Virginia Craft Beer and Winery Visitors: An Exploratory Study of Beverage Visitor Demographics and Expenditures in the Commonwealth of Virginia

by

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ABSTRACT

The craft beer industry has experienced significant growth over the past several years, especially in the Commonwealth of Virginia. While the effects of winery operation on the tourism industry have been widely researched, a dearth of similar knowledge exists for the craft brewery. Moreover, there lacks an understanding of who these visitors to craft breweries aree, how similar they are to their winery counterparts, and if the same individuals are visitors to both.

This study of Virginia wineries and breweries sought to begin the process of satisfying this need for information through an exploratory study using a questionnaire through intercept interviews. Respondent demographics, cursory visitation patterns, and general expenditure patterns comprise the three main components of research undertaken. The information discovered is of particular value to brewery and winery marketers, advertisers, festival coordinators, policy makers, DMOs, DMCs, and any industry that serves in the tourism industry.

Through analysis of the survey results, conclusions on who brewery and winery visitors are and whether or not they are the same, as well as recommendations to continue the growth of beverage tourism in the Commonwealth of Virginia are explored. Lastly, areas of future research are delineated to foster future research in this tourism niche.

ACKNOWLEDGEMENTS

Thanks to my numerous research assistants who undertook the fieldwork required for this project with a sense of enjoyment and thrill for doing science. To the participant breweries and wineries, namely Old Ox Brewery, Stone Tower Winery, Tarara Winery, Doukenie Winery, Chateau Morrisette, Chaos Mountain Brewing Company, Lost Rhino Brewing Company, and Wolf Hills Brewing Company - Thank You.

A special thanks to my friends and family, who have been my drive to accomplish this feat and the unwavering support to achieve this goal.

I. Introduction

Background

Beer has been brewed in America since colonial times and is a quintessential part of American culture. Founding father Benjamin Franklin has been credited with saying that "Beer is proof that God loves us." However, only recently have the vast majority of Americans awoken to the existence of more than ales and lagers, spurring the burgeoning craft beer industry of the late 20th and early 21st century.

The craft beer phenomenon has grown quickly in the Commonwealth of Virginia. From urban Richmond to the Blue Ridge Mountains, the craft beer revolution has exploded across the Commonwealth, due in no small part to relaxed regulations. The passage of SB604 in 2012 allowed for alcohol sales at breweries directly to customers for consumption without the need for a restaurant, allowing for a new revenue stream for businesses.

At roughly the same time, the explosion of global mass tourism has encouraged studies into its causes, effects, and impetus. Gastronomy tourism is one such area of study, regarding local food as an attraction unto itself; akin to sun and sand or adventures, gastronomy tourism holds something unique to one particular time and place for visitors.

An area of growth within gastronomy tourism is beverage tourism. While wine has been studied extensively, researchers have largely ignored beer. Indeed, while a few macro-breweries in a country as large as America may not generate much tourism demand, the growth of the craft industry presents a unique set of circumstances that deserve further exploration.

Study Purpose

The purpose of this study is to explore the demographics, motivations, and expenditures of craft brewery visitors in the Commonwealth of Virginia. This information would benefit the stakeholders in the tourism industry regarding marketing, advertising, and product development geared toward the craft brewery visitors. Hotels and restaurants that cater to individuals that match those demographics will find such research extremely helpful for sales and marketing purposes. Moreover, this information would be a direct benefit to any current and prospective craft brewers regarding business development, facility construction to accommodate tours for tourists, and any vendors that would work to serve these brewers.

Lastly, and perhaps most importantly, understanding the financial impact of craft brewery visitors on the communities they visit, in terms of tourism dollars spent, is critical. State and local policy makers, destination management organizations, and breweries will find this component of particular interest for substantiating any claims of the impact of the craft brewing business and craft beer tourism on the "bottom line."

It should be noted that this study is intended as a self-contained, exploratory study of the possible factors and variables regard craft brewery and winery visitors. Any findings are not designed to be generalized beyond the geographic area of study, and best describe the visitors to the participating data collection locations determined herein.

Moreover, given the variance of alcohol control laws both interstate and intrastate, any findings from this exploratory study may be limited in generalization due to those variances. Other limitations are delineated later in this study.

Area of Research

The geographic area of research will be the 42,774 square miles of the Commonwealth of Virginia (Brittanica, 2014). Located in the Mid-Atlantic region of the United States of America, Virginia is bounded to the north by Maryland, the District of Columbia, and West Virginia; to the west by Kentucky; and Tennessee and North Carolina to the south.

The terrain of Virginia is widely varied. Flatland and marsh is proximate to the Atlantic Ocean to the east, the weathered Appalachian Mountain Range on the western part of the state, with deciduous forest and farmland in the middle and to the north.

Virginia was chosen as the area of research as the rapid proliferation of micro-breweries is currently underway. Other regions in the country have long-established craft brewers, such as the west and Rocky Mountains - but the craft brewery phenomena is fairly recent in comparison (Virginia Craft Beer, 2014). This makes for a rare opportunity to study these events as they occur. The accessibility of informational resources, such as records from a destination management organization and associated costs of data acquisition were also considered.

Virginia Tourism Corporation, the official state tourism organization for the Commonwealth, lists 72 different craft brewery facilities operate in the Commonwealth as of April 2015. These breweries are scattered across the state, with clusters proximate to the population centers of Northern Virginia, Richmond, Charlottesville, and Virginia Beach, as well as numerous other breweries in secondary cities and rural areas.

Problem Statement

Gastronomy tourism has been a very popular area of research recently, and while there exists a breadth of knowledge regarding food and wine tourism, beer tourism has been vastly overlooked. Marketing to beer tourists, such as with the VTC, has only recently diverged from promoting wineries. As the two beverages are vastly divergent in cost, so too may be the behavior and profile of the respective visitors. It was with this in mind that research should be undertaken to explicitly understand who the beer tourist is in the Commonwealth of Virginia, and more importantly, their expenditure profiles. Existing research has sought to build a profile of beer tourism visitors and their motivations, but there has been little emphasis on the economic impact of their activities.

Research Objectives

The defined objectives for this research are as follows:

1) To explore demographic characteristics of visitors to wineries and breweries and build a basic profile of those visitors;
2) To understand the spending patterns of these visitors both on the host location and the local economy; and,

3) Provide insights for businesses and policy makers on how to better serve the target market of Virginia beverage visitors, or target markets, should they indeed be two discrete groups based on beverage type.

Hypothesis Statement

Due to the exploratory nature of this study, no hypothesis statement can be formulated at this time. However, a goal of this study is to conduct scientific research, and through the review of numerous variables, find areas of future research to based on the below null hypothesis:

H0: The demographic and expenditure profile of craft brewery visitors in the Commonwealth of Virginia are not different from that of winery visitors.

II. <u>Review of Related Literature</u>

Introduction

In order to better understand and define the parameters of the research that will be undertaken over the course of this thesis, terms, ideas, and processes should be defined. To this end, a review of existing and relevant literature has been provided to create a standard framework for discussion and recreation of results for verification. To this end, the “golden thread” shall flow from the definition of tourism to the concentration of Gastronomy tourism, to the specific niche of beer tourism. The specific areas which need to be understood to qualify any results for future research and hypothesis testing will include a review of demographic and expenditure analysis techniques and foundations from relevant literature.

Tourism Defined

Tourism is the phenomena of the movement of people from their usual place of residence to a new location for business and/or pleasure (USTA, 2009; UNWTO, 2014). By 2017, U.S. domestic travel will account for upwards of 2.1 billion trips, with expenditures in excess of $900 million, and account for 5% of national GDP (USTA, 2014). This level of economic impact has only grown in recent years as municipalities realize tourism development can be a boon for local businesses. Thus, the definition adopted for this study defines tourism as “the processes, activities, and outcomes arising from the relationships and the interactions among tourists, tourism suppliers, host governments, host communities, and surrounding environments that are involved in the attracting and hosting of visitors" (Goeldner & Ritchie, 2006). Moreover, these processes, activities, and outcomes are helped or hindered by their respective governmental, social, and environmental stakeholders (Sautter, 1999; Freeman, 1984; Donaldson and Preston 1995).

Mass vs. Niche Tourism

Drilling further, there exist two sectors of tourism activities (Robinson and Novelli, 2005). The first is mass tourism, or broad interest activities, such as theme parks, beach-and-sun locations, or those locations otherwise geared toward dedicated tourism activity (Robinson and Novelli, 2005). Mass tourism can also be further defined as the significant movement of people for leisure activities, typically as large groups and/or tours. The natural converse of this type of tourism is niche tourism. Characterized by special and specific interest, niche tourism is typically smaller in scale and but fine-tuned with a depth in cultural, environmental, urban, rural, or other areas (Robinson and Novelli, 2005). Moreover, niche tourism is also characterized by smaller groups, if not individuals, undertaking tourism activities. Because of this smaller size, there is also a lesser stigma attributed to this type of tourism as it pertains to environmental impact.

Gastronomy as Niche Tourism

Gastronomy tourism, as it exists in one time and place, and typically in a particular style, can be easily characterized as one of these niches. The idea that the food and drink of a destination can itself be an attraction has been well studied (Santich, 2004;

Karim, 2010). In Taiwan, the marketing of a destination through food was explored as a means of differentiation (Lin et al., 2011). By distinguishing itself from its neighboring countries, Taiwanese tourism sought to appear as a different tourism market as the food was different. This has resulted in tourist opinions that see Taiwan as different from nearby countries, despite their similarities. In Italy, the reputation of olive oil and wine attracts visitors to wineries and farms to experience the product and process (Hjalager and Corigliano, 2000). Additionally, the attraction of this type of lifestyle to tourists to take in creates a unique experience in conjunction with the food.

Bringing together the hallmarks of gastronomy tourism, food and drink can act as an authentic part of the local culture shared with visitors, a marketing tool to attract visitors, a driver for local economic development, and an exchange of culture through sharing of food and drink itself (Hall and Mitchell, 2000). The fulfillment of tourism activities within these areas can satisfy any number of Maslow's hierarchy of needs, including physiological - the need of sustenance, to a sense of belonging - or the relationship built through sharing of food, to a self-actualization experience - the enjoyment of creativity and learning (Tikkannen, 2007; Maslow, 1943).

Beverage Tourism as Gastronomy Tourism

In particular, wine and spirits have been studied to determine if beverages themselves are an attraction. Specifically, this has been described as beverage tourism, where like food, visitors will go to attractions geared toward the niche of making beverages (Plummer et. al. 2005). The motivations, attitudes, impacts, and outcomes of wine tourism in particular have been studied both in the United States and abroad (Hall and Mitchell 2000; Rivera et. al. 2010). Similarly, the draw of the spirits distillation process has attracted visitors to the production facilities of whiskey. In Scotland, the interest in scotch whiskey has grown significant tourism interest and spurred new tourism development for these distilleries (McBoyle, 2008). Because of this interest, additional employees to act as tour guides and guide managers, as well as special facilities specifically for tasting, showcasing, and walking through the distillery, are all positive impacts for both the businesses and tourists.

Using many of these same criterion as wineries, tourism driven by breweries was studied along the Waterloo/Wellington Ale Trail in Ontario, Canada (Plummer et. al., 2005). In this instance, the economics of various tourism stakeholders working together in concert for the success of the trail to entice tourists is well documented. In was noted that through their differentiation efforts, these stakeholders succeeded in creating a different product tourists could describe as specifically beer-oriented. As both wine and spirit research indicates, beer tourists can attribute their activities solely to that of visiting craft breweries, and may be a separate segment from a general beverage, wine, or spirit tourism. As such, beer tourism may require its own specific research; however, this does not currently exist in empirical and peer reviewed form.

To further understand the motivations and visitor profile of the beer tourist, Francioni undertook a study of such factors more recently in North Carolina (2012). In this study, demographic information, as well as travel behavior, activities and importance, planning, preferences, and psychographics were compiled to understand the motivations of these visitors. Like Plummer et. al, it was also found that beer tourists could be considered their own specific segment, rather than a component of a general beverage tourists, as they have motivations, behaviors, and patterns of their own which may not completely overlap with any one other segment.

Craft Beer Brewing

The Brewers Association defines a craft brewer as “small, independent, and traditional,” or 6 million barrels of beer or less is produced by an entity that is predominantly owned by non-craft brewer company, and a brewer that makes mostly beer rather than malt beverages (Brewers Association, 2014).

Brewing in the Commonwealth of Virginia is an activity that has been done since colonial times (Virginia Craft Beer, 2014). George Washington and Thomas Jefferson, both founding fathers of the United States, are storied to have brewed and sold their own beers in the 18th and 19th centuries. Today, the art of craft brewing has experienced a resurgence since the first craft brewery opened in 1994. From that humble beginning 20 years ago, there now operate 72 craft breweries in the commonwealth, as reported by the Virginia Tourism Corporation.

In support of these breweries, numerous published beer and Virginia beverage trails have been assembled, including the “Red, White and Brew Trail” and the “Brew Ridge Trail” (Virginia Craft Beer, 2014). These trails feature breweries, wineries, markets, and accommodations as one cohesive tourism product. Marketing efforts for these trails include printed materials, viral video media, and a presence on the virginia.org website.

Utilizing this framework, those persons visiting such establishments in the Commonwealth of Virginia with the intention to taste beer as their main motivation should be considered craft brewery visitors.

Review of Previous Literature Analyses

Demographics

Measurable characteristics, such as age, gender, education, income level, and relationship status have been shown to significantly impact spending behaviors of consumers. Granted, while there exists many other factors outside of demographics that determine the ability of a person to travel, they can be attributed to an individual's socio-demographic factors such as occupation, marital status, children, and numerous others (Middleton et. al. 1973; Moisescu, 2013).

Moisescu (2013) sought to understand the relationship between travel preferences and demographics, using an online questionnaire instrument on social-media site Facebook on Romanian users age 18-35. In this study, income, education, age, and gender were studied with regard to trip duration, group size, transportation type, comfort level of accommodation, and type of accommodation.

Similarly, and specifically to beer tourist demographic research, Francioni (2012) utilized demographic questions related to gender, age, and education level to describe respondents of North Carolina brewery tourists. Many of these had been adapted from wine tourist research studies conducted by Park et. al (2008), Plummer et. al (2005), and River et. al (2010). Plummer et. al, through their research of tourists along the Waterloo/Wellington Ale Trail, found that visitors ages 30 to 50 were among the most sought after age demographic.

Lastly, a recently completed study by Young Strategies, Inc., undertook the task of determining the demographics, psychographics, activities, and overall spending of Virginia craft brewery visitors. The time frame was from September 2013 to September 2014 (Young Strategies, Inc.). This study sought to understand many of these same demographics, including age, gender, familial status, occupation, household income, and visitation patterns.

To make research results easily accessible to marketers, policy makers, and destination management organizations, this study will also endeavor to utilize metrics meaningful to those stakeholders. To that end, the Virginia Tourism Corporation has utilized several different methods to describe the profile of visitors to Virginia, including their purpose, their month of travel (time of year), party size, methods of transportation used, ethnicity, household size, age of head of household, marital status, education level, and household income (TNS TravelsAmerica, 2013). As many of these should be incorporated into the survey instrument to best understand the how the respondents would fit into the overall understanding of the Virginia visitor.

Expenditures

After demographics can be established for respondents, understanding their spending patterns and expenditures as a whole is an important first step in understanding the linkages between industries. Frechtling et. al (1999) analyzed the spending of visitors to Washington, DC, and utilizing multipliers for trickle down spending in related industries, a comprehensive economic impact of tourist spending. While this study does not aim to do so, the same framework of acquiring respondent data on lodging, transportation, food, beverage, and other costs is highly relevant.

Additionally, research at Canadian wineries yielded insights in how to examine beverage sales and overall economic activity. Northwood's study (2000) cites tourist expenditures including spending on wine, accommodation, attractions, souvenirs, and additional food and beverage. Each figure was reported as a dollar amount ($) per person, per day. Research showed that tourists who stayed overnight spent more than double, or $178 per day compared to $67 per day. An approach of this similar style - gauging spending on the beverage under research, and its tourists spending on accommodation, attractions, souvenirs, and additional food and beverage may be an appropriate means of study.

Alternately, the Young Strategies study compared spending by groups that visit one brewery as opposed to multiple. Spending was broken into 6 categories: lodging, food/meals, shopping, attractions, beer spending, and local transportation. All in, spending ranged from $168.16 for single brewery visitors to $290.15 for multiple-brewery visitors. Overnight visitors visiting both one or multiple breweries, spent substantially more, or between 50-100% more. Lastly, the influences for these visitors, as well as other activities undertaken, were studied.

As done with the demographics research, similar descriptions and data should be researched, where applicable, including nights and types of accommodation used both in Virginia and on their overall trip, activities visited, transportation, parking, food, drink, and beverage, groceries, entertainment, fuel, and miscellaneous (TNS TravelsAmerica, 2013).

Through the review of relevant literature, we have determined the relevancy and importance of craft brewery tourism as a type of beverage tourism. Through this understanding we can begin to define those factors that are important in describing the tourists and visitors to these locations, such as the demographics of the individuals, as well as the impact of their expenditures in and around the these destinations. Looking ahead, a review of those methodologies will provide insight into how that data can and should be gathered.

III. Methodology

Overview

During March and April 2015, an exploratory study was undertaken to gain a cursory knowledge of Virginia brewery visitors with regard to their demographics and expenditures, and compare that to Virginia winery visitors sampled during the same timeframe. An intercept interview, led by a research assistant, using a questionnaire was completed during the interview. The research design, collection procedures, analysis and pilot study testing will be discussed, and the limitations of the study as designed.

Description of Approach

The primary data collection method for this study was the survey method. This included the creation of a survey instrument to be used for data collection of willing respondents to answer the research objectives. Analyzed data is reported for each question, along with any significant findings.

Research Design

Required Data

Two major types of data were collected from respondents: 1) demographic data, or the personal attributes of the subjects completing the survey instrument, and; 2) related expenditure data, such as spending on lodging, food, beverage, transportation, souvenirs, and crafts.

Demographic characteristics collected include gender, age, party size, marital status, ethnicity, education level, household income, and home zip code.

Spending behavior characteristics collected include frequency of similar beverage tourism excursions, frequency of any crossover beverage tourism excursions, length of overnight stay at hotel, quality of hotel/lodging used, spending on food, cost of craft/souvenir purchases, and cost of purchases from beverage tourism location. This information was collected on a per person, per day expenditure, related only to the subject and not necessarily the entire party.

Units of Measurement

Respective to the corresponding demographic and behavioral characteristics under study, the following units of measurement were applied:

- Age in Years;
- Gender as Male and Female;
- Home zip code as 5-digit alphanumeric code, or custom where necessary;
- Group size as digits;
- Household income range as dollar amount (USD);
- Frequency of excursions as digits;
- Length of stay as digits; and,
- Lodging, food, beverage, souvenir, and craft spending as dollar amount (USD).

Pilot study

Before implementation of the survey instrument into the field, a pilot study was undertaken at one winery and one brewery within the Northern Virginia area, chosen as a convenience for researchers. Each location had 10 respondents chosen, using the previously described random sampling method, with no personal information such as name collected, with every third person exiting the establishment asked to engage in the study.

At the completion of the survey instrument, respondents were asked to provide their own open-ended comments or suggestions to the reviewer, which were transcribed and submitted along with the anonymous instrument.

Data analysis and reporting procedures were implemented to determine if the methods used accurately answered the intended research objectives and hypothesis testing. In conjunction with respondent comments and suggestions, changes were made to the study and survey instrument before full implementation.

Selection of subjects

Sampling Frame

A list of wineries and craft breweries that operate in the Commonwealth of Virginia is maintained by the Virginia Tourism Corporation ("Wineries and breweries," 2014). This list includes 72 craft breweries and 239 wineries. These two lists provided he sampling frame to determine both strata to compare for beverage tourism in the Commonwealth.

Target Population

The target population consisted of U.S. residents 21 years of age or over who visited a winery or craft brewery in Virginia during the defined time period.

Sampling Units

One survey instrument was used per individual as the respondent for themselves.

Sample Size

In 2013, the Virginia Tourism Corporation reported that 40 million domestic visitors came to Virginia (TNS TravelsAmerica, 2013). In this same year, a survey was conducted by TNS TravelsAmerica to create a profile of who the average visitor to Virginia is, and what activities they undertake. In this study, it was determined 2% of visitors to Virginia go to wineries. Unfortunately, breweries were not researched.

Using the above information, and because of a lack of information visitors to breweries equal zero, the population size of winery and brewery visitors was approximated at 800,000.

To obtain the most reliable results, a 95% confidence level and 5% confidence interval have been assumed, as these are standard parameters with socio-economic surveys of this type. With this, we calculated the sample size below:

$$SS = \frac{Z^2 \times (p) \times (1-p)}{c^2}$$

Applied As:

$$SS = \frac{1.96^2 \times (.5) \times (1-.5)}{.05^2}$$

SS = 385 respondents

Where:

Z= z-value of 95% confidence interval

p= chance of answer selection

c= confidence interval

In contrast to current day response rate issues, typically concerning mail and electronic survey methods, the interview method garners exceptionally high response rates. This does come at a significantly higher cost to conduct the study. The generally accepted good response rate is 80-85%. Congruent with this and additional information from Francioni and Frechtling, an 85% response rate has been chosen. This value ultimately yielded an initial sample size of 453.

To prevent over-sampling from one location per sampling frame (wineries, breweries), the sample size per location was set to n=30. This resulted in 4 breweries and 10 wineries required to attain the required sample size. The breweries and wineries were chosen at random using a randomization table generated by Microsoft Excel. Facility managers were contacted for clearance to work on property for interviews.

Please note, these procedures were updated, and those modifications are subsequently described in CHAPTER 4: Results.

Field Procedures

The survey instrument, a questionnaire, was administered by an interviewer. Pre-field training was completed, where interviewers were instructed on how to approach, instruct, clarify, and complete the questionnaire with respondents. The pilot study also served as additional training, with feedback provided by the lead interviewer.

Interviewers were dressed in casual clothing, but each wore a t-shirt with *The George Washington University* name and logo on the front, and lanyard designating them as conducting a survey.

Data Collection and Recording

Data collection occurred on Fridays, Saturdays, and Sundays, commensurate with the brewery/wineries hours of operation during the months of March and April. The questionnaire was given only in American English.

Data recording occurred at the time of the interview through the use of a smartphone or tablet computer capable of accessing the Internet. Qualtics, a proprietary online questionnaire platform, was utilized to capture responses. To prevent deletion of data, a revision history was maintained in case there was an issue so that data could be retrieved.

Data Processing and statistical analysis

Following collection, data was imported, processed, and analyzed by Statistical Package for Social Sciences (SPSS). Previously stated demographic factors were processed through descriptive statistical methods for each of the groups. Comparative testing methods, including cross tabulations were be used to determine differences between the two groups.

Limitations

- As this study seeks to focus solely within the confines of the Commonwealth of Virginia, it would not be appropriate to extrapolate any findings beyond its borders.
- The factor of perceived quality of the wineries and breweries by respondents is not being investigated, and may provide insight into the expenditures of visitors.
- Data was collected over a 1 month span at the collection points, which may have introduced time bias as visitors with different spending or demographics may not have been counted if they visit during a different time of the year.

- Due to the exploratory nature of this study, a system of answer value buckets has been used to group respondents together. This will result in answer ranges, and not necessarily discrete values.

Exploratory Research

Given the dearth of craft brewery research as it relates to tourism, and in comparison to determining sameness of winery tourism populations, an exploratory study was determined to the best method of discovering ideas and insights. That said, quantitative data will be collected, as previously described, and discussed in proceeding chapters. However, the goal of this study is to understand discover possible factors that differentiate the two populations, discern future areas of research, and business recommendations to make the research applicable to private industry.

IV. <u>Results</u>

Background

During March and April 2015, 172 completed surveys and 17 denials from potential respondents were collected from 3 Virginia breweries and 3 Virginia wineries. Over the course of the pilot study and fieldwork, significant barriers to achieving an appropriate sample size became clear, including but not limited to: significant lack of visitors to host locations due to weather and seasonality, financial cost of repeatedly visiting host location due to lack of visitors, poor response rate from the randomly chosen wineries, and the significant time required for a statewide research campaign. Given this, and the exploratory nature of the research, the scope of the study was limited to focus on 3 Virginia wineries and 3 Virginia craft breweries, chosen at random from the previously mentioned lists compiled by Virginia Tourism.

Approximately two-thirds of respondents for Virginia wineries were visitors of Northern Virginia wineries, or 66.3%. These locations include Tarara Winery and Doukenie Winery. Conversely, 61.7% of respondents at breweries came from locations outside of the Northern Virginia area, including Wolf Hills Brewing Company and Chaos Mountain Brewing Company.

The results from these questionnaires will discuss the demographics, motivations, a basic visitor profile, and expenditure profile of visitors to these locations. Completed surveys were collected from *respondents*, which characterize the visitor to the winery or brewery, and will appear in subsequent analyses and tables provided. Utilizing the updated criteria previously discussed, a response rate of 88.6% was achieved. Virginia

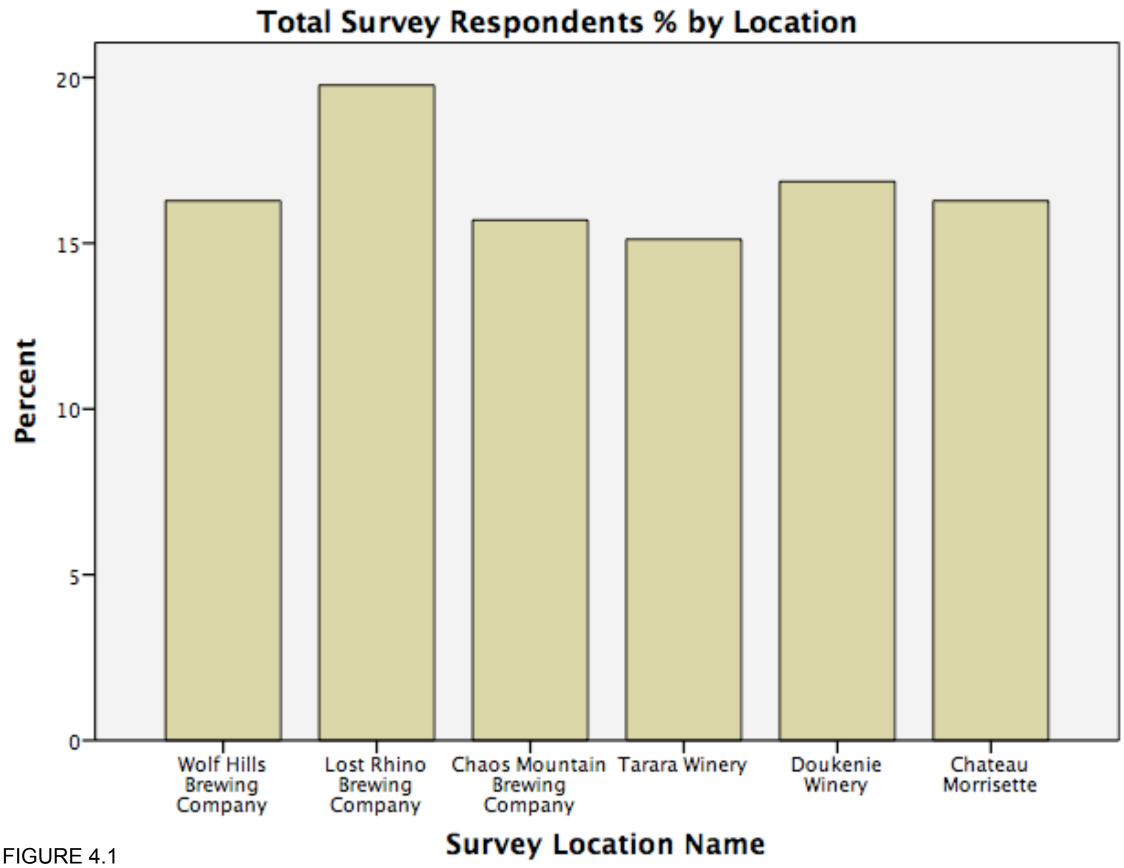

FIGURE 4.1

winery visitors represented 48.3% of total respondents, with the other 51.7% responding from Virginia breweries.

Pilot Study

On February 21 & 22, 2015, a pilot study was administered via intercept interview to 20 respondents, 10 from a pilot winery and 10 from a pilot brewery. The pilot brewery was Old Ox Brewing Company located in Ashburn, Virginia. The pilot winery was Stone Tower Winery in Leesburg, Virginia. Both locations were chosen as a convenience for the study administrator with regard to financial and time costs.

Through the course of the pilot study, it was determined that a question was poorly worded and required re-writing, the addition of parenting as a sector of employment, and removed ambiguity from several questions. The buckets for expenditures by respondents were rewritten for ease of viewing on mobile devices - the primary method of delivering the survey.

Initial findings showed 55% of winery visitors were female, compared to 50% of brewery visitors; the majority of winery visitors were 45-54 years old, whereas brewery visitors were evenly split between 30-54, with 1 respondent in the 25-29 bracket; and, roughly 9 out of every 10 visitors to both breweries and wineries were not staying overnight as part of a trip. These findings, in many ways, turned out to be quite different from the full study completed afterward, but regardless provided valuable insight into training and administration of the questionnaire.

Demographics

In order to properly describe the respondents, demographic data was collected on an anonymous basis - without collecting personally identifiers such as name or address. The first, and most basic, data collected was gender as identified by the respondent.

		Survey Location Type		Total
		Winery [1]	Brewery [2]	
What is your gender?	(A) Female	50.6%	34.8%	42.4%
	(B) Male	49.4%	65.2%	57.6%
Total		100.0%	100.0%	100.0%

FIGURE 4.2 1) n=83 2) n=89

Q1: What is your Gender?

As noted in the chart above, respondents who identified as female and male are nearly equal at wineries, or 50.6% and 49.4% respectively. Brewery visitors on the other hand were significantly more skewed toward males, with nearly two-thirds of respondents answering male (65.2%).

Q2: What is your Age?

		Survey Location Type		
		Winery [1]	Brewery [2]	Total
What is your age?	(A) Younger than 25 Years Old	10.8%	13.5%	12.2%
	(B) 25-29 Years Old	20.5%	19.1%	19.8%
	(C) 30-35 Years Old	20.5%	27.0%	23.8%
	(D) 36-44 Years Old	14.5%	14.6%	14.5%
	(E) 45-54 Years Old	14.5%	13.5%	14.0%
	(F) 55-65 Years Old	15.7%	11.2%	13.4%
	(G) 66+ Years Old	3.6%	1.1%	2.3%
Total		100.0%	100.0%	100.0%

FIGURE 4.3 1) n=83 2) n=89

Brewery respondents reported their largest age demographic to be the 30-35 year old, followed by the next youngest 25-29, and 36-44. Winery respondents were three times more likely to be in retirement age, or "66+ years old." However, 1 in 10 winery respondents were under 25, and the majority of respondents answered to be under 35. As a whole though, winery respondents did answer more frequently in the upper age brackets than brewery visitors.

Q3: What is your marital status?

		Survey Location Type		
		Winery [1]	Brewery [2]	Total
What is your marital status?	(A) Single	43.4%	33.7%	38.4%
	(B) Engaged	6.0%	5.6%	5.8%
	(C) Domestic Partnership	1.2%	2.2%	1.7%
	(D) Married	45.8%	50.6%	48.3%
	(E) Separated		2.2%	1.2%
	(F) Divorced	1.2%	3.4%	2.3%
	(G) Widow/Widower	2.4%	2.2%	2.3%
Total		100.0%	100.0%	100.0%

FIGURE 4.4 1) n=83 2) n=89

Overall, respondents were primarily married, with 45.8% of winery visitors and 50.6% of brewery visitors responding such, or 48.3% combined. The second largest group are singles at 43.4% at wineries and 33.7% at breweries. Respondents who characterized themselves as engaged were similar at 6.0% at wineries and 5.6% at breweries, as well as widows and widowers at 2.4% and 2.2%, respectively. Divorced was nearly 3 times more prevalent at breweries than wineries, or 3.4% compared to 1.2%.

Q1 & Q3: Age & Marital Status by Survey Location Type

			Survey Location Type		
What is your gender?			Winery[1]	Brewery[2]	Total
(A) Female	What is your marital status?	(A) Single	42.9%	38.7%	41.1%
		(B) Engaged	7.1%	12.9%	9.6%
		(C) Domestic Partnership		3.2%	1.4%
		(D) Married	42.9%	32.3%	38.4%
		(E) Separated		3.2%	1.4%
		(F) Divorced	2.4%	6.5%	4.1%
		(G) Widow/Widower	4.8%	3.2%	4.1%
	Total		100.0%	100.0%	100.0%
(B) Male	What is your marital status?	(A) Single	43.9%	31.0%	36.4%
		(B) Engaged	4.9%	1.7%	3.0%
		(C) Domestic Partnership	2.4%	1.7%	2.0%
		(D) Married	48.8%	60.3%	55.6%
		(E) Separated		1.7%	1.0%
		(F) Divorced		1.7%	1.0%
		(G) Widow/Widower		1.7%	1.0%
	Total		100.0%	100.0%	100.0%
Total	What is your marital status?	(A) Single	43.4%	33.7%	38.4%
		(B) Engaged	6.0%	5.6%	5.8%
		(C) Domestic Partnership	1.2%	2.2%	1.7%
		(D) Married	45.8%	50.6%	48.3%
		(E) Separated		2.2%	1.2%
		(F) Divorced	1.2%	3.4%	2.3%
		(G) Widow/Widower	2.4%	2.2%	2.3%
	Total		100.0%	100.0%	100.0%

FIGURE 4.5 1) n=83 2) n=89

Taken as a whole, when both gender and marital status are viewed through the prism of survey location type, the differences between winery and brewery demographics are more pronounced. Single and female respondents represented the vast majority of female winery respondents, each reporting at 42.9%. These same demographics were also dominantly represented at breweries as well, 38.7% and 32.3% respectively, however certain differences come to light. More than twice as many divorced female respondents were at breweries than wineries, and nearly that many engaged females as well.

Single and married demographics also comprised the majority of male respondents, but a few surprising differences were found. The number of male respondents who answered they are single and engaged was significantly higher than their brewery counterparts. Married males were also 20% more likely to be found at breweries than wineries, though each accounted more nearly 1 in 2 of every marital status of males at wineries and breweries during the review period.

Q1, Q2 & Q3: Age, Gender, and Marital Status by Survey Location Type

A commonly sought-after type of demographic data is understanding the ages and genders combined of beer and wine drinkers, or in this case brewery and winery visitors. A full chart of this data is provided on the next two pages in Figure 4.6, but the most significant findings are married male and female respondents reporting significantly more from wineries than breweries, on average 4 time greater; but this number swings dramatically in the 30-35 age range toward breweries to the order of roughly 3:1.

What is your marital status?	What is your age?			Survey Location Type		Total
				Winery	Brewery	
(A) Single	(A) Younger than 25 Years Old	What is your gender?	(A) Female	33.3%	44.4%	38.9%
			(B) Male	66.7%	55.6%	61.1%
		Total		100.0%	100.0%	100.0%
	(B) 25-29 Years Old	What is your gender?	(A) Female	66.7%	50.0%	57.1%
			(B) Male	33.3%	50.0%	42.9%
		Total		100.0%	100.0%	100.0%
	(C) 30-35 Years Old	What is your gender?	(A) Female	55.6%	16.7%	40.0%
			(B) Male	44.4%	83.3%	60.0%
		Total		100.0%	100.0%	100.0%
	(D) 36-44 Years Old	What is your gender?	(A) Female		50.0%	16.7%
			(B) Male	100.0%	50.0%	83.3%
		Total		100.0%	100.0%	100.0%
	(E) 45-54 Years Old	What is your gender?	(A) Female	66.7%		50.0%
			(B) Male	33.3%	100.0%	50.0%
		Total		100.0%	100.0%	100.0%
	(F) 55-65 Years Old	What is your gender?	(A) Female	100.0%		100.0%
		Total		100.0%		100.0%
	Total	What is your gender?	(A) Female	50.0%	40.0%	45.5%
			(B) Male	50.0%	60.0%	54.5%
		Total		100.0%	100.0%	100.0%
(B) Engaged	(B) 25-29 Years Old	What is your gender?	(A) Female		100.0%	100.0%
		Total			100.0%	100.0%
	(C) 30-35 Years Old	What is your gender?	(A) Female	50.0%	100.0%	75.0%
			(B) Male	50.0%		25.0%
		Total		100.0%	100.0%	100.0%
	(D) 36-44 Years Old	What is your gender?	(A) Female	100.0%		100.0%
		Total		100.0%		100.0%
	(E) 45-54 Years Old	What is your gender?	(A) Female	50.0%		50.0%
			(B) Male	50.0%		50.0%
		Total		100.0%		100.0%
	(F) 55-65 Years Old	What is your gender?	(B) Male		100.0%	100.0%
		Total			100.0%	100.0%
	Total	What is your gender?	(A) Female	60.0%	80.0%	70.0%
			(B) Male	40.0%	20.0%	30.0%
		Total		100.0%	100.0%	100.0%
(C) Domestic Partnership	(A) Younger than 25 Years Old	What is your gender?	(B) Male		100.0%	100.0%
		Total			100.0%	100.0%
	(C) 30-35 Years Old	What is your gender?	(B) Male	100.0%		100.0%
		Total		100.0%		100.0%
	(D) 36-44 Years Old	What is your gender?	(A) Female		100.0%	100.0%
		Total			100.0%	100.0%
	Total	What is your gender?	(A) Female		50.0%	33.3%
			(B) Male	100.0%	50.0%	66.7%
		Total		100.0%	100.0%	100.0%
	(A) Younger than 25 Years Old	What is your gender?	(A) Female		50.0%	50.0%
			(B) Male		50.0%	50.0%
		Total			100.0%	100.0%
	(B) 25-29 Years Old	What is your gender?	(A) Female	37.5%	50.0%	40.0%
			(B) Male	62.5%	50.0%	60.0%
		Total		100.0%	100.0%	100.0%
	(C) 30-35 Years Old	What is your gender?	(A) Female	20.0%	18.8%	19.0%
			(B) Male	80.0%	81.3%	81.0%
		Total		100.0%	100.0%	100.0%

(D) Married	(D) 36-44 Years Old	What is your gender?	(A) Female	83.3%		33.3%
			(B) Male	16.7%	100.0%	66.7%
		Total		100.0%	100.0%	100.0%
	(E) 45-54 Years Old	What is your gender?	(A) Female	42.9%	50.0%	46.7%
			(B) Male	57.1%	50.0%	53.3%
		Total		100.0%	100.0%	100.0%
	(F) 55-65 Years Old	What is your gender?	(A) Female	60.0%	12.5%	38.9%
			(B) Male	40.0%	87.5%	61.1%
		Total		100.0%	100.0%	100.0%
	(G) 66+ Years Old	What is your gender?	(B) Male	100.0%		100.0%
		Total		100.0%		100.0%
	Total	What is your gender?	(A) Female	47.4%	22.2%	33.7%
			(B) Male	52.6%	77.8%	66.3%
		Total		100.0%	100.0%	100.0%
(E) Separated	(B) 25-29 Years Old	What is your gender?	(A) Female		100.0%	100.0%
		Total			100.0%	100.0%
	(E) 45-54 Years Old	What is your gender?	(B) Male		100.0%	100.0%
		Total			100.0%	100.0%
	Total	What is your gender?	(A) Female		50.0%	50.0%
			(B) Male		50.0%	50.0%
		Total			100.0%	100.0%
(F) Divorced	(D) 36-44 Years Old	What is your gender?	(A) Female	100.0%	100.0%	100.0%
		Total		100.0%	100.0%	100.0%
	(E) 45-54 Years Old	What is your gender?	(A) Female		50.0%	50.0%
			(B) Male		50.0%	50.0%
		Total			100.0%	100.0%
	Total	What is your gender?	(A) Female	100.0%	66.7%	75.0%
			(B) Male		33.3%	25.0%
		Total		100.0%	100.0%	100.0%
(G) Widow/Widower	(F) 55-65 Years Old	What is your gender?	(A) Female	100.0%		50.0%
			(B) Male		100.0%	50.0%
		Total		100.0%	100.0%	100.0%
	(G) 66+ Years Old	What is your gender?	(A) Female	100.0%	100.0%	100.0%
		Total		100.0%	100.0%	100.0%
	Total	What is your gender?	(A) Female	100.0%	50.0%	75.0%
			(B) Male		50.0%	25.0%
		Total		100.0%	100.0%	100.0%
	(A) Younger than 25 Years Old	What is your gender?	(A) Female	33.3%	41.7%	38.1%
			(B) Male	66.7%	58.3%	61.9%
		Total		100.0%	100.0%	100.0%
	(B) 25-29 Years Old	What is your gender?	(A) Female	52.9%	58.8%	55.9%
			(B) Male	47.1%	41.2%	44.1%
		Total		100.0%	100.0%	100.0%
	(C) 30-35 Years Old	What is your gender?	(A) Female	41.2%	25.0%	31.7%
			(B) Male	58.8%	75.0%	68.3%
		Total		100.0%	100.0%	100.0%
			(A) Female	58.3%	23.1%	40.0%

FIGURE 4.6

Q 4: Group size

		Survey Location Type		
		Winery[1]	Brewery[2]	Total
How many people are in your traveling group today?	1	7.2%	10.1%	8.7%
	2	48.2%	38.2%	43.0%
	3	9.6%	16.9%	13.4%
	4 or More	34.9%	34.8%	34.9%
Total		100.0%	100.0%	100.0%

FIGURE 4.7 1) n=83 2) n=89

Couples and large groups were the predominant party size of respondent visitors during the review period, accounting for more than three-quarters of all respondents. Trios and solo visitors were distant laggards, trailing 20-25% on average . Groups of 4 or more were a substantial amount of respondents for both wineries and breweries at 34.9% and 34.8%, respectively.

When reviewing the individual locations by reported group size, each type of location had one location with a very low singles response (party size of 1), namely Lost Rhino Brewing Company and Tarara Winery, both in Northern Virginia. For each location, groups of 2 and groups of 4 or more consistently represented the two largest responses.

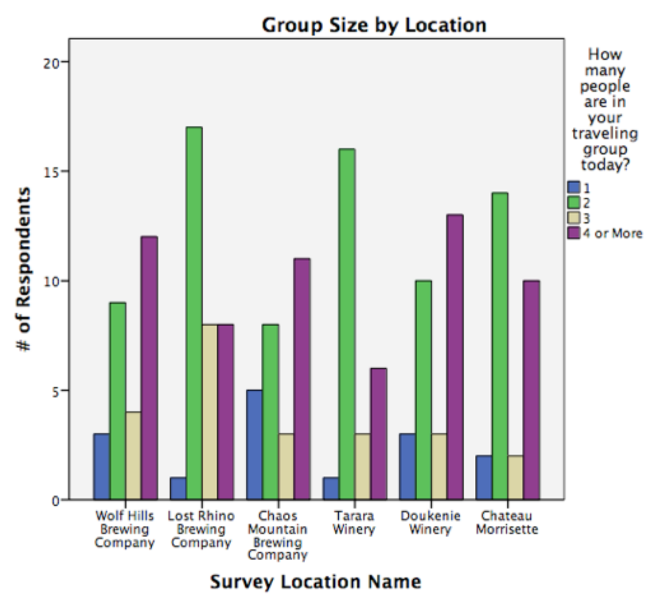

FIGURE 4.8

Q 5: Distance Traveled to Survey Location

Home ZipCode Distance Traveled (One-Way) to Survey Location by Type

(Distance from Q6-Zip Code to Q1 survey location)

Survey Location Type	Mean	Std. Deviation	Median	Range	Variance	Skewness
Winery	171.8675	508.80984	47.0000	3886.00	258887.458	5.666
Brewery[2]	85.0787	291.25751	22.0000	2665.00	84830.937	8.162
Total	126.9593	411.93729	36.0000	3886.00	169692.332	6.687

FIGURE 4.9 1) n=83 2) n=89

Visitors to breweries and wineries both travel significant distances from their home, as described by the respondents' zip code. The distance traveled mean (one-way) for wineries is roughly 172 miles, and 85 miles for breweries. However, when removing the furthest reported visitor from each Survey Location Type, we find the averages drop significantly. A review of the data shows 1 respondent from England for California, each, were dramatically inflating those averages.

Survey Location Type	Mean	N	Std. Deviation
Winery[1]	126.5488	82	299.19068
Brewery[2]	55.7273	88	90.83441
Total	89.8882	170	220.02486

FIGURE 4.10 1) n=83 2) n=89

However, when taking a finer look at those respondents who traveled under 50 miles to get to their destination, wineries garner a greater overall percentage of visitors that could be termed "tourists", or persons who traveled greater than 50 miles.

		Survey Location Type		
		Winery	Brewery	Total
Distance Traveled Less than 50 miles?	Under 50 Miles	58.5%	75.0%	67.1%
	Greater than or equal to 50 Miles	41.5%	25.0%	32.9%
Total		100.0%	100.0%	100.0%

FIGURE 4.11

When looking at the statistics for respondents' distance traveled, it is obvious that the majority of both wineries and breweries is locals, or those traveling under 50 miles. Two-thirds of all respondents travel under 50 miles, with three-quarters of brewery visitor respondents reporting as such. We will review this later on through the prism of locations being visited to drill down into these differences between winery and brewery visitation types - distances and the number of locations visited in a trip.

Q 6: Household Income

		Survey Location Type		Total
		Winery [1]	Brewery [2]	
What is your total household income?	(A) $0 - $30k	6.1%	4.6%	5.3%
	(B) $31k - $60k	18.3%	23.0%	20.7%
	(C) $61k - $90k	22.0%	20.7%	21.3%
	(D) $91k - $120K	15.9%	28.7%	22.5%
	(E) $121k +	37.8%	23.0%	30.2%
Total		100.0%	100.0%	100.0%

FIGURE 4.12 1) n=82 2) n=87

When reviewing household income by survey location type, winery respondents were a higher percentage of both the lowers income bracket ($0-$30k) as well as the highest ($121k+). Of the 172 total respondents, 169 answered this question, where 3 abstained, or roughly 98.3% of respondents answered this question. Brewery respondents identified incomes in the next closest brackets to wineries, or the $31k-$60k and $91k-$120k brackets. Breweries and wineries had an equal proportion of respondents in the $61k-$90k bracket.

Q 7: Employment

		Survey Location Type		Total
		Winery 1	Brewery 2	
What sector of employment most closely describes yours?	(A) Agriculture	1.2%	2.2%	1.7%
	(B) Manufacturing / Mining	1.2%	4.5%	2.9%
	(C) Utilities	1.2%	2.2%	1.7%
	(D) Retail		5.6%	2.9%
	(E) Transportation	2.4%	1.1%	1.7%
	(F) IT	15.7%	7.9%	11.6%
	(G) Finance/Insurance	4.8%	6.7%	5.8%
	(H) Education	18.1%	9.0%	13.4%
	(I) Professional services	12.0%	13.5%	12.8%
	(J) Health Care	15.7%	7.9%	11.6%
	(K) Travel & Tourism	3.6%	1.1%	2.3%
	(L) Government	6.0%	12.4%	9.3%
	(M) Other	3.6%	19.1%	11.6%
	(N) Retired	7.2%	4.5%	5.8%
	(O) Student	4.8%	1.1%	2.9%
	(P) Unemployed	2.4%		1.2%
	(Q) At Home Parent		1.1%	0.6%
Total		100.0%	100.0%	100.0%

FIGURE 4.13 1) n=83 2) n=89

Respondents at breweries overwhelmingly considered themselves employed in the "Other" sector of employment, as described by Bureau of Labor Statistics. Upon wrap-up conversations with the interviewers, and anecdotal information volunteered by respondents during interviews, many of these individuals were engineers of one form or fashion but did not know how to otherwise respond than choose "Other." That 1 in 5 interviewed may have been engineers is fascinating, but given local industry proximate to one of the breweries, this information was more closely scrutinized by reviewing the data per location, as can be seen below:

Contrary to the idea that one particular brewery may have influenced the "Other" category, in fact each brewery exhibited a substantial number of respondents who felt their sector of employment most closely resembled that, between 1 in 8 to 1 in 4.

		Survey Location Name						
		Wolf Hills Brewing Company	Lost Rhino Brewing Company	Chaos Mountain Brewing Company	Tarara Winery	Doukenie Winery	Chateau Morrisette	Total
What sector of employment most closely describes yours?	(A) Agriculture	7.1%				3.4%		1.7%
	(B) Manufacturing / Mining	10.7%		3.7%			3.6%	2.9%
	(C) Utilities			7.4%	3.8%			1.7%
	(D) Retail	3.6%	2.9%	11.1%				2.9%
	(E) Transportation			3.7%	7.7%			1.7%
	(F) IT	7.1%	14.7%		23.1%	20.7%	3.6%	11.6%
	(G) Finance/Insurance	3.6%	2.9%	14.8%	3.8%	3.4%	7.1%	5.8%
	(H) Education	7.1%	8.8%	11.1%	11.5%	17.2%	25.0%	13.4%
	(I) Professional services	17.9%	14.7%	7.4%	11.5%	13.8%	10.7%	12.8%
	(J) Health Care	17.9%	2.9%	3.7%	19.2%	10.3%	17.9%	11.6%
	(K) Travel & Tourism		2.9%			10.3%		2.3%
	(L) Government		26.5%	7.4%	7.7%	6.9%	3.6%	9.3%
	(M) Other	14.3%	23.5%	18.5%		6.9%	3.6%	11.6%
	(N) Retired	7.1%		7.4%	11.5%	3.4%	7.1%	5.8%
	(O) Student	3.6%					14.3%	2.9%
	(P) Unemployed					3.4%	3.6%	1.2%
	(Q) At Home Parent			3.7%				0.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

FIGURE 4.14

Winery respondents answered “IT” at the Northern Virginia wineries - Tarara and Doukenie - 23.1% and 20.7% of the time, respectively. At the rural location only 3.6% responded “IT”, which may show that local industry drives demand to wineries more than breweries rather than that employment group as a whole being attracted to wine. When looking at the 14.7% of respondents for Lost Rhino Brewing Company who also answered “IT”, it would appear this is the case.

In general, brewery respondents worked more in agriculture, manufacturing/ mining, utilities, and retail than winery respondents, perhaps reflecting the stereotypical blue-collar nature of beer.

Q 8: Ethnicity

		Survey Location Type		Total
		Winery [1]	Brewery [2]	
How would you describe your ethnicity?	(A) American Indian/Native American	2.4%		1.2%
	(B) Asian	4.8%	4.5%	4.7%
	(C) Black/African American	3.6%	1.1%	2.3%
	(D) Hispanic/Latino	3.6%		1.7%
	(E) White/Caucasian	79.5%	92.1%	86.0%
	(F) Pacific Islander		1.1%	0.6%
	(G) Other	6.0%	1.1%	3.5%
Total		100.0%	100.0%	100.0%

FIGURE 4.15 1) n=83 2) n=89

Winery respondent ethnicity shows a greater diversity than brewery respondents. Whereas brewery respondents associated with White/Caucasian 92.1% of the time, 79.5% of winery respondents answered as such. That said, both are overwhelmingly white.

Q 9: Education Level

		Survey Location Type		Total
		Winery [1]	Brewery [2]	
What is your highest level of education achieved?	(B) High School	8.4%	11.2%	9.9%
	(C) Associates Degree	7.2%	7.9%	7.6%
	(D) Bachelors Degree	47.0%	41.6%	44.2%
	(E) A graduate degree	37.3%	39.3%	38.4%
Total		100.0%	100.0%	100.0%

FIGURE 4.16 1) n=83 2) n=89

Winery and brewery respondents were a highly educated group in general, with a combined 82.6% answering they had achieved a bachelors or graduate degree, and for those with any college and/or an Associate's degree, more than 9 in 10 had attended college. Brewery respondents were more likely to have stopped at high school education, whereas an even greater amount of winery respondents had achieved a bachelors degree.

Q 10: Previous visits to survey location

		Survey Location Type		
		Winery [1]	Brewery [2]	Total
How many times had you visited this destination previously?	(A) This was my first visit.	49.4%	39.3%	44.2%
	(B) 1-3 previous visits.	18.1%	19.1%	18.6%
	(C) 4 or more previous visits	32.5%	41.6%	37.2%
Total		100.0%	100.0%	100.0%

FIGURE 4.17 1) n=83 2) n=89

Respondents at wineries were more likely to be on their first visit than brewery visitors, or nearly half of winery visitors. However, what this means is that breweries have done a better job of retaining visitors in both the 1-3 visit and 4+ range.

Q 11: Previous brewery visitation

		Survey Location Type		Total
		Winery	Brewery	
How many times have you visited Virginia breweries in the last year?	(A) 0 Times	38.6%	4.5%	20.9%
	(B) 1-3 Times	36.1%	29.2%	32.6%
	(C) 4-6 Times	9.6%	16.9%	13.4%
	(D) 7 or More Times	15.7%	49.4%	33.1%
Total		100.0%	100.0%	100.0%

1 2

FIGURE 4.18 1) n=83 2) n=89

Unsurprisingly, nearly half of brewery respondents have visited 7 or more breweries in the past year. What is surprising is the level of cross-over of winery respondents that have visited breweries, approximately 71.4%, have visited at least 1 location in the past 12 months. More than 1 in 8 winery respondents have visited a brewery 7 or more times in the past 12 months, which may mean there is significant overlap of Virginia wine drinks and local craft beer drinkers.

Using the median as the measure of central tendency, winery respondents averaged 1-3 previous visits to Virginia breweries in the last year. Brewery respondents, however, report visiting 4-6 times in the last year, and is within 1% of the highest amount of 7 or more previous visits.

Q 12: Previous winery visitation

		Survey Location Type		
		Winery[1]	Brewery[2]	Total
How many times have you visited Virginia wineries in the last year?	(A) 0 Times	13.3%	36.0%	25.0%
	(B) 1-3 Times	41.0%	31.5%	36.0%
	(C) 4-6 Times	18.1%	12.4%	15.1%
	(D) 7 or More Times	27.7%	20.2%	23.8%
Total		100.0%	100.0%	100.0%

FIGURE 4.19 1) n=83 2) n=89

Other winery respondents report having visited fewer other wineries than compared to their brewery counterparts. Interestingly, a similar amount of respondents have visited 0 of the other type of Virginia beverage, or in this case 36% compared to 38.6% when the question is juxtaposed. More information could be gathered in the future to determine why this phenomena occurs with nearly 40% of the population.

Median previous visits by winery respondents to Virginia wineries was reported as 1-3 times. Interestingly, this is the same range of visits reported when discussing visits to breweries, perhaps indicating a lack of strict allegiance to one beverage over another. Brewery respondents reported an average of 1-3 previous visits in the last year to Virginia wineries as well.

		Survey Location Type		
		Winery[1]	Brewery[2]	Total
What was your primary reason for visiting this establishment today?	(A) Education	3.6%	4.5%	4.1%
	(B) Relaxation	65.1%	71.9%	68.6%
	(C) Group Event	16.9%	16.9%	16.9%
	(D) Other	14.5%	6.7%	10.5%
Total		100.0%	100.0%	100.0%

FIGURE 4.20 1) n=83 2) n=89

Q 13: Visitation reasoning

Lastly, relaxation is the primary reason respondents chose for visiting wineries and breweries both. Visiting for a group event, of which bachelor/bachelorette parties, retirement parties, birthday parties, and social get-togethers were all witnessed by the interviewers. Education, or the learning of brewing/vinting or what these locations have to offer, came in a distant last for reasons respondents were visiting breweries and wineries.

Q 14: Visiting other locations

		Survey Location Type		
		Winery [1]	Brewery [2]	Total
How many other Virginia Breweries or Wineries are you visiting today, in addition to this one?	(A) This is the only one.	45.8%	75.3%	61.0%
	(B) One other brewery.	7.2%	11.2%	9.3%
	(I) A mix of 4 or more wineries and breweries.		2.2%	1.2%
	(F) A mix of 2-3 more wineries and breweries.	4.8%	3.4%	4.1%
	(C) One other winery.	16.9%	1.1%	8.7%
	(D) 2-3 more wineries.	20.5%		9.9%
	(E) 2-3 more breweries.		5.6%	2.9%
	(G) 4 or more breweries.	1.2%	1.1%	1.2%
	(H) 4 or more wineries.	1.2%		0.6%
	(J) I don't know.	2.4%		1.2%
Total		100.0%	100.0%	100.0%

FIGURE 4.21 1) n=83 2) n=89

Brewery respondents are mostly one-and-done, with 75.3% reporting they only are visiting one location - where they are reporting from - and that is it. Winery respondents on the other hand report 16.9% of the time to visit one other winery, and 20.5% 2-3 more wineries. Interestingly, a modest mix of breweries enters in on the winery respondent side, with 7.2% responding they will visit a brewery, and 4.8% visiting a mix of 2-3 more wineries and breweries.

Q 15: Virginia beverage preference

		Survey Location Type		Total
		Winery[1]	Brewery[2]	
When thinking of Virginia made beverages, do you prefer Virginia Craft Beer or Virginia Wine?	(A) Beer	21.7%	76.4%	50.0%
	(B) Wine	72.3%	22.5%	46.5%
	(C) Neither/other	6.0%	1.1%	3.5%
Total		100.0%	100.0%	100.0%

FIGURE 4.22 1) n=83 2) n=89

At both breweries and wineries, their representative respondents overwhelmingly preferred their beverage compared to the alternative. Of winery respondents, 72.3% prefer wine, and of brewery respondents 76.4% beer. An interesting dynamic was winery respondents, at more than 5 times as many brewery respondents, answered they prefer "Neither/Other."

Expenditures

In addition to understanding demographics of respondents, the expenditure amounts and patterns of brewery and winery visitors is equally important to comprehend the impact these businesses make on their local economies.

Q 16: Overnight trip

		Survey Location Type		Total
		Winery [1]	Brewery [2]	
Is your visit today part of an overnight trip?	Yes	19.5%	14.6%	17.0%
	No	80.5%	85.4%	83.0%
Total		100.0%	100.0%	100.0%

FIGURE 4.23 1) n=83 2) n=89

The vast majority of brewery and winery visitors are day-trippers, or persons who are driving to the location and back in a day. Winery respondents were more likely to stay overnight than brewery visitors, at 19.5% of those persons responding as such.

Distance Traveled Less than 50 miles?			Survey Location Type		Total
			Winery	Brewery	
Under 50 Miles	Is your visit today part of an overnight trip?	Yes	6.4%	1.5%	3.5%
		No	93.6%	98.5%	96.5%
	Total		100.0%	100.0%	100.0%
Greater than or equal to 50 Miles	Is your visit today part of an overnight trip?	Yes	38.2%	50.0%	42.9%
		No	61.8%	50.0%	57.1%
	Total		100.0%	100.0%	100.0%
Total	Is your visit today part of an overnight trip?	Yes	19.8%	13.6%	16.6%
		No	80.2%	86.4%	83.4%
	Total		100.0%	100.0%	100.0%

FIGURE 4.24

As can be seen from the above table, those individuals who have traveled less than 50 miles are very unlikely to be staying overnight, only 6.4% of winery respondents and 1.5% of brewery respondents. However, the proportion is even for brewery visitors who traveled more than 50 miles, and slightly less at 38.2% of winery respondents who traveled more than 50 miles that are staying overnight.

Q 17: Length of stay

		Survey Location Type		Total
		Winery [1]	Brewery [2]	
How many nights are you traveling for on your current trip?	(A) 1 night	37.5%	46.2%	41.4%
	(B) 2 nights	25.0%	53.8%	37.9%
	(C) 3-5 nights	25.0%		13.8%
	(D) 6 nights to 13 nights	12.5%		6.9%
Total		100.0%	100.0%	100.0%

FIGURE 4.25 1) n=16 2) n=13

Brewery respondents exclusively reported staying 1 and 2 nights only while on their trip. Winery respondents, on the other hand, were equally split between weekenders (1 and 2 night stay) and longer trippers, those persons staying 3 nights and longer. Winery visitors, thus, have the potential to be injecting much more money into the local economy through lodging expenditures, though the quality of lodging and typical price point would be a major determining factor in this.

Using the midpoint of the grouped data and the frequency of each response, we calculated the mean ($\overline{x}$) length of stay for winery respondents was 3.1 nights, whereas brewery respondents were 1.5 nights. This furthers the case that winery respondents may spend more on lodging.

Q 18: Lodging chain-scale

		Survey Location Type		Total
		Winery[1]	Brewery[2]	
When traveling for similar purposes like today, what type of hotel do you typically stay at?	(A) Economy, like EconoLodge, Days Inn, Motel 6, etc		7.7%	3.4%
	(B) Midscale, like Candlewood Suites, La Quinta, Quality Inn, etc	12.5%	30.8%	20.7%
	(C) Upper Midscale, like Comfort Inn, Hampton Inn, Holiday Inn, Holiday Inn Express, etc	18.8%	7.7%	13.8%
	(D) Upscale, like Courtyard by Marriott, Crowne Plaza, Hilton Garden Inn, etc	18.8%		10.3%
	(E) Upper Upscale, like Hilton, Marriott, Sheraton, Hyatt, etc	12.5%	7.7%	10.3%
	(F) Luxury, like Ritz Carlton, St. Regis, Four Seasons, etc		7.7%	3.4%
	(G) Sharing economy, such as AirBnB, Couchsurfing, etc	6.3%	23.1%	13.8%
	(H) Other	31.3%	15.4%	24.1%
Total		100.0%	100.0%	100.0%

FIGURE 4.26 1) n=16 2) n=13

To mitigate the recall issue of not knowing their exact rate, and to have a better overall understanding of the respondent's typically lodging preference for when they travel overnight to visit wineries and breweries, we adopted the STR Global Hotel chain-scale for lodging, while also adding "sharing economy", which includes AirBnB and Couchsurfing for those persons who stay in peoples homes or rent a room, and an

"Other" category to accommodate persons who stay with family, camping, or other extremely low-cost or free arrangements. A copy of this chain-scale has been provided in the appendix.

Brewery respondents overwhelmingly associated their hotel lodging of preference as midscale hotels, such as Candlewood Suites, La Quinta, Quality Inn, etc. at 30.8%. Additionally, utilizing sharing economy accommodations such as AirBnB was a close second at 23.1%, and "Other" arrangements as third at 15.4%.

Winery respondents, alternately, associated their lodging of choice more in the upper-midscale and upscale segments, such as Hampton Inn, Comfort Inn, Holiday Inn Express as well as Courtyard by Marriott and Hilton Garden Inn. Like brewery respondents, winery respondents also utilized "Other" accommodation options as a predominant lodging type.

		Survey Location Type		Total
		Winery[1]	Brewery[2]	
When traveling for similar purposes like today, what type of hotel do you typically stay at?-TEXT		94.0%	97.8%	95.9%
	Boutique or Hotwire		1.1%	0.6%
	Family	2.4%		1.2%
	Friends cabin	1.2%		0.6%
	House		1.1%	0.6%
	Mooch	1.2%		0.6%
	With friends, ie free	1.2%		0.6%
Total		100.0%	100.0%	100.0%

FIGURE 4.26 1) n=83 2) n=89

Reviewing the "Other" choice does offer some insight into this answer choice, though with over 90% not elaborating further, one can only view the answers given as possibly representative of those who did not. Those who chose "Other" listed staying at boutique hotels or using an opaque third-party intermediary (TPI), staying with family, and friends as choices the respondents felt were otherwise not offered.

Q 18: Expenditure Matrix

Question 18 was designed to elicit per person/ per day expenditure responses from respondents when they are traveling on similar excursions similar to the one they were taking that day. Thus, rather than requiring respondents recall all spending they had done for the day, and may have yet to spend thus lowering the overall value of their visit, recalling how much they *typically* spend on such trips and using appropriately large response buckets seemed to allow for ease of response and decreased fatigue in an otherwise mentally taxing question matrix.

Q 18a: Alcoholic Beverage Spending

		Survey Location Type		
		Winery [1]	Brewery [2]	Total
When thinking of trips like the one you are taking today: Regarding other kinds of spending, plea...-Beverage purchased at the winery or brewery, including tastings, bottles to go, etc	<$10	9.6%	3.4%	6.4%
	$11-$25	32.5%	37.1%	34.9%
	$25+	47.0%	52.8%	50.0%
	$100+	8.4%	4.5%	6.4%
	NA	2.4%	2.2%	2.3%
Total		100.0%	100.0%	100.0%

FIGURE 4.27 1) n=83 2) n=89

First and foremost, understanding how much respondents spent on alcoholic beverages at the survey locations similar to their typical trips to breweries and wineries, the data suggests that substantially more respondents pay only a small amount when visiting wineries than breweries, 9.6% compared to 3.4%. Brewery respondents offered a higher response rate in the $11-25 and $25+ brackets, but lagged behind in the $100+ bracket. This may be because while brewery respondents will spend a modest amount on filling growlers to go, doing flights of beers and enjoying several pints, as beer is much more perishable than wine there is less incentive for additional spending, such as purchasing a case (12 bottles) of wine. Moreover, wineries often have “clubs” where visitors can purchase membership for beverage discounts in exchange for a guaranteed purchase of a set volume of wine.

As the upward limit of the top spending bucket is open-ended, the most appropriate central measure is the median of respondents. For both winery and brewery respondents, the median response is spending between $26 and $99 on beverages, including those sold on-site and purchased to-go.

Q 18b: Food & Non-Alcoholic Beverage Spending

		Survey Location Type		
		Winery [1]	Brewery [2]	Total
When thinking of trips like the one you are taking today: Regarding other kinds of spending, plea...-Restaurants, including food and beverage at the winery or brewery or offsite	<$10	9.6%	14.6%	12.2%
	$11-$25	30.1%	34.8%	32.6%
	$25+	49.4%	40.4%	44.8%
	$100+	6.0%	4.5%	5.2%
	NA	4.8%	5.6%	5.2%
Total		100.0%	100.0%	100.0%

FIGURE 4.28 1) n=83 2) n=89

Food and non-alcoholic beverage spending is an important facet to look at considering the need of imbibers to eat food and drink water to minimize intoxication and the consequences of intoxication. In this regard, brewery respondents reported spending less on these items, as interpreted by more frequently in the under $10 bucket and the $11-$25 range. At many of these breweries, food options are basic, often as little as a bag of chips, but very often a food truck provides a separate option for food. Again, this option is very often inexpensive, under $10. Wineries, by contrast, can be found to offer fruit, cheese plates, nuts etc, for their patrons, often at a higher cost than $10. Another possibility for the responses in the $25+ and $100+ are winery respondents visiting several locations and purchasing meals at outside restaurants, or multiple meals for those staying overnight.

Using the same logic as before regarding the best central measure, the \$26 to \$99 spending range is the average response for both locations. However, the average for breweries is within 1% of the \$11-\$25 spending range, so it stands to reason that actual spending is close to \$25.

Q 18c: Attraction Spending

		Survey Location Type		
		Winery [1]	Brewery [2]	Total
When thinking of trips like the one you are taking today: Regarding other kinds of spending, plea...-Other attractions, like parks or other tourist locations	<\$10	18.1%	21.3%	19.8%
	\$11-\$25	16.9%	12.4%	14.5%
	\$25+	9.6%	14.6%	12.2%
	\$100+	2.4%	2.2%	2.3%
	NA	53.0%	49.4%	51.2%
Total		100.0%	100.0%	100.0%

FIGURE 4.29 1) n=83 2) n=89

Using the same framework of the question, the data suggests that nearly half of all respondents to do spend any money on attractions, 18.1% of winery respondents and 21.3% of brewery respondents report spending under \$10 on attractions.

As discussed before, using the median as the central measure of average, the average winery respondent does not spend any money on attractions, while brewery respondents median falls within the <\$10 bucket, though only by 0.6%. Thus, the average brewery respondent spends very little, if anything, on attractions.

Q 18d: Souvenir Spending

		Survey Location Type		Total
		Winery[1]	Brewery[2]	
When thinking of trips like the one you are taking today: Regarding other kinds of spending, plea...-Souvenirs or crafts, either at the brewery/winery of off site	<$10	27.7%	37.1%	32.6%
	$11-$25	21.7%	19.1%	20.3%
	$25+	6.0%	3.4%	4.7%
	$100+		1.1%	0.6%
	NA	44.6%	39.3%	41.9%
Total		100.0%	100.0%	100.0%

FIGURE 4.30 1) n=83 2) n=89

Brewery respondents reported spending more overall on souvenirs from both the establishment and the local economy, or 61.4%, compared to 57.5% of winery respondents. However, winery respondents spend more in the $25 range, which may be outweighed by the volume in the lower brackets. The median respondent for both location types is under $10 in spending on souvenirs.

		Survey Location Type		Total
		Winery[1]	Brewery[2]	
When thinking of trips like the one you are taking today: Regarding other kinds of spending, plea...-Gas or other transportation cost	<$10	32.5%	53.9%	43.6%
	$11-$25	31.3%	19.1%	25.0%
	$25+	22.9%	20.2%	21.5%
	$100+	1.2%	1.1%	1.2%
	NA	12.0%	5.6%	8.7%
Total		100.0%	100.0%	100.0%

FIGURE 4.31 1) n=83 2) n=89

Q 18e: Gas and transportation cost

Gas and transportation cost is the most commonly reported ancillary expenditure for respondents, with 91.2% of winery respondents and 96.6% of brewery respondents reporting spending on this. Given the amount of respondents that report traveling less than 50 miles, the large proportion of those spending under $25 makes sense. Median spending reported by winery respondents is $11-$25, whereas brewery respondents spend less as under $10.

Q 18f: Parking

		Survey Location Type		
		Winery [1]	Brewery [2]	Total
When thinking of trips like the one you are taking today: Regarding other kinds of spending, plea...-Parking	<$10	24.1%	13.5%	18.6%
	$11-$25	4.8%	1.1%	2.9%
	$25+	3.6%		1.7%
	NA	67.5%	85.4%	76.7%
Total		100.0%	100.0%	100.0%

FIGURE 4.32 1) n=83 2) n=89

Respondents reporting parking costs was higher than expected, but when considering people stayed at hotels where parking may be paid, or in urban areas, these values are more understandable. That said, winery respondents reported more than twice as much parking expenses as brewery respondents. The median, the most appropriate measure of central tendency, also falls well within the NA range for both winery and brewery respondents.

Q 18g: Entertainment

		Survey Location Type		
		Winery[1]	Brewery[2]	Total
When thinking of trips like the one you are taking today: Regarding other kinds of spending, plea...-Entertainment	<$10	16.7%	17.9%	17.3%
	$11-$25	17.9%	22.6%	20.4%
	$25+	11.5%	9.5%	10.5%
	$100+	5.1%	3.6%	4.3%
	NA	48.7%	46.4%	47.5%
Total		100.0%	100.0%	100.0%

FIGURE 4.33 1) n=83 2) n=89

Respondents from both survey location types reported significant spending in entertainment, which can range from bowling to general shopping or any type of activity they felt was entertainment. While few reported spending over $100, over half spent up to half that amount. Under half of all respondents for both survey location types responded not spending any money on entertainment, generally meaning these are sole-purpose visitors to the wineries and breweries. Median spending from both respondent types fall within the NA spending range as well.

		Survey Location Type		Total
		Winery[1]	Brewery[2]	
When thinking of trips like the one you are taking today: Regarding other kinds of spending, plea...-Other	<$10	1.2%	2.2%	1.7%
	$11-$25	1.2%	2.2%	1.7%
	$25+	1.2%	3.4%	2.3%
	$100+	1.2%		0.6%
	NA	95.2%	92.1%	93.6%
Total		100.0%	100.0%	100.0%

FIGURE 4.34 1) n=83 2) n=89

Q 18h: Other

In this catch-all category of other, for anything that respondents were unsure could fit into any other category or was not represented, of the 172 respondents, 51 (29.7%) offered an answer, of which 40 answered NA. While most did not feel anything needed to be added, respondents answered “tour”, “errands”, “hunt”, “music”, “gifts” and “party food” as different items.

Q 19: Motivation for spending

To better understand the motivations for respondents spending money when visiting wineries and breweries, respondents were asked to answer a question regarding their typical trip. Approximately six in 10, 60.5%, answered they go out as a trip with friends, 22.1% as a romantic day trip, 22.1% enjoy visiting by themselves, and 2.3% for business. Lastly, 11.6% reported for “band meeting”, “family trip”, “home brewer”, “growler fill” etc.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		146	84.9	84.9	84.9
	Advertising - felt that breweries are not as much of a cohesive unit as wineries	1	.6	.6	85.5
	Amusement park should be in here	1	.6	.6	86.0
	Awesome survey	1	.6	.6	86.6
	Best of luck defending your masters	1	.6	.6	87.2
	breweries need to do better advertising	1	.6	.6	87.8
	could have used a marketing and sales employment category	1	.6	.6	88.4
	Drink up	1	.6	.6	89.0
	Easy recreational thing to do on weekends.	1	.6	.6	89.5
	Found wineries to be much less friendly than breweries.	1	.6	.6	90.1
	Friendly and approachable	1	.6	.6	90.7
	Good luck!!!	1	.6	.6	91.3
	Great place and beer	1	.6	.6	91.9
	I lovebeer	1	.6	.6	92.4
	It was fine	1	.6	.6	93.0
	It was very easy to understand	1	.6	.6	93.6
	Love Virginia wineries	1	.6	.6	94.2
	Making it nice and open and clean	1	.6	.6	94.8
	Michelle is an amazing person. Give her a raise.	1	.6	.6	95.3
	NA	1	.6	.6	95.9
	Pretty simplistic. Pretty easy. Add customer service as an occupation. How far are you willing to travel as a question in terms of miles or hours driven.	1	.6	.6	96.5
	Return because she likes it.	1	.6	.6	97.1
	Salary ranges could be expanded.	1	.6	.6	97.7
	Something extra to do for a dc visit	1	.6	.6	98.3
	We all love beer and wine.	1	.6	.6	98.8
	Wineries and breweries are going to be an important part of va's economy and they should be, as the economy shifts toward small business. This will make our economy stronger and more secure.	1	.6	.6	99.4
	With family.	1	.6	.6	100.0
	Total	172	100.0	100.0	

FIGURE 4.35 n=146

Q 20: Open-ended comment

Lastly, an open-ended qualitative comment space was left for respondents to provide thoughts or feedback, as well as any observations or suggestions. Visitors provided meaningful, qualitative ideas that are further discussed in future chapters, but a focus on better advertising, marketing, quality of products, and outlooks into the economic impact of beverage tourism were all important points gleamed from this line of open-ended questioning. A table of these has been provided on the following pages.

V. Discussion

The burgeoning craft brewing industry in Virginia is maturing quickly. Since recent legal changes allowed for ease of entry into the business, craft brewing has begun to make a major economic impact in the state. This research provides a basis for understanding how the visitors to these establishments compare to those going to wineries, demographically and spending-wise, for the purposes of: marketing, planning, and policy creation. Moreover, while wineries and breweries act as attractions for locals, the evidence showing 1 in 3 visitors are bringing in money from outside the area, and thus creating jobs and auxiliary spending in the community, only bolsters the point that wineries and breweries provide a net benefit to their community.

Based on this study, the data suggest that brewery and winery visitors are different groups of individuals based on several key factors. When asked about previous visitation to wineries and breweries, nearly one-third of respondents answered they had not visited the other type of establishment at all in the past year; almost half of all winery respondents were there as groups of two, while breweries attracted both couples and larger groups of 4 or more in roughly equal likelihood; breweries attract nearly twice as many men as women compared to a near even split between men and women at wineries; and, visitors staying overnight often stay twice as long.

Given the substantial overlap of so many categories of brewery and winery visitors, it cannot be determined whether or not the two types of visitors are discrete, or more likely, have substantial overlapping with a large proportion devoted solely to one or the other. That said, if there does exist the possibility of substantial overlap between the two groups, a dollar spent in marketing, promotion, or otherwise advertising for one may help the other, and a dollar spent promoting Virginia-made beverages combined would have a general positive effect.

Building a Cohesive Tourism Product

Respondents answered nearly two-thirds of the time that they had visited the other type of survey location type in the past year. While both businesses are very different in terms of how they operate, they are both still operating in the tourism sector, and as such, only benefit from having a larger and more diversified product for outside visitors. While breweries are now working together to promote beer culture in their local areas, much as wineries have done, should the two industries work as a cohesive tourism product through cross promotion, cross-selling each others products, and promotion of the overall product in the region, it may mean only more tourism and sales dollars for their businesses.

This can be done through the thoughtful fostering and promotion of beer trails, within industry, and as a distinct geographic area regardless of beverage type for beer and wine trails. Working with outside industries, such as lodging, restaurants, transportation, and other retailers makes it easier for visitors to better understand what the area has to offer at a glimpse. Moreover, Destination Management Organizations (DMOs) play at important role by creating this relationship between breweries and wineries, and can provide focus for the overall marketing as both a combined beverage tourism product and differentiated brewery and winery tourism products. Nearly one-quarter of visitors to breweries and wineries travel a distance of 50 miles or more, which through DMOs will help bring in outside dollars to their communities. Furthermore, should they entice the local population of nearly 75% of visitors to travel further, they effectively create new tourists and amass more revenues.

A Typical Virginia Craft Brewery Visitor

In order to best serve the public and private sector stakeholders of the burgeoning craft brewing industry, a prototypical brewery visitor profile and associated characteristics of those demographics was created.

Based on the survey data, the average craft brewery visitor in Virginia is a young, married male aged between 25 and 34. He is most likely white, highly educated with at least a bachelors degree, and makes between $91-120k a year / household. He travels with his spouse or friend as a small group, but also larger groups of 4 or more. He doesn't mind driving, but prefers to stay local, and won't really travel overnight just to visit a brewery alone. Because of this, he is loyal to the good craft breweries he frequently visits, but is often wanting to try something new. By the same token, he greatly prefers beer but will occasionally try wine and visit a winery.

When he goes to a brewery, he will stay there for a while, hang out with friends and make it a thing-to-do, rather than quickly hop from brewery to brewery. He will spend good amount of money on alcohol, usually enough for a sampler, a few pints, and maybe a growler, but typically under $25. Maybe it's because most Virginia craft breweries don't have extensive food service options, or because he's usually visiting just one brewery, but he doesn't spend much otherwise - like on food and non-alcoholic drinks. He will, however, spend money on trinkets, glasses, clothes, and other souvenirs when he goes to a brewery - presumably when he visits a new one that he thinks makes good quality beer.

Ultimately, this is just a snapshot of today's Virginia craft brewery visitor. Over time, he can be cultivated, better understood, marketed to, and converted into an even more valuable customer. Conversely, other group demographics may come forward in the future and create all new opportunities for Virginia craft breweries, but this profile coupled with local market intelligence should help marketers and policy makers better understand today's market situation.

VI. Conclusion and Recommendations

Promoting Policy that Drives Business

As has been referenced several times within this study, craft breweries have expanded and flourished thanks to the removal of barriers to entry and promotion of business-friendly policies. While a comprehensive review of state and local policies was not undertaken, ensuring that businesses have the possibility to succeed without prohibitively low limits or caps on how much beverage they may create is critical to the growth and success of the craft brewery industry. At the same time, policy makers must be mindful of the ecological effects and mitigate whenever reasonable, any impacts upon the community at large. Similarly, the facilitation of other industries in support of wineries and breweries, such as the ride-sharing economy and incorporation of distilleries into the promotion of Virginia as a tourism product, should also be considered.

A Digital Guide for the Digital Age

Independent vendors and entities have back-filled the mobile experience where Virginia Tourism has seemingly lacked. A recent study by comScore, a major internet data insights firm, found "Mobile has swiftly risen to become the leading digital platform, with total activity on smartphones and tablets accounting for an astounding 60 percent of digital media time spent in the U.S. The fuel driving mobile's relentless growth is primarily ***app usage."*** *(comScore, 2014).* As the majority of time is now being spent on mobile devices with smaller screens and specialized apps, the Virginia Tourism app is essentially a viewer for the print magazine. It does offer valuable insight for its featured brewers, but only refers to 11, or approximately 15%, of Virginia breweries. Creating an app that is more up-to-date, easy to read, easy to reference, and provides easy guidance would be a vast improvement over the current instance of the app. Furthermore, if working together with local DMO and industry apps, the Virginia Tourism app could provide a vastly superior product to locals and tourists alike.

Opportunities for Future Research

While quickly maturing, Virginia brewing is still a growing industry. Brewing in general lacks the research and sophistication that wine making has attracted. Advancing this understanding will benefit all future researchers in this area.

Through the course of the intercept interviews, the question of perceived quality of the beverage may help add further insight into the motivations and spending patterns of Virginia wineries and breweries. Additionally, several respondents made off-the-cuff comments that were not included in the questionnaire comparing the quality of Virginia products to California products, both wine and beer. A comparative analysis of these two geographic areas may bear fruit for researchers in these two markets, with an opportunity to explore whether or not policy and marketing practices can be learned.

A stronger, more intensive, and substantially larger follow-up to this exploratory study should delve deeper into the underlying motivations in general, and undertake an intensive economic impact of the wine and beer making industries. Analysis of the growing cider market in Virginia, when compared to the growth of craft beer, may provide further insight into future tourism growth through this other beverage type.

Understanding the Virginia beer drinker, in general, may also provide insight into future markets for breweries. For example, determining Virginians' tastes with regard to beer as a whole, incorporating macro-brews such as Budweiser and Miller with Virginia craft beers, could further enhance the position of Virginia breweries by giving the customers what they want.

Within the next several years, recently passed legislation that will allow farm breweries to operate within the state should create an interesting niche of brewers for tourists. Advertising that the feedstocks for beer have been grown on site could prove attractive to those interested in the farm-to-table movement of culinary arts, with a farm-to-bottle movement. Being able to describe the particular distinct flavors of your beer because it used ingredients with attributes that can only be found in-state and on that farm can further differentiate Virginia beer selections.

In summation, while this exploratory study established that breweries have potential to add depth and breath to a destination's tourism offerings and contribute to economic development within a region, further research is needed to more specifically articulate the impacts of these activities. The local nature of craft brewing creates an interesting juxtaposition of an increasingly popular tourism product that is equally enjoyed by members of the local community. Both inside and beyond the Commonwealth of Virginia, this dynamic surely changes with the demographics and other variables explored in this study, making for a diverse industry overall. Understanding who these visitors are, their motivations, and their impacts early-on will help event organizers and policy makers determine how to best serve their requisite stakeholders to ensure they have a net-positive impact in the future.

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VII. Appendixes

Appendix A: Questionnaire for Participants of Survey

(1) What is your gender?

(A) Female

(B) Male

(2) What is your age?

(A) Younger than 25 Years Old

(B) 25-29 Years Old

(C) 30-35 Years Old

(D) 36-44 Years Old

(E) 45-54 Years Old

(F) 55-65 Years Old

(G) 66+ Years Old

(3) What is your marital status?

(A) Single

(B) Engaged

(C) Domestic Partnership

(D) Married

(E) Separated

(F) Divorced

(G) Widow/Widower

(H) Other

(4) How many people are in your traveling group today?

0

1

2

3

4 or More

(5) What is your home zipcode?

(6) What is your total household income?

(A) $0 - $30k

(B) $31k - $60k

(C) $61k - $90k

(D) $91k - $120K

(E) $121k +

(7) What sector of employment most closely describes yours?

(A) Agriculture

(B) Manufacturing / Mining

(C) Utilities

(D) Retail

(E) Transportation

(F) IT

(G) Finance/Insurance

(H) Education

(I) Professional services

(J) Health Care

(K) Travel & Tourism

(L) Government

(M) Other

(N) Retired

(O) Student

(P) Unemployed

(Q) At Home Parent

(8) How would you describe your ethnicity?

(A) American Indian/Native American

(B) Asian

(C) Black/African American

(D) Hispanic/Latino

(E) White/Caucasian

(F) Pacific Islander

(G) Other

(9) What is your highest level of education achieved?

(A) Gradeschool

(B) High School

(C) Associates Degree

(D) Bachelors Degree

(E) A graduate degree

(10) How many times have you visited Virginia breweries in the last year?

(A) 0 Times

(B) 1-3 Times

(C) 4-6 Times

(D) 7 or More Times

(11) How many times have you visited Virginia wineries in the last year?

(A) 0 Times

(B) 1-3 Times

(C) 4-6 Times

(D) 7 or More Times

(12) How many times had you visited this destination previously?

(A) This was my first visit.

(B) 1-3 previous visits.

(C) 4 or more previous visits

(13) How many other Virginia Breweries or Wineries are you visiting today, in addition to this one?

(A) This is the only one.

(B) One other brewery.

(C) One other winery.

(D) 2-3 more wineries.

(E) 2-3 more breweries.

(F) A mix of 2-3 more wineries and breweries.

(G) 4 or more breweries.

(H) 4 or more wineries.

(I) A mix of 4 or more wineries and breweries.

(J) I don't know.

(14) When thinking of Virginia made beverages, do you prefer Virginia Craft Beer or Virginia Wine?

(A) Beer

(B) Wine

(C) Neither/other

(15) What was your primary reason for visiting this establishment today?

(A) Education

(B) Relaxation

(C) Group Event

(D) Other

(16) Is your visit today part of an overnight trip?

Yes

No

(16a) How many nights are you traveling for on your current trip?

(A) 1 night

(B) 2 nights

(C) 3-5 nights

(D) 6 nights to 13 nights

(E) 14+ nights

(F) A month or longer

(16b) When traveling for similar purposes like today, what type of hotel do you typically stay at?

(A) Economy, like EconoLodge, Days Inn, Motel 6, etc

(B) Midscale, like Candlewood Suites, La Quinta, Quality Inn, etc

(C) Upper Midscale, like Comfort Inn, Hampton Inn, Holiday Inn, Holiday Inn Express, etc

(D) Upscale, like Courtyard by Marriott, Crowne Plaza, Hilton Garden Inn, etc

(17) Regarding other kinds of spending, please consider your spending on a per person per day basis.

	Not Applicable	Under $10 per day	$11-$25 per day	$25+ per day	$100+ per day
Beverage purchased at the winery or brewery					
Restaurants					
Other attractions, like parks or other tourist locations					
Souvenirs or crafts					
Gas or other transportation cost					
Parking					
Entertainment					
Other					

(E) Upper Upscale, like Hilton, Marriott, Sheraton, Hyatt, etc

(F) Luxury, like Ritz Carlton, St. Regis, Four Seasons, etc

(18) What is your motivation for your previously mentioned purchases such as beverages, food, souveniers, etc?

Day Trip with Friends
Romantic day trip
Enjoy visiting breweries/wineries myself
Business Functions
Other, please explain

(19) Thank you for completing the survey. Do you have any feedback regarding survey questions, question order, survey length, or any other thoughts to share?

Appendix B: Information Sheet Provided to Participants

Information Sheet about the Research Study

Virginia Craft Beer and Winery Tourism: Visitor and Spending Behavior Profiles

of Beverage Tourism in the Commonwealth of Virginia

{IRB #091451}

You are invited to participate in a research study under the direction of Dr. Sheryl Elliott of the Department of Tourism Studies, George Washington University (GWU). Taking part in this research is entirely voluntary.

The purpose of this study is to *determine demographic and spending similarities and differences of winery and brewery tourists in Virginia.*

If you choose to take part in this study, you will *be completing a questionnaire with the investigator*. The total amount of time you will spend in connection with this study is *approximately 3 minutes.* You may refuse to answer any of the questions and you may stop your participation in this study at any time.

Possible risks or discomforts you could experience during this study include: psychological stress from the question and answer period.

You will not benefit directly from your participation in the study. The benefits to science and humankind that might result from this study are helping Virginia brewers and vintners better understand their clients, festival marketers, and satisfaction for how brewery tourists compare to brewery visitors.

Every effort will be made to keep your information confidential, however, this can not be guaranteed. *No personal identifying information will be collected from you.* If results of this research study are reported in journals or at scientific meetings, the people who participated in this study will not be named or identified.

The Office of Human Research of George Washington University, at telephone number (202) 994-2715, can provide further information about your rights as a research participant. Further information regarding this study may be obtained by contacting Boyd Harrison, the graduate student who is managing this study, at boharri1@gwu.edu

To ensure anonymity your signature is not required, unless you prefer to sign it. Your willingness to participate in this research study is implied if you proceed.

*Please keep a copy of this document in case you want to read it again.

Appendix C: Interviewer Scripts

- **ORAL SCRIPT – LEAD RESEARCHER**

Hello, my name is [INSERT FULL NAME]. I am a George Washington University student. As part of my studies in Tourism, I am conducting a research study about who Virginia brewery and winery visitors are, and how they spend money while visiting.

I have a brief survey that would take about 5 minutes. Your participation is entirely voluntary; you may skip any questions that you don't want to answer. No personally identifying information is being collected. Do you have any questions about the research study?

Are you ready to begin?

[after survey completion]

Thank you for your participation in this research study. If you have any questions later on you may reach the lead investigator by email listed on the information sheet.

- **ORAL SCRIPT – RESEARCH ASSISTANT**

Hello, my name is [INSERT FULL NAME]. I am assisting a George Washington University student with conducting a research study about who Virginia brewery and winery visitors are, and how they spend money while visiting.

I have a brief survey that would take about 5 minutes. Your participation is entirely voluntary; you may skip any questions that you don't want to answer. No personally identifying information is being collected. Do you have any questions about the research study?

Are you ready to begin?

[after survey completion]

Thank you for your participation in this research study. If you have any questions later on you may reach the lead investigator by email listed on the information sheet.