



# **Economic Impact Of The Walla Walla Wine Industry**

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# Overview

- **Introductory Comments**
- **Winery Visitor Survey**
- **Winery & Tasting Room Survey**
- **Economic Impact Analysis**
- **Concluding Comments**
- **The text of the report for this project is at:**

<http://sites.wvcc.edu/wwwvc/wp-content/uploads/sites/13/2019/05/Economic-Impact-of-WW-Wine-Industry.pdf>

# Acknowledgements

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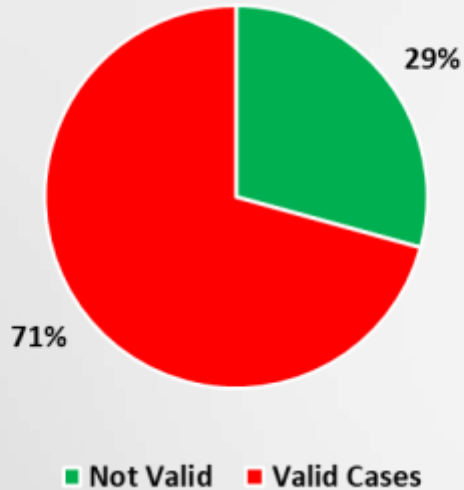
- The authors thank the financial supporters of the project: Walla Walla Community College, the City of Walla Walla, the Port of Walla Walla, Visit Walla Walla, and the Walla Walla Wine Alliance.
- The study would not have been possible without strong support for survey research from wineries, tasting rooms, and visitors to the local area.

# Visitor Survey Approach

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- **Wineries and tasting rooms provided e-mail contact information on visitors to GMA Research.**
- **GMA Research sent an online request for these visitors to participate in a survey regarding expenditures, characteristics of visitor groups, and selected other information regarding their visitor experiences.**
- **We received 728 responses to this survey.**

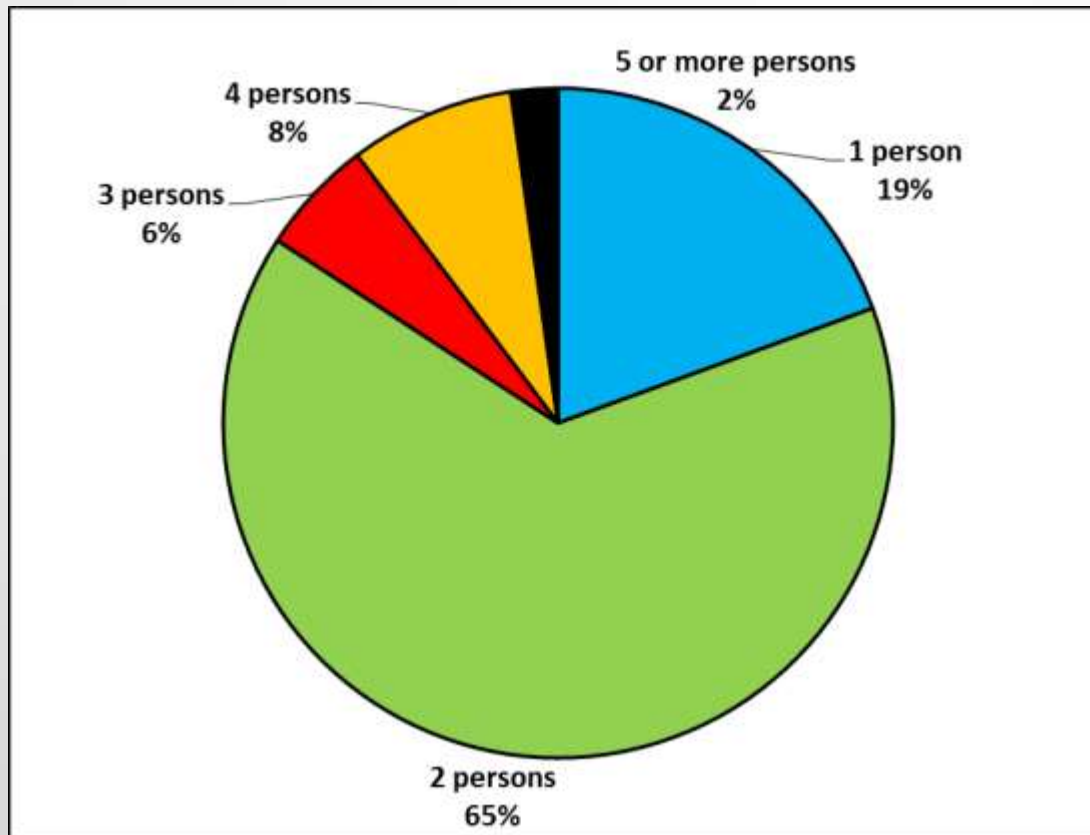
# Visitor Survey Sample Classification



		% of Total Not Valid
Lack of Data	181	85.0%
Data Issue	19	8.9%
Trip Purpose	93	43.7%
Total Not Valid	213	

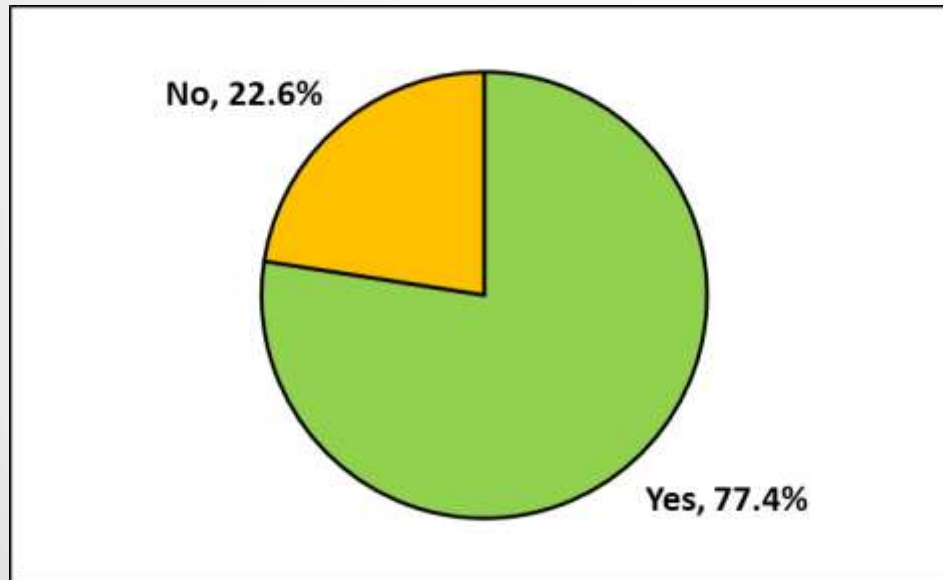
There were 515 valid cases to this survey. Cases deemed not valid had multiple issues. Valid cases had to include data on visitor spending and how many people were in their groups. 181 responses did not include these data. Some people responded with data that were simply not feasible—a group size that could not be analyzed, or expenditures that were not feasible (19 cases). Another group of people identified trip purposes that were not related to visiting wineries or tasting rooms (93 cases). In some cases these reasons were overlapping, resulting in 29% of total responses being classified as not valid. Even after these exclusions, the survey had a robust number of responses, yielding excellent results.

# Number Of Household Members In Visits To Walla Walla



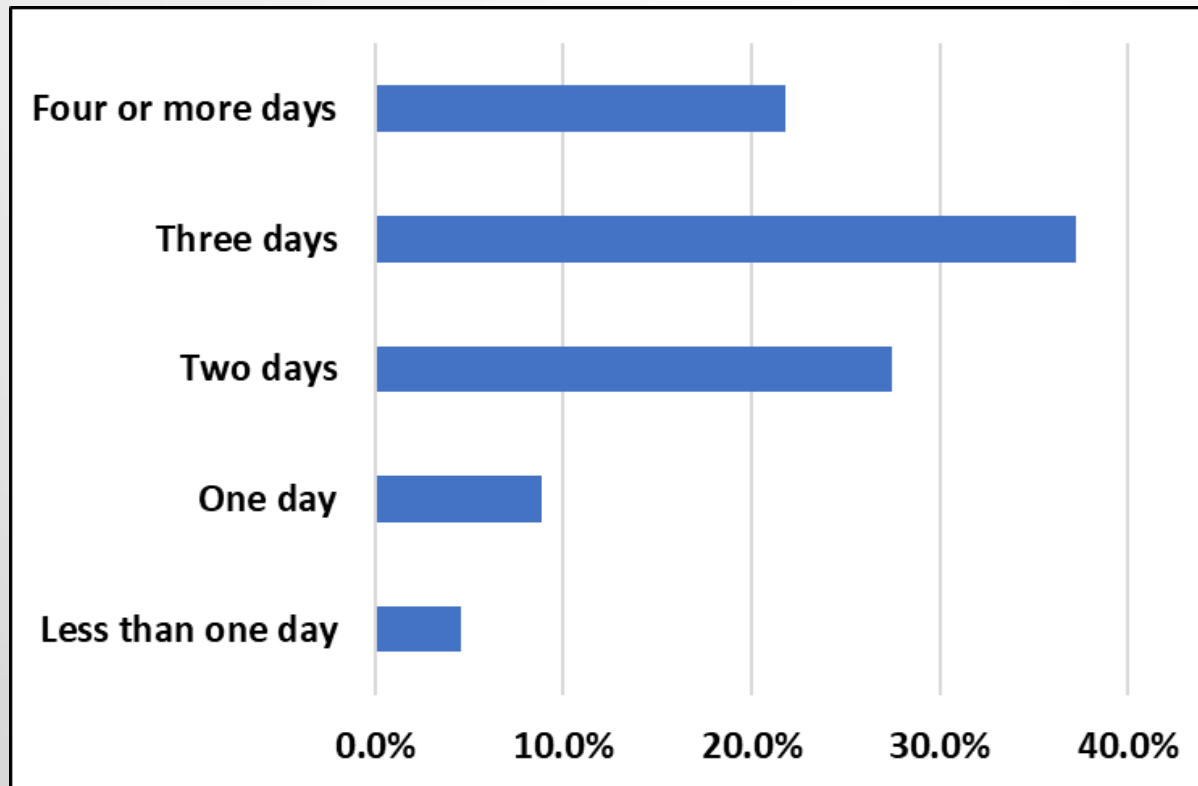
Based on Valid Sample (N=515)

# Was The Primary Trip Reason Wine-Related?



77% of all visitors said their primary trip reason was wine-related. 23% had other trip purposes, such as business, or visiting a family member attending a local college. Most of those who said their primary trip purpose was not wine related were placed in the not valid sample.

# Length Of Stay In The Walla Walla Region



The mean length of stay was 2.82 days.  
The median and mode were both 3 days.

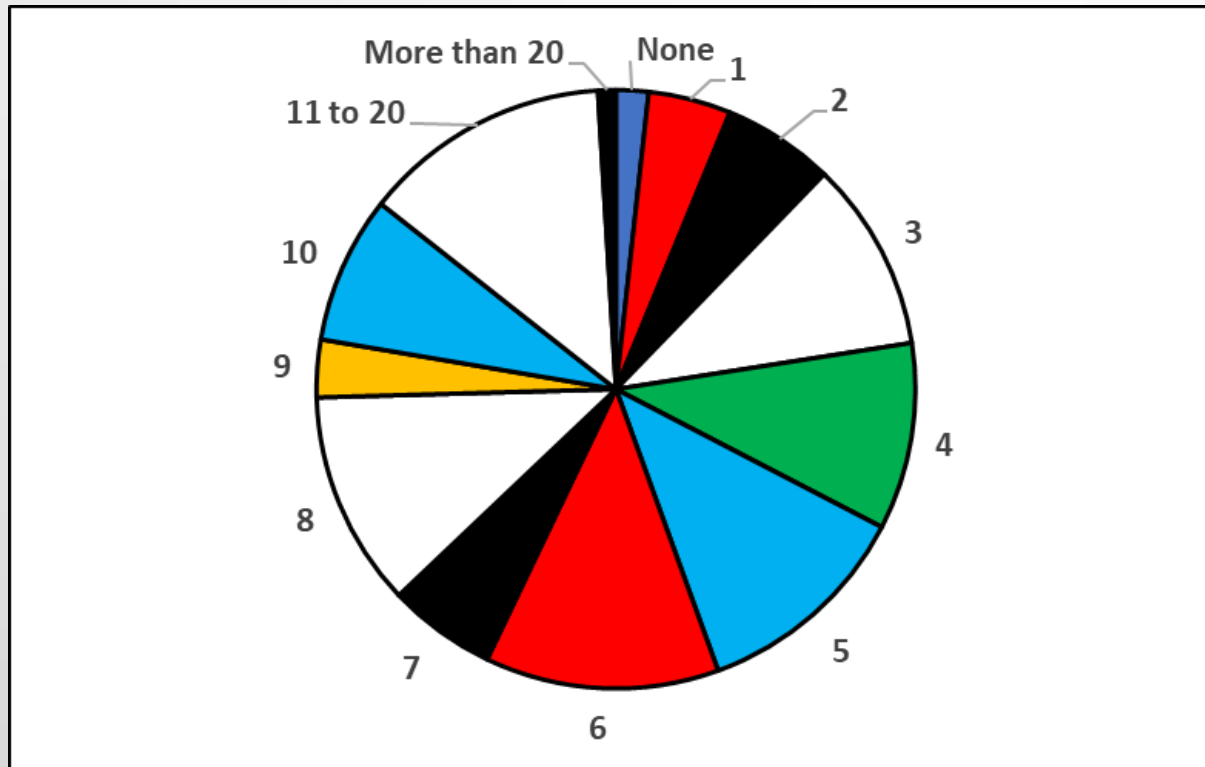


# Attributes Visitors Associate With The Walla Walla Valley

Upscale and classy	15.2%	Offers a great variety of wines worth trying	61.9%
Natural Beauty	55.3%	Consistent and reliable quality wines	60.5%
Friendly, family run wineries	62.7%	Hard to find wines	17.4%
Fun small towns	47.0%	Good value wines	41.9%
Fine restaurants and food	57.5%	Bordeaux varieties and blends	32.9%
Interesting non-wine activities	13.1%	Interesting discovery wines and wineries	52.6%
Undiscovered high quality wines	43.4%	Informal and unpretentious	56.9%
Hard to get to	10.8%	Great for Rhone varieties	22.0%
Often meet the owners or winemaker	56.3%	Charming town	75.6%
Good hotel and places to stay	33.7%	Don't have to venture very far for wineries	52.9%
Affordable, not expensive	37.5%	Undiscovered high quality wines (2)	41.2%

# of Attributes	# of Responses	% of Non-zero Responses
1-3	53	8.1%
4-7	172	26.2%
8-9	115	17.5%
10-14	223	34.0%
15-19	81	12.3%
20+	12	1.8%

# Number Of Wineries Visited On Last Wine-related Visit To Walla Walla



Average 6.9  
Median 6  
Mode 11-20

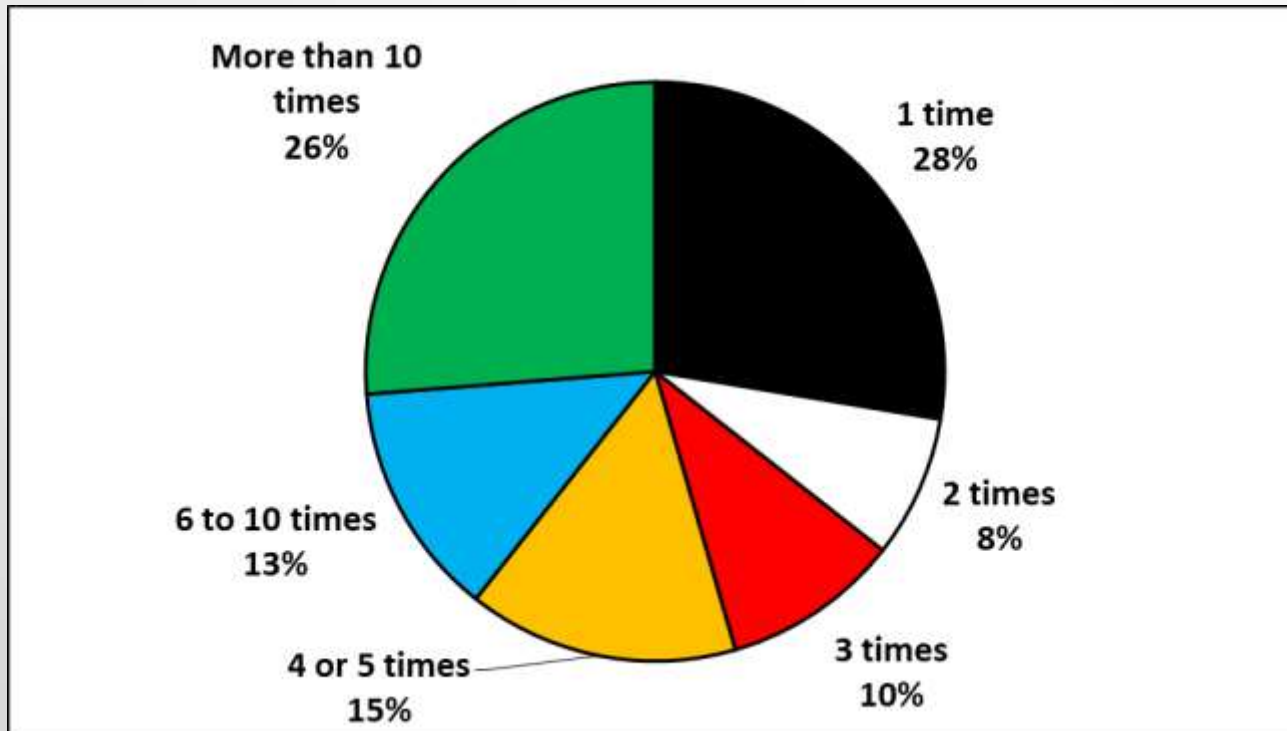
Length of stay is highly correlated with the number of wineries visited.

# Year Of First Visit To Walla Walla For Wine-related Activities

<b>2009 or before</b>	<b>39%</b>
<b>2010-2012</b>	<b>13%</b>
<b>2013-2015</b>	<b>15%</b>
<b>2016</b>	<b>9%</b>
<b>2017</b>	<b>11%</b>
<b>2018</b>	<b>14%</b>
<b>Total</b>	<b>100%</b>

Median – 2012  
Mode - 2009

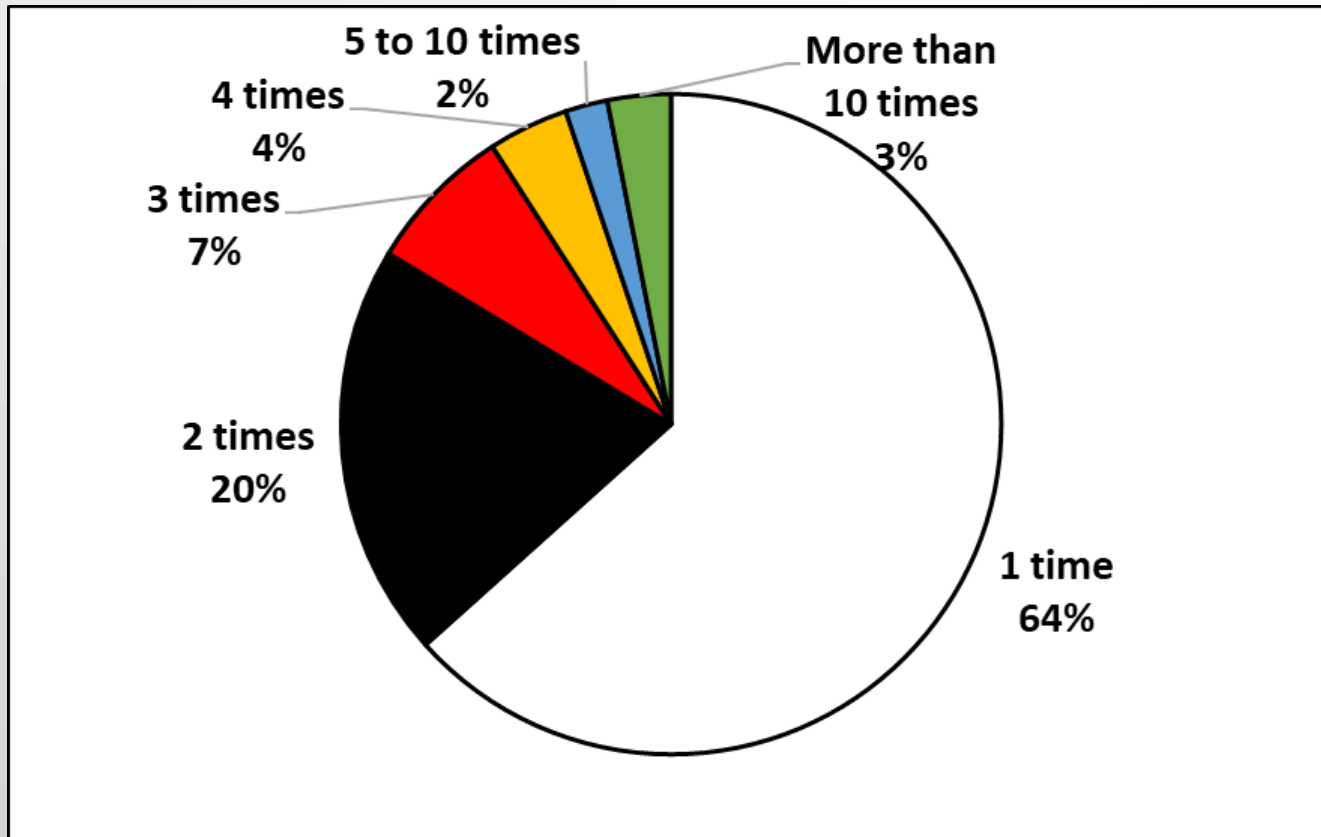
# Since Your First Visit, How Many Times Have You Come To Walla Walla For Wine-related Activities?



**Mean – 5.16    Median - 4    Mode - 1**

There is a statistically significant correlation between the year of a first visit and the total number of visits to Walla Walla for wine-related activities.

# How Many Times Each Year Do You Visit Walla Walla For Wine-related Activities?

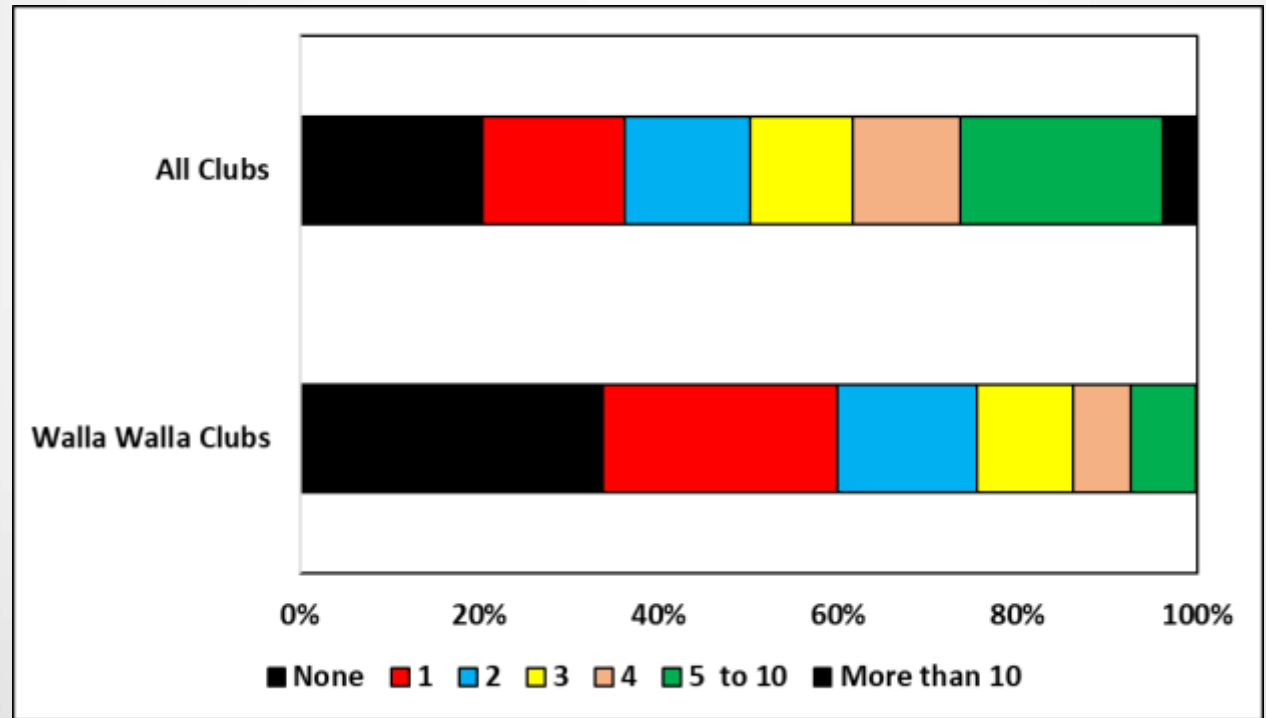


Mean is 1.77; mode and median are both 1.

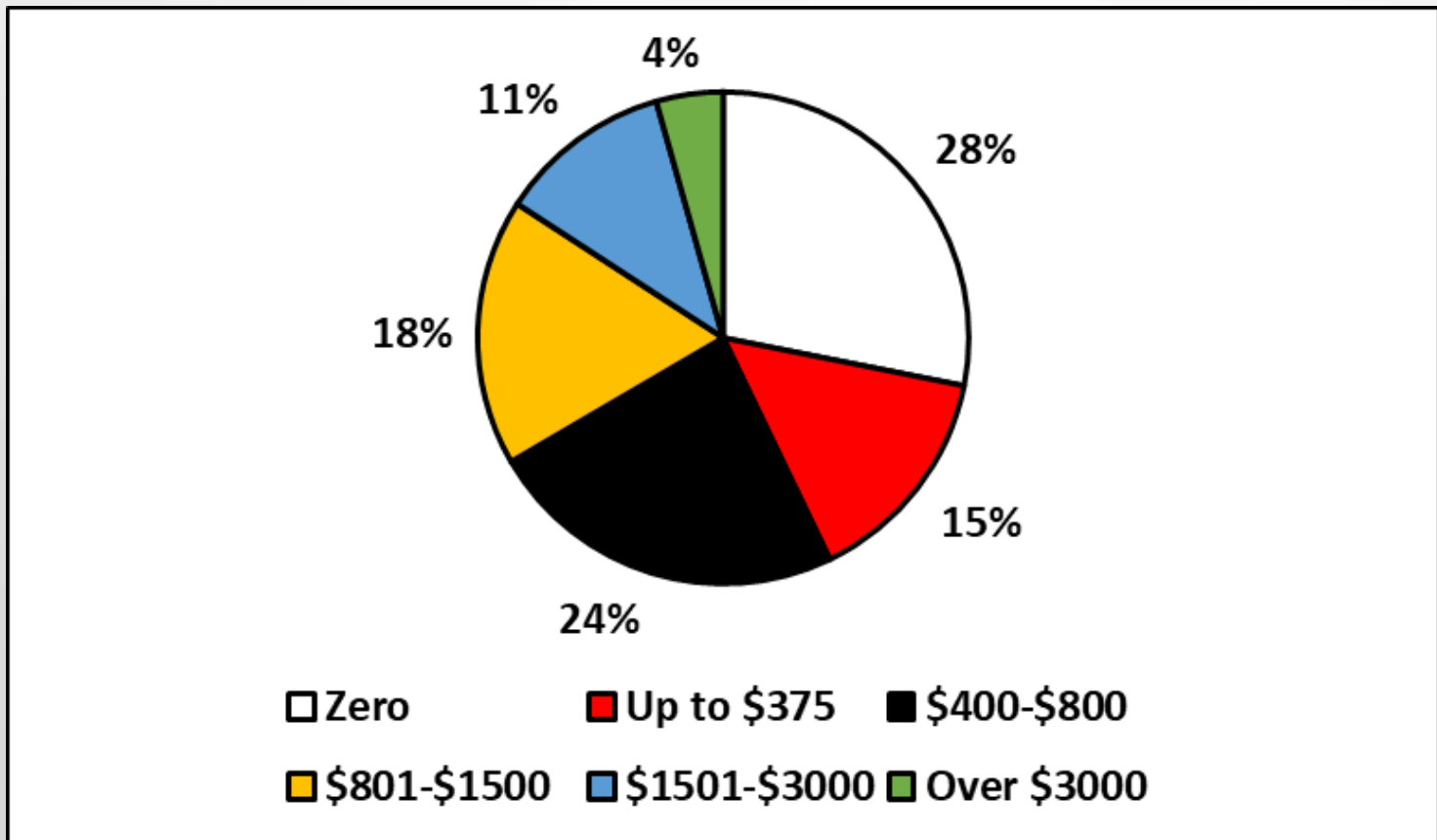
# How Many Wine Clubs Do You Belong To?

Total Mean 3.16  
Total Median 2.5  
Total Mode 0

Walla Walla Mean  
1.62  
Walla Walla Median 1  
Walla Wall Mode 0

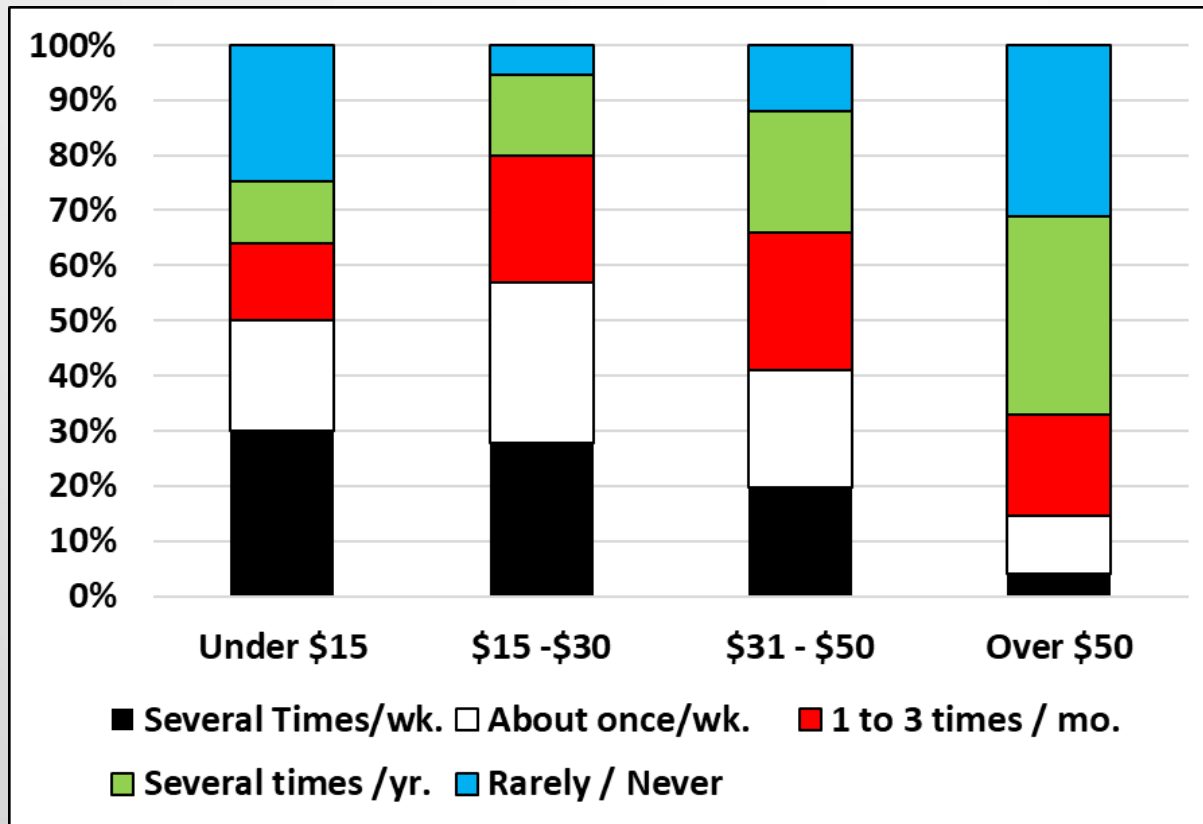


# How Much Did You Spend On Wine Purchased From Walla Walla Wine Clubs In The Past Year?



Mean \$886    Median \$500

# How Often Do You Consume Wine In Each Of These Price Segments?

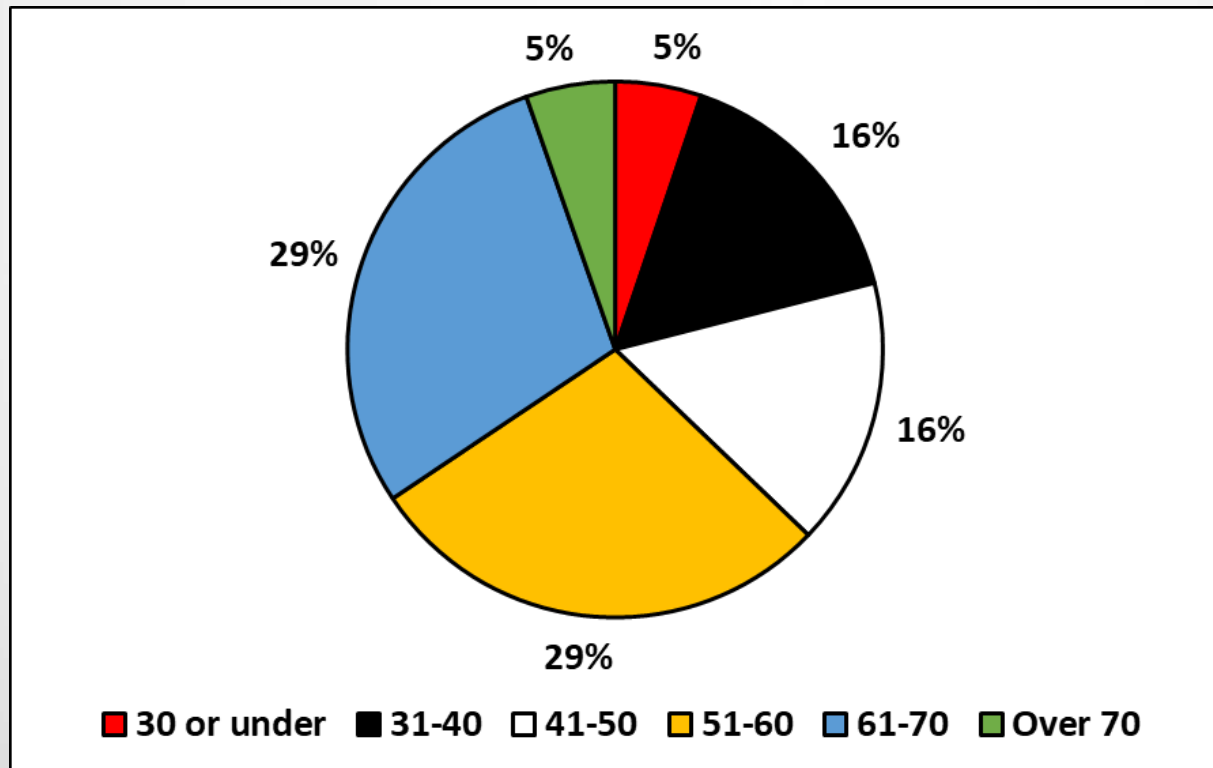
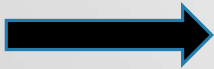


About 40% of respondents did not answer the question with regard to wine in the over \$50 per bottle price segment.



# Age Distribution, Gender & Nationality Of Visitors

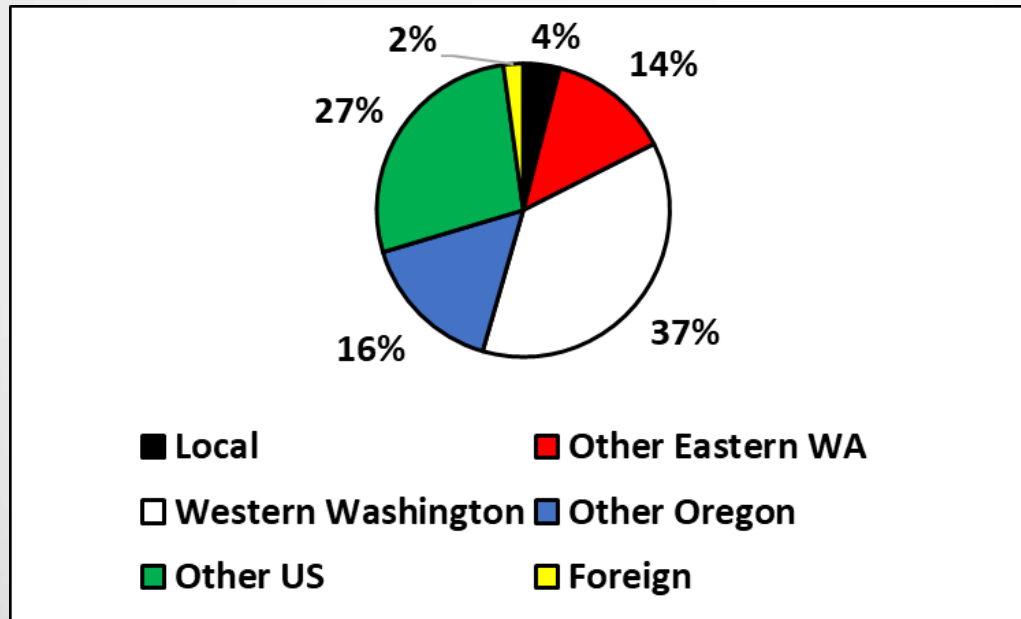
Age  
Distribution of  
Survey  
Respondents



Visitors were almost evenly split between males (48%) and females (52%).

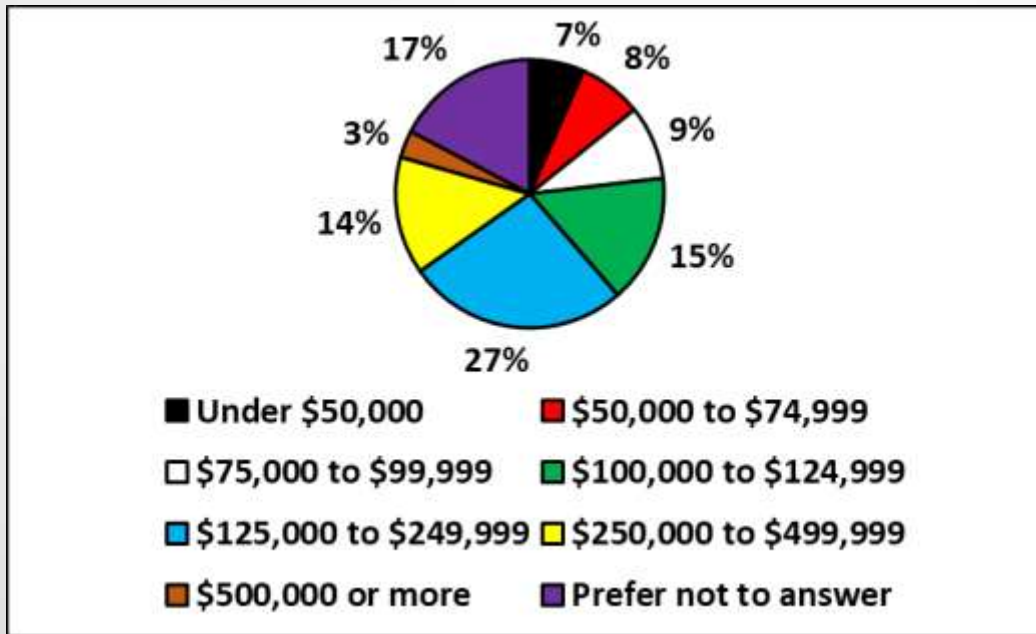
They were mostly U.S. residents (97.6%), but foreign visitors from Canada, the United Kingdom, Japan, France, Switzerland, and New Zealand answered the survey.

# Geographic Origin Of Visitors



Washington accounts for just over 50% of visitors, Oregon for about 16%, and about 30% came from other states and other countries.

# Annual Income Of Visitors



Visitors reporting their income are from upper income categories, but a significant cohort of respondents did not wish to answer this question.

# Winery And Tasting Room Survey

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- The survey of wineries and tasting rooms was coordinated by Walla Walla Community College.
- A total of 94 wineries and seven tasting rooms were included in this survey. Some 78 wineries responded to our survey. Data from Reference USA were used to develop data for non-respondents.
- The winery and tasting room surveys were relatively short; lessons learned in this study suggest that future studies could expand data collection efforts.

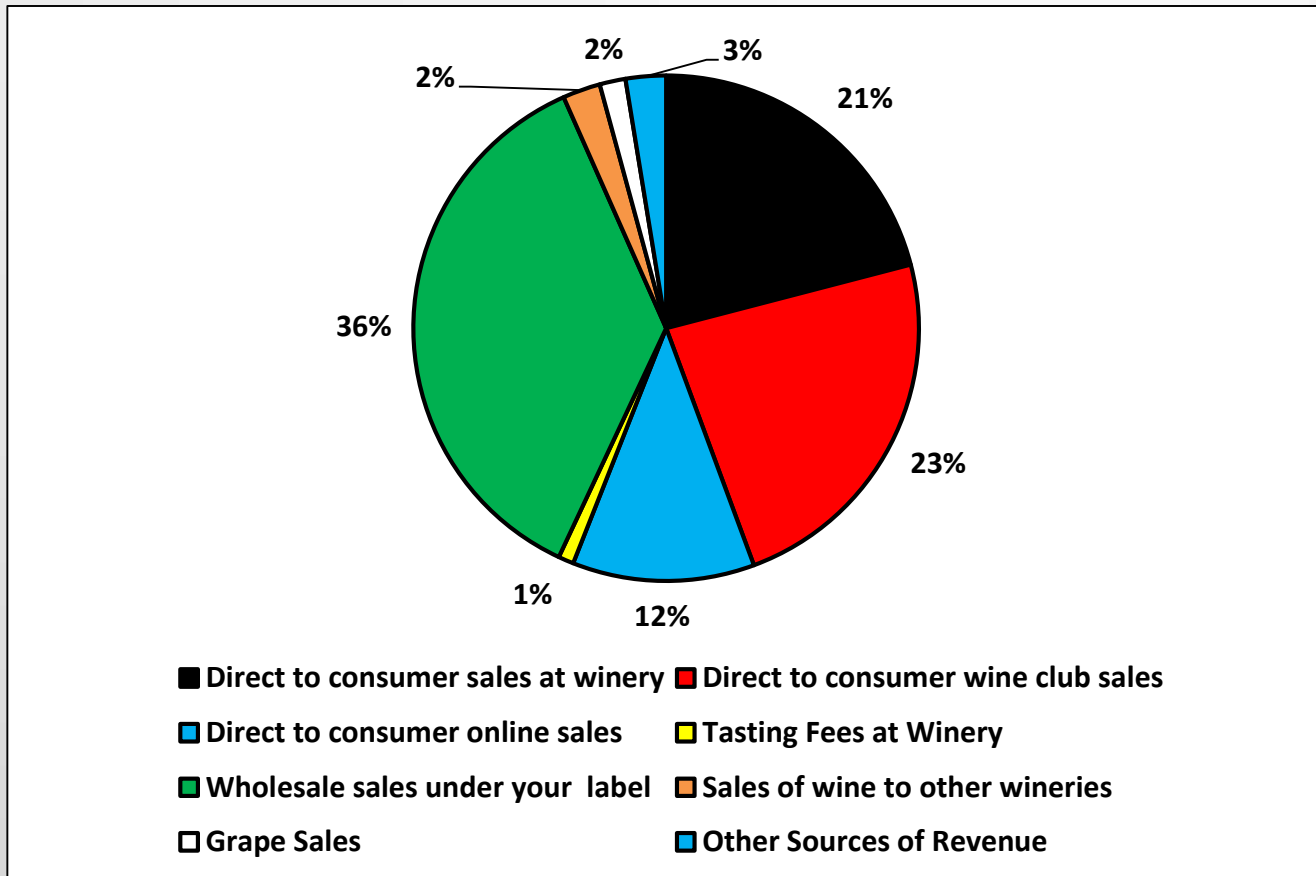
# Activities Of Walla Walla Wineries

Made wine from grapes that you grew, and sold it under your label	57.7%
Made wine from grapes that you purchased, and sold under your label	80.8%
Sold grapes to other wineries	23.1%
Sold wine to other wineries	26.9%
Other production activities, e.g. custom crush, consulting services, etc.	26.9%

Other production activities were diversified. Examples include the following:

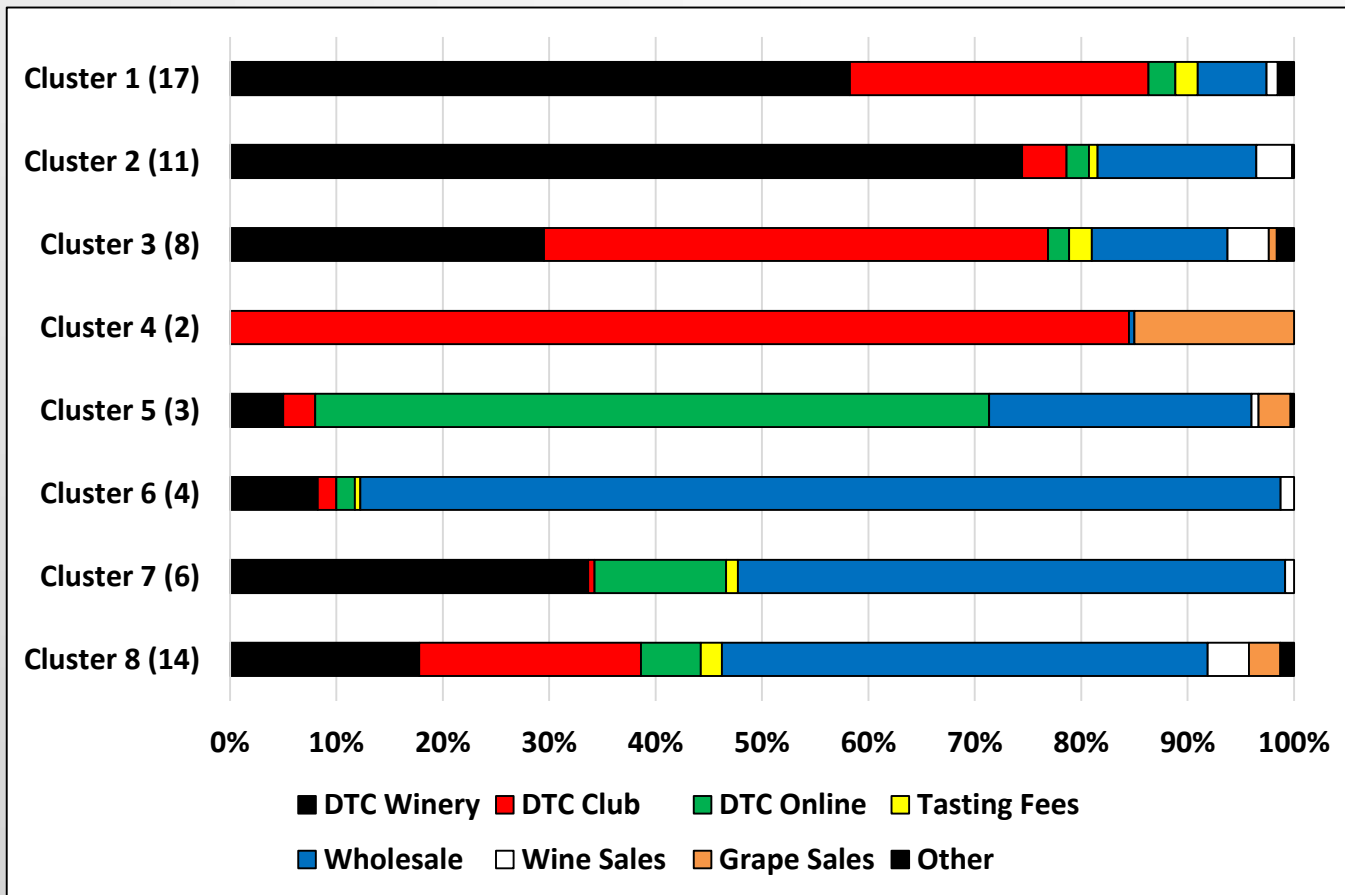
- Consulting winemaker; wine making consulting services
- Custom crush clients, custom crush
- Bought finished wine and sold it
- Bottled wine which was purchased in bulk
- About half of the wineries citing other production activity provided text regarding this activity

# Sources Of Revenue To Wineries



Direct to consumer sales account for 56% of revenues, followed by 36% in wholesale sales under the winery label.

# Winery Revenue Patterns: A Cluster Analysis



This graphic documents widely-varying patterns of sources of revenue to Walla Walla region wineries. Some are dependent on DTC markets, others on wholesaling, and yet others on a broader mix of these markets.

# Winery And Tasting Room Revenue, Employment, And Wages & Salaries (\$ millions)

Winery Revenue	\$	115.31	Tasting Room Revenue	\$	8.360
Employment		495	Margin	\$	2.56
Wages & Salaries	\$	20.22	Employment		24
			Wages & Salaries		0.598

Data on winery and tasting room revenues, employment, and wages & salaries came from the survey, and were supplemented by data from Reference USA for non-respondents. Data on employment were used to weight values for revenue and Wages and salaries for non-respondents.

Tasting room sales of wine to customers are modelled in the impact analysis by using an estimate of the margins (markups) on their sales, from the wholesale value of the wine they distribute. U.S. Census Bureau data on retail margins were used to make these estimates.



# Estimated Annual Visits To Wineries And Tasting Rooms

- Wineries and tasting rooms were asked how many days per year their tasting rooms were open, and how many people on average came to them on the days they were open.
- We had to extrapolate these estimates in the cases of non-respondents to the survey. We used employment estimates for non-respondents as the basis for extrapolation; the percentage was 29%.
- These data were used in the estimation of total visitor expenditures.

Winery Visits	439,074
Tasting Room Visits	64,800
Total	503,874

# Economic Impact Analysis

- Results of the visitor, winery, and tasting room surveys were used with a version of the 2007 Washington State input-output model to estimate economic impacts.
- The Washington State input-output model was modified through the use of the location quotient method to approximate Walla Walla and Umatilla County economic structure.
- Economic impact measures were calculated or output (sales), labor income, employment, and selected taxes.
- Ideally, the modelling would have utilized input-output data for Umatilla County, but these data were not available for the purposes of this analysis. It is felt that the Washington data provide reasonable estimates of economic impact in the Walla Walla wine industry and its visitors.

# Winery And Wine Tasting Room Visitor Expenditures (1)

- The survey of wineries and tasting rooms produced an estimate of annual visitation of 503,874 persons.
- The survey of winery and tasting room visitors estimated that they visited an average of 6.9 wineries or tasting rooms on a typical visit.
- Dividing total annual visitation by 6.9 visits and 365 days in the year, yields an average of 200 visitors per day. The visitor survey reports an average visitor group to be two persons, which implies 100 groups of visitors per day to the Walla Walla region on an annual average basis. Clearly, this number varies by time of year.

# Winery And Wine Tasting Room Visitor Expenditures (2)

- Total Winery and Tasting Room visitor expenditures are estimated to be \$145.2 million.
- These expenditures were allocated to input-output model categories using accounting principles standard for modelling of this type.

<b>Total_spending</b>	<b>\$ 145.166</b>
<b>Wine_purchases</b>	<b>59.592</b>
<b>Wine_tasting</b>	<b>3.260</b>
<b>Shopping</b>	<b>6.076</b>
<b>Wine_events</b>	<b>2.308</b>
<b>Winery_Tours</b>	<b>1.118</b>
<b>Auto_travel</b>	<b>11.293</b>
<b>Food_beverages</b>	<b>21.483</b>
<b>Entertainment</b>	<b>1.610</b>
<b>Lodging</b>	<b>28.510</b>
<b>Air_travel</b>	<b>9.040</b>
<b>Other_Costs</b>	<b>0.877</b>

# Direct Purchase Estimation And Impact Estimation Procedures

- The version of the input-output model used in this research has two tables used to set up the computation of direct, indirect, and induced impacts.
- The first table contains sales, employment, labor income and other value-added for wineries and wine tasting rooms.
- The second table contains estimated direct purchases by wineries, wine tasting rooms, and wine-related visitors. The latter involve a reclassification of data reported above into input-output model categories.
- The input-output model spreadsheet takes these inputs, and computes indirect and induced impacts, as measured by sales (revenue), employment, labor income, and selected taxes.

# Impact Estimates (1)

- The table below presents estimated economic impacts of \$430.3 million in sales, 2,484 jobs, and \$114.1 million in labor income related to Walla Walla wineries and tasting rooms in 2018.
- More detailed sectoral data are presented in the project report.
- It should be noted that impact model has state and local government endogenous, an extension to the model found on the Washington State Office of Financial Management website. State and local government expenditures were considered to be a function of other value added in this formulation.

	Sales	Employment	Labor Income
Natural Resources and Utilities	\$ 32.420	255	\$ 11.237
Construction and Manufacturing	144.986	564	29.513
Retail and Wholesale Trade	27.400	218	9.963
Producer and Transport Services	33.284	151	10.388
Consumer Services	92.978	999	33.528
State & Local Govt	99.216	298	19.510
Total	\$ 430.285	2,484	\$ 114.139

# Impact Estimates (2)

- Selected Tax Revenue impacts were calculated as follows, in \$Millions.
- Direct payments of sales taxes to state and local governments were based on survey data from winery visitors.
- Indirect sales taxes were calculated using data on estimated labor income from the input-output model, and data from the Washington State Office of the Forecast Council on sales tax collections as a share of personal income. US Bureau of Economic Analysis data were used to estimate the share of labor income as a fraction of personal income.
- The level of Business and Occupation tax collections were based on WA State Department of Revenue estimates of these tax collections as a share of total revenue.
- Local hotel motel tax collections were based on data supplied from Dr. Velluzzi; it should be noted that these are tax collections in addition to sales taxes paid for hotel - motel accommodations.

<b>Direct Sales Tax - State</b>	<b>\$</b>	<b>7.412</b>
<b>Direct Sales Tax - Local</b>		<b>2.259</b>
<b>Indirect Sales Tax - State as % of labor Y</b>		<b>3.585</b>
<b>Indirect Sales Tax - Local as a % of Labor Y</b>		<b>1.103</b>
<b>B&amp;O Tax - state</b>		<b>2.490</b>
<b>Hotel- Motel Tax</b>		<b>0.570</b>
<b>Total</b>	<b>\$</b>	<b>17.418</b>

# Impact Estimates (3) – Wineries & Tasting Rooms Only (\$ millions)

- In response to a question from one of the key winery participants in this study, we have made a separate estimate of the economic impact of wineries and tasting rooms
- These impacts are about 60% of the values reported in the last two slides

	Sales	Employment	Labor Income
Natural Resources and Utilities	\$ 28.993	247	\$ 10.275
Construction and Manufacturing	135.603	539	27.840
Retail and Wholesale Trade	14.695	113	5.139
Producer and Transport Services	17.651	86	5.781
Consumer Services	22.926	204	8.874
State & Local Govt	73.417	220	14.437
<b>Total</b>	<b>\$ 293.286</b>	<b>1,409</b>	<b>\$ 72.347</b>

<b>Winery and Tasting Room Tax Impacts</b>	
Indirect Sales Tax - State as % of labor Y	\$ 2.272
Indirect Sales Tax - Local as a % of Labor Y	0.699
B&O Tax - state	1.545
<b>Total</b>	<b>\$ 4.517</b>



# Concluding Comments

- This study is based on robust surveys of wineries, wine tasting rooms, and visitors to the Walla Walla region.
- It is the first survey-based estimate of this type for this region.
- Future studies could extend the questionnaires used in this study in several directions:
  - Wineries could be queried in more detail about their purchasing patterns, and sales distributions.
  - Visitors could be queried in more detail about timing of direct purchases.
- The authors again thank the sponsors of this study, and the wineries, tasting rooms, and visitors to the Walla Walla region, who have made this study possible.