Private Housing Structures Authorized	483	267.0518	369.6109	0	2549

This analysis uses annual tourism numbers and poverty data from the years 1999 to 2019, twenty-one years for each of the twenty-three counties. The model for the relationship between tourism expenditures and SNAP benefit recipients is as follows:

$$Y_{lmnstj} = \mu + DVS_j + DVLocalTax_m + Population_n + Rural_s + Before2008_t + NewHousing_j + \varepsilon_{lmnstj} \quad (3)$$

Where  $Y_{lmnpst}$  is SNAP benefit recipients for all twenty-three Western North Carolina counties from 1999 to 2019 with direct visitor spending  $l$ , direct visitor tax receipts  $m$ , population  $n$ , rural status (defined using the Census Bureau's definition where urban counties have a population density of 250 people per square mile or greater and rural counties are the opposite)  $s$ , year before or after 2008  $t$ , and the total number of building permits for all structure types by county by year (structure types include 1-unit, 2-unit, 3-unit, 4-unit, and 5-unit or more)  $j$ ;  $\mu$  is the overall mean value of SNAP benefit recipients across all counties and years included in this study.  $DVS_l$  is the effect of direct visitor spending,  $DVLocalTax_m$  is the effect of taxes collected from non-residents in each county by year,  $Population_n$  is the effect of the population of each county,  $Rural_s$  is the effect of rural versus urban status,  $Before2008_t$  is the effect of the 2008 housing crisis,  $NewHousing_j$  is the effect of the total number of building permits for all structure types by county by year (structure types include 1-unit, 2-unit, 3-unit, 4-unit, and 5-unit or more), and  $\epsilon_{lmnstj}$  is the residual for SNAP benefit recipients.

The model, with estimates of people of all ages in poverty and number of employed persons as the outcomes of interest, was also completed for the same time periods and locations. These results were then used to draw deeper conclusions on the effects of tourism expenditures on varying poverty measures.

These particular variables of interest were selected because they represent important parts of the overall narrative of the effects of tourism expenditures on the three different poverty measures. Direct visitor spending and direct visitor tax receipts were both included in the analysis because they offered two different perspectives on the

effects of spending. Direct spending offers a look at the immediate effects of tourism spending. The direct visitor tax receipts offer a look at the more indirect effects of tourism spending, the funds received by the specific county that could then be redistributed into the community. The other variables included in the model offer other possible explanations for any changes in the poverty measures.

The inclusion of the variable “population” helped avert any changes due to simple population growth. The variable “rural” helped to avoid any changes that were due to differences between urban and rural areas. Similarly, the variable “before2008” helped to exclude changes only caused by the incredibly impactful 2008 market crash, which caused poverty measures to increase on a national scale. Finally, the variable “NewHousing” is included because of housing expenditures represent “too large” a percentage of vulnerable households’ limited budgets. In all, this model attempts to encapsulate the effect of tourism expenditures on vulnerable populations in the twenty-three-county region of Western North Carolina.

## Results

The results of the multiple multivariate analyses are reported in tables 3.3 through 3.5.

**Table 3.3** Multivariate Regression of SNAP Benefit Recipients

SNAP Benefit Recipients	Coefficient	Std. Error	P>z	
DVS	1.417418	2.955059	0.631	
DVLocalTax	23.59805	11.80109	0.046	*

Population	0.1517956	0.0127655	0	*
Rural	5063.759	1716.348	0.003	*
Before2008	-1688.318	225.6782	0	*
NewHousing	-6.497502	0.5965631	0	*

\*= Significant at the 95% level.

These results indicate a noteworthy and interesting relationship between tourism expenditures and measures of economic health and growth in the Western North Carolina region. Regression one investigates the relationship between the number of SNAP benefit recipients and direct visitor spending estimates and direct visitor tax receipt estimates. The results show that there is no significant relationship between direct visitor spending and the number of SNAP benefit recipients, but that there is a relationship at the 95% level between direct visitor tax receipts and SNAP benefit recipients. The relationship between these two variables is a positive one, meaning that it appears an increase in direct visitor local tax receipts causes the number of people enrolled in the SNAP program to also increase.

Additionally, we see a significant relationship between some of the other variables included in the model. Population is significant at the 95% level and seems to show that for every new person added to a county's population, the number of people enrolled in the SNAP program increases. The variable "rural" is also significant and demonstrates that urban populations tend to have more SNAP enrollees than rural populations. Another expected outcome from these results is that more people were

enrolled in the SNAP program after the 2008 market crash. Finally, this regression shows a negative relationship between the number of new, private housing units built and the number of SNAP benefit recipients. These results seem to indicate that for one new private housing unit built, the number of SNAP enrollees decreases.

**Table 3.4** Multivariate Regression of People of All Ages in Poverty

<b>Estimate of People of All Ages in Poverty</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>P&gt;z</b>	
DVS	-6.049922	2.109049	0	*
DVLocalTax	4.789451	8.714927	0.004	*
Population	0.1801315	0.0100433	0.583	
Rural	1576.249	1371.637	0.25	
Before2008	-748.1733	149.4556	0	*
NewHousing	-3.980758	0.3966133	0	*

\*= Significant at the 95% level.

Regression two investigates the relationship between the estimated number of people of all ages in poverty and direct visitor spending and tax receipts. The results indicate a complicated relationship between these variables. There is a negative relationship between direct visitor spending estimates and the estimated number of people of all ages in poverty, but a positive one between direct visitor tax receipts and people in poverty. These results seem to indicate that increases in direct visitor spending may cause fewer people to fall below the poverty line but increases in direct visitor tax

receipts may cause the opposite. Additionally, these results show that more people fell below the federal poverty line in the aftermath of the 2008 market crash and that for each new private housing unit built, the number of people below the poverty line seems to decrease.

**Table 3.5** Multivariate Regression of Employed Persons

<b>Employed Persons</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>P&gt;z</b>	
DVS	0.4632715	0.21	0.834	
DVLocalTax	39.64302	4.22	0	*
Population	0.43	36.35	0	*
Rural	904.6066	0.54	0.588	
Before2008	1236.692	8.55	0	*
NewHousing	3.200769	8.3	0	*

\*= Significant at the 95% level.

Regression three evaluates the relationship between the number of employed persons and direct visitor spending and tax receipts. This regression illustrates an important relationship between these variables, seemingly indicating that an increase in direct visitor tax receipts may lead to more employment. These results also show that more people in an area leads to greater numbers of employed persons and that more people were employed prior to the 2008 market crash. Additionally, these results indicate

that the more private housing units are constructed, the more employed people there are in the region.

## **Conclusions**

The results of these regressions seem to suggest that there is a relationship between tourism expenditures and the three measures of economic health used in this study. It appears that the effect of tourism spending on the Western North Carolina region is extremely complicated. These results indicate that increases in direct visitor tax receipts seem to cause increases in the number of people receiving government assistance in the form of SNAP benefits and seem to cause the number of people below the poverty line to increase. Conversely, it appears that increased visitor spending creates opportunity by decreasing the number of people below the poverty line, and that spending also contributes to job creation.

How, then, can these complicated results be interpreted? It is possible that these results are similar to those drawn by Tooman in 1997, that tourism seems to negatively impact vulnerable populations in the Western North Carolina region. That more tourists and more tourism spending may lead to more low-wage, seasonable jobs and impossible rents that then may lead to an increased reliance on government assistance. Conversely, these results do seem to demonstrate that there is a positive effect of tourism spending in that it increases the number of people employed and receiving wages. Thus, it appears that the relationship between increased tourism spending in the Western North Carolina region and measures of economic health is incredibly, and notably, nuanced.

This study is limited by the estimations of tourism spending. There is a high likelihood that parts of the tourism expenditure equation were left unmeasured in the work done by Tourism Economics. It is likely that there was more tourism activity in this region than was completely measured by Tourism Economics' estimations.

This study was also likely limited by the fact that these regressions only measured the effects of tourism expenditures on what are likely the most vulnerable members of the Western North Carolina population. It is likely that a study which measured the effects of these expenditures on members with higher incomes (the middle class, and/or upper class) would see different results. This study does not encapsulate the whole effect of tourism expenditures on these populations, just on those who might be the most affected.

This study leaves a host of important questions unanswered and offers a multitude of possibilities for further study. First, it would likely be useful to perform a study which attempted to understand the relationship between tourism expenditures and the middle and upper classes. Additionally, it would likely be interesting to perform a study like this one, but include the years 2020, 2021, and 2022 to attempt to understand the ways in which the pandemic affected the tourism industry and the most vulnerable populations in the Western North Carolina region.

In all, this study illustrates what the literature surrounding tourism and economic growth already seemed to indicate; that the relationship between tourism spending and economic growth and health is complicated. This is a worthwhile study because local leaders in the Western North Carolina region have recently made increasing tourism a part of their strategic vision for the future. It is important for these leaders to understand



that tourism spending affects different members of their communities in very different ways and that they need to look at the effects of tourism through a critical and careful lens.

## CHAPTER FOUR

### DISCUSSION AND CONCLUSIONS

This thesis sought to understand the perceptions and effects of the growing tourism industry, with emphasis placed on understanding consumer perception of local craft breweries. The second chapter illustrates that there is a relationship between consumer perception of other food system elements and perceptions of craft breweries within communities across the American South. It demonstrates that those who already have positive perceptions of other local food system elements carry over this goodwill to their local craft breweries. Additionally, it shows that demographic elements like age, sex, and income do not determine consumer perception of craft breweries. Importantly, this chapter also illustrates the complicated relationship between rural communities and craft breweries, showing that smaller communities and more rural communities view their local craft breweries as performing poorer than their counterparts in more urban communities.

The third chapter of this work evaluates the relationship between direct tourism expenditures and tax receipts and specific measures of economic health in the twenty-three county Western North Carolina region. The results indicate that increases in direct visitor tax receipts cause increases in the number of people receiving government assistance in the form of SNAP benefits and seem to cause the number of people below the poverty line to increase. Additionally, this analysis demonstrates that increased visitor spending creates opportunities by decreasing the number of people below the poverty line and contributing to job creation. This analysis ultimately demonstrates that the

relationship between increased tourism spending in the Western North Carolina region and measures of economic health is incredibly nuanced.

These two analyses, together, seem to note something important about the relationship between rural regions, craft breweries, and tourism development. While chapter two did not focus in its entirety on rural regions, it did offer interesting and useful results about consumer perception in those locations. As noted earlier, the analysis in chapter two seemed to indicate a negative relationship between rural residents and craft breweries, meaning that rural residents seemed to have a more negative perception of the craft breweries in their areas than their urban counterparts. Chapter three illustrates the complicated relationship between tourism spending and economic health in rural regions by showing that vulnerable rural residents are often negatively impacted by increases in tourism spending. Together, these two analyses demonstrate that growth in the tourism sector is important and often necessary, but that the relationship between rural peoples and these changes are important to evaluate and understand as time moves forward.

These results, ultimately, demonstrate the usefulness of economic development methodologies like SET, Community Capitals, Asset Based Community Development, and Pulver's "Big Five" which all center themselves around broad ideas of development via relationship (SET Overview, 2022; Flora & Flora, 2008, Kretzmann & McKnight, 1993; Hustedde, Shaffer, & Pulver, 2005). All of these methodologies, together, illustrate that economic development need not come at the cost of the vulnerable (or anyone else for that matter). Rather, economic development should consider the interconnected web

of relationships that exist in each and every industry and community and should seek a cooperative and balanced way of creating growth that benefits as many as possible.

These chapters view the relationship between local peoples and their local industries as paramount, with the ultimate goal of evaluating both perception (of craft breweries) and effect (of tourism expenditures). Within the complicated world of economic development, it is important to understand these relational aspects of growing industries and to evaluate how changes in an economic ecosystem affect the most vulnerable. Thus, this thesis offers a look at two pieces of the larger economic development story in these regions in the hopes that it can shed light on a complicated and ever-interconnected web of relationships with the ultimate goal that these insights can lead to informed growth in these two important and ever-evolving industries.

In terms of policy, it is vital for decisionmakers to build upon their knowledge of their communities' web of relationships. It is important for these leaders, on both local and state levels, to understand that orienting their economic development strategies towards tourism and incentivizing the development of new businesses, like craft breweries, create opportunity, but also affect the lives of rural residents. In this case, it is important for leaders and brewery owners to diversify their offerings to include local people and to interact in a positive way with locals through participation in local events and by advocating for local causes.

One strategy that leaders could implement would be to frame their conversations around development through the lens of sustainable tourism. Sustainable development strategy is oriented around the idea that meeting the needs of the present does not need to

come at the expense of the needs of the future. Some of the strategies of sustainable tourism, according to author Dr. Ananya Mitra (2018), include:

- Engaging tourists in aspects of local culture and making them aware of the distinctiveness of the place that they are visiting.
- Encouraging both tourists and hosts to value conserving the limited resources of a destination.
- Pushing for the involvement of local people in the industry in jobs that offer continuous and compassionate employment.
- Focusing on maintaining the overall integrity of the destination.

Using these strategies, local leaders in Western North Carolina and beyond could create a thriving tourism economy that respects local culture and uplifts local residents.

There is evidence that some of these communities are already taking steps in the right direction. For example, every April Sylva, North Carolina hosts a festival called Greening Up the Mountains where the new and the old collide in creative ways. The festival is, ostensibly, a place to celebrate Appalachian culture, but has become, in recent years, a melting pot of experiences. Notably, many of the local craft breweries take part in the celebrations by organizing musicians, offering food and beverages, and giving out free merchandise to visitors and locals alike. In this space, traditional Appalachian cloggers exist alongside new craft breweries in a way that allows for a sustainable, educational, and community-centered experience. Festivals like this one demonstrate the potential of using a sustainable tourism lens to tie new businesses, like craft breweries, to old culture in a way that feels fresh and exciting to locals while also attracting tourists.

This model has potential as a good starting place for other communities looking for ways to create intentionally diverse and united spaces.

Overall, it is important for local decisionmakers to understand that while increasing tourism expenditures has its benefits, there may be people who are negatively impacted by the changes. It is important, then, for these leaders to be compassionate in their policymaking and to listen to the concerns of their constituents. While there is no sweeping policy that would be applicable to every community, these results indicate, in all, that it is important to consider the implications of new tourism-centered policies on the most vulnerable members of a population.

APPENDIX

Appendix A

Market Performance Question from Local Food System Vitality Survey

Please rate the performance of different community activities of your local food environment:

	Don't Know	Extremely Poor	Poor	Average	Good	Excellent
Farmers markets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cooperative food stores/ specialty stores/ health food stores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grocery stores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restaurants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community supported agriculture (CSA)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Food trucks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ethnic markets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Road-side markets or stands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Microbreweries, distilleries, and/or wineries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Farm-to-school programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Institutions (hospitals, workplaces, state parks, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



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