



## Overview of the 2020 Vineyard and Winery Report Methods August 2021

As part of its research mandate, the Oregon Wine Board (OWB) commissions an annual Oregon Vineyard and Winery Report. These studies were historically conducted by the U.S. Department of Agriculture. Between 2012 and 2016, the Southern Oregon University Research Center (SOURCE) produced the reports. Since 2017, the Oregon Wine Board has contracted the University of Oregon's Institute for Policy Research and Engagement (IPRE) to prepare the report.

### Intent of this Paper

The purpose of this overview is to provide readers who desire more information about the data collection and statistical modeling procedures used to compile the annual Oregon Vineyard and Winery Report with a general overview. The intent is not to provide a detailed description of all the methods and assumptions used to develop the report; rather we aim to answer a few basic questions that we commonly receive regarding the report. The overview assumes some level of knowledge about data collection and statistical modeling.

### Data Collection

This project intends to collect data from all wineries and wine grape producers in the state of Oregon. The intent is to document the scope and breadth of Oregon's wine industry in each vintage and over time. Thus, the project is effectively a large-scale data collection and analysis effort that involves requesting data from every known vineyard and winery in Oregon. A big part of this effort is working with wineries and wine grape producers to encourage them to respond.

With guidance from OWB, IPRE develops and administers the winery and wine grape producer data collection instrument. IPRE uses the systematic approach to design and analysis developed by Dr. Don Dillman at Washington State University called the "[Tailored Design Method for Mail and Internet Surveys](#)." Dillman advocates a structured administration process with structured follow-up to boost response rates. IPRE uses a data collection instrument that was developed by USDA and refined by both SOU and IPRE (see appendix for the data collection instrument).

The process begins by building a database of all known wineries and vineyards in the state. IPRE uses data from the [Oregon Liquor Control Commission](#) (OLCC) on licensed producers supplemented by data from Wines & Vines, a private data management company. No complete central database exists of vineyards. IPRE relies on lists previously developed for the study, information from the Oregon Wine Board and its partner associations, lists from [Wines & Vines Analytics](#) and [Everyvine](#) as well as Internet research to develop the list of vineyards. IPRE now has acreage data on over 1,000 vineyards totaling over 31,000 acres. IPRE expends considerable effort in reviewing and validating the lists each year. The unit of analysis is individual producers (business entities). Building and maintaining the database is a big part of the project—given how dynamic the wine industry is. Table 1 shows the number of wineries and vineyards in Oregon by region.

**Table 1. Vineyards and Wineries in Oregon, by Region, 2020**

Region	Vineyards		Wineries	
	Number	Percent	Number	Percent
North Willamette Valley	808	59.0%	650	65.3%
South Willamette Valley	123	9.0%	86	8.6%
Umpqua Valley	82	6.0%	53	5.3%
Rogue Valley	205	15.0%	122	12.3%
Columbia River	135	9.9%	64	6.4%
Other Oregon	17	1.2%	20	2.0%
<b>Total</b>	<b>1,370</b>	<b>100.0%</b>	<b>995</b>	<b>100.0%</b>

IPRE’s database includes 1,903 businesses. It is important to note the overlap that exists in the population—many entities have both a vineyard and winery; some are just vineyards; some are just wineries. A further complication emerges for vineyards and wineries that are linked, but do not share the same name. This is further complicated by the fact that the vineyard section disaggregates results by both region and variety. Many growers produce more than one variety and many wineries produce more than one type of wine.

IPRE uses the online platform Qualtrics to collect data through a secure portal. Qualtrics allows management of all aspects of the administration and provides data on who provided data, how long it took, as well as managing follow-up correspondence sending reminders only to individuals that have not provided data. Producers for which IPRE has an email contact receive a solicitation to submit data. to manage the mailings. In 2020, we contacted individuals on the list up to 20 times. The Oregon Wine Board also shared links to the data collection instrument several times to ensure that any producers that IPRE did not have listed in its database had an opportunity to respond.

The data collection instrument is broadly divided into two sections: (1) the vineyard section; and (2) the winery section. It uses conditional branching to direct respondents to appropriate areas of the data collection instrument. For example, if an entity does not grow grapes, the respondent will skip the vineyard section. Appendix A includes a copy of the data collection instrument.

## Analysis

The Vineyard and Winery Report is based on a sample. The results presented in the 2020 Vineyard and Winery Report were developed through statistical models that weighted up the sample data to represent estimates of the scope and extent of production across many different variables.

IPRE received 486 responses in our 2020 data collection process. This represented a decrease from the 557 responses in 2019. The decrease may be related to the significant impacts of the 2020 wildfires and COVID-19 pandemic on the industry. The overall response rate is limited as an indicator of the quality of the data IPRE uses to prepare the report. The industry is composed of businesses of all sizes, with a small number of large businesses that account for a significant proportion of total production.

Table 2 shows the number of data points collected for vineyards for all varieties by region (note that vineyards that grow more than one variety provide data for all varieties grown). For example, if a vineyard in the North Willamette Valley reported growing three varieties, it would account for three of the 452

data points collected for that region. These data points provide the foundation for Tables 1-3 in the vineyard section.

**Table 2. Vineyard Section – Number of Data Points by Region for All Varieties**

<b>Region</b>	<b>Data Points</b>
North Willamette Valley	452
South Willamette Valley	122
Umpqua Valley	66
Rogue Valley	177
Columbia River	60
Other Oregon	21
<b>Total</b>	<b>898</b>

Producers reported 10,034 planted acres, or 25.4% of the 39,531 estimated total planted acres. The data reported for 2020 are not the sole source of data IPRE relies on to estimate total acres – we have data on over 1,000 vineyards that documented more than 31,000 planted acres. The harvested acres and production figures are estimated using ratios based on vineyards that provided data for all three variables, and by reviewing trends observed in previous reports. The Research Team makes estimates for harvest and production for vineyards that did not provide complete data, consistent with footnote 1 of the vineyard tables (Includes estimates for incomplete responses). These methods improve the overall accuracy of the results and compensate for incomplete responses.

Table 3 shows response to the winery section by region. Overall, 429 wineries provided data for a 43% response rate. Responding wineries reported crushing 25,414 tons of grapes in 2020. This represents 39% of the estimated 65,009 tons crushed in 2019. The research team analyzes wineries by amount of production to develop industry-level models. A few large producers account for a substantial amount of overall production. The reason that 43% of wineries reported 39% of the overall crush is explained by the fact that a higher proportion of smaller producers provided data for the 2020 report.

**Table 3. Winery Section – Response Rate by Region**

<b>Variety</b>	<b>Wineries Reporting</b>	<b>Total Wineries</b>	<b>Percent Reporting</b>
North Willamette Valley	256	650	39%
South Willamette Valley	61	86	71%
Umpqua Valley	20	53	38%
Rogue Valley	55	122	45%
Columbia River	27	64	42%
Other Oregon	10	20	50%
<b>Total</b>	<b>429</b>	<b>995</b>	<b>43%</b>

## Estimates of Planted Acres by County

IPRE prepares a separate, but related, analysis each year as part of the Vineyard and Winery Report. The estimates of planted acres by county are used by Travel Oregon in their disbursement of distributed funds from the Wine Country License Plates program. The rules and description of this program, along with the

eight designated regions receiving direct fund disbursement, are described on the [Oregon Secretary of State's website](#).

The county acreage estimates are a disaggregation of the regional estimates presented in Vineyard Table 2 of the Vineyard and Winery Report. The 2020 report estimates that Oregon had 39,551 planted acres statewide. The county estimates are based on analyzing multiple data sources: (1) our cumulative database of more than 1,100 vineyards, (2) data collected for the 2020 vineyard report that requests businesses provide data on vineyards (e.g., vineyard name, county and planted acres), and acres planted by varietal. We use this data to develop a statistical model that estimates planted acres by county.

## **Limitations of the Methods and Results**

This project is basically a census – IPRE requests data from all vineyards and wineries in Oregon. Ideally, we would collect data from all producers, however, many producers do not provide data. Thus, the Oregon Vineyard and Winery Report uses a sampling methodology to model the scope of Oregon's grape and wine production. As with all studies, IPRE observes considerable year-over-year variability in the sample data. This is due to the heterogenous nature of Oregon producers. This variability is considered in our modeling but creates challenges as the results are disaggregated by region, variety and sales channels. An ongoing challenge is partial responses—many producers only provide part of the requested information, which compounds modeling challenges. IPRE is confident the industry totals presented in the report present a reasonably accurate estimate of vineyard and winery production in Oregon given what is reported. The accuracy of the data is reduced as it is disaggregated by region and other variables.

## **About the Institute for Policy Research & Engagement**

The Institute for Policy Research & Engagement (IPRE) is a research center affiliated with the Department of Planning, Public Policy, and Management at the University of Oregon. It is an interdisciplinary organization that assists Oregon communities by providing planning and technical assistance to help solve local issues and improve the quality of life for Oregon residents. The role of the IPRE is to link the skills, expertise, and innovation of higher education with the transportation, economic development, and environmental needs of communities and regions in the State of Oregon, thereby providing service to Oregon and learning opportunities to the students involved.

The University of Oregon Economic Development Administration University Center is a partnership between the Community Service Center, RAIN @ UO, the Lundquist Center for Entrepreneurship, the Oregon Business Consulting Group, and UO faculty. The UO Center provides technical assistance to organizations throughout Oregon, with a focus on innovation, entrepreneurship, and rural economic development. The UO Center seeks to align local strategies to community needs, specifically with regards to building understanding of the benefits of sustainable practices and providing technical training to capitalize on economic opportunities related to those practices. The EDC is partially funded through a grant from the U.S. Department of Commerce, Economic Development Administration.

## Appendix: Vineyard and Winery Report Data Collection Instrument



### Intro

Dear Oregon Vineyard Operator and/or Wine Producer,

Welcome to the **2020 Oregon Vineyard and Winery Production Report** form. We understand that this is a trying time for business in Oregon. The COVID-19 pandemic has affected broad swaths of Oregon's economy--including the wine industry. Collecting quality data for 2020 will help us document changes to the industry between 2019 and 2020. Regardless of whether you harvested grapes or made wine last year, we encourage you to participate in the 2020 report to ensure the highest quality data possible.

This project is being completed by the University of Oregon Institute for Policy Research and Engagement (IPRE) on behalf of the Oregon Wine Board. **The information you provide is kept confidential and secure.** NO INDIVIDUAL GROWER or WINERY DATA will be used or shared with any party outside the University of Oregon Institute for Policy Research and Engagement, except as the UO's funding agreement from the Oregon Wine Board allows to facilitate the development of future Oregon Vineyard and Wine Production Reports. Data from your business are combined with all Oregon vineyards and wineries to produce the annual Oregon Vineyard and Winery Production Report. The report provides the most complete picture of Oregon's wine production, including grape pricing, for all of the wine growing regions.

**Only one person in your organization should receive a request to complete the data form. We encourage you to talk with other people in your organization prior to inputting data and to select a single individual to complete the form or to complete it as a group. We only need one response from your organization.** The heading for each section of the census indicates the document(s) that will help you complete that section. You can download a copy of the questions [here](#).

If you have any questions regarding the census please contact Robert Parker at the University of Oregon Institute for Policy Research & Engagement by phone at 541-346-3801 or email ([rgp@uoregon.edu](mailto:rgp@uoregon.edu)).

Your participation is greatly appreciated.

Click Next >> to continue.

Please fill in the your name and the name and address of your business.

Name:

Business Name:

Address:

City:

State:

Zip Code:

Email

During 2020, this operation:

- Conducted business as a vineyard only
- Conducted business as a winery only
- Conducted business as both a vineyard and a winery

During 2020, did your operation **grow wine grapes in leased and/or owned Oregon vineyards** for estate use, for sale, and/or for trade?

- Yes
- No

## **Vineyard info**

**VINEYARD INFORMATION-** Fill out this section if you grew wine grapes in leased and/or owned Oregon vineyards for estate use, for sale, and/or for trade in 2020. **Do not include vineyards rented or leased to others.**

List all vineyards and total acres your business owns/leases. Include non-bearing acres.

	Vineyard Name	Located in which Oregon county?	No. of acres your business owns and/or leases (include non-bearing).
Vineyard 1			
Vineyard 2			
Vineyard 3			
Vineyard 4			
Vineyard 5			
Vineyard 6			
Vineyard 7			
Vineyard 8			
Vineyard 9			
Vineyard 10			
Vineyard 11			
Vineyard 12			

In what growing region is the largest percentage of the vineyards listed on the previous question located? (Please select one below.)

- North Willamette Valley** (including Yamhill-Carlton, Chehalem Mountains, McMinnville, Ribbon Ridge, Dundee Hills, Eola-Amity Hills, Tualatin Hills, Laurelwood District, and Van Duzer Corridor)
- South Willamette Valley** (defined as being in the Willamette Valley AVA and in Benton, Lane, Linn, or Polk Counties)
- Umpqua Valley** (including Red Hill Douglas County and Elkton Oregon)
- Rogue Valley** (including Applegate Valley)
- Columbia River** (including Columbia Gorge, Columbia Valley and Walla Walla Valley, and The Rocks District of Milton-Freewater)
- Other Oregon area** (outside any of the other regions)

Did the 2020 wildfires affect your 2020 crop?

- Yes
- No

Please explain how the wildfires affected your crop (e.g., acreage burned, potential smoke impacts to fruit, etc).

Did the COVID-19 Pandemic affect any of the following (i.e., vineyard operations, harvest operations, staffing harvest - be as specific as possible):

- Yes  
 No

Please explain how the COVID-19 Pandemic affected your operation.

Regardless of whether you own or lease, Did you harvest in 2020?

- Yes  
 No

Please indicate the **total tons** for all varieties for each of the following categories:

Total tons used by wineries under same ownership as vineyard

Total tons sold in 2020 to third parties in Oregon (not under the same ownership as vineyard)

Total tons sold in 2020 to third parties outside Oregon (not under same ownership as vineyard)

Total tons that went unsold or unused

Total

Check ALL varieties grown in vineyards reported on this form **including non-bearing acres.**

- Albariño
- Cabernet Franc
- Cabernet Sauvignon
- Chardonnay
- Chenin Blanc
- Gamay
- Gewürztraminer
- Malbec
- Merlot
- Müller-Thurgau
- Pinot Blanc
- Pinot Gris
- Pinot Noir
- Riesling
- Sangiovese
- Sauvignon Blanc
- Syrah
- Tempranillo
- Viognier
- All other varieties

**Use data from Vineyard Records, Grape Sale Invoices and Weigh Tags to complete this section**

Complete the following table as accurately as possible with information regarding your vineyard operation(s). Please fill in all columns for each of your grape varieties; use zeros or dashes as necessary. *Report only those grapes from vineyards you leased or owned. Do not include grapes you purchased. If grapes were processed and sold as bulk wine or bulk juice, please report the harvest information below, but report the sale in the following section.*

If a grape variety is missing from this list that you need to report, use the back button "<<" at the bottom of the page to go to the list on the previous page to add it.

The last column is **Total Dollars Billed (for tons sold) to parties outside Oregon.**

Report **acreage** to the nearest tenth of an acre.

Report **production** to the nearest tenth of a ton.

**Note: Some of the columns of the table may not appear on your screen - scroll to the right to see all the columns.**

**It is essential that you provide both tons sold and dollars billed for the price report.**

	Total <b>planted acres</b> of grapes (include non-bearing)	<b>Acres harvested</b> in 2020	<b>Total Tons harvested</b> in 2020	<b>Tons sold</b> including tra parties <b>in</b> (under same as vin
>> Albariño	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
>> Cabernet Franc	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
...				

Crush Brand				
» Gamay				
» Gewürztraminer				
» Malbec				
» Merlot				
» Müller-Thurgau				
» Pinot Blanc				
» Pinot Gris				
» Pinot Noir				
» Riesling				
» Sangiovese				
» Sauvignon Blanc				
» Syrah				
» Tempranillo				
» Viognier				
» All other varieties				

**No Vineyard crush qualifier**

During 2020, did your business have **estate grapes, purchased grapes, or grapes acquired through trade crushed in Oregon** for your own label, private label sale, and/or for sale as bulk juice or bulk wine regardless of where they were crushed.

- Yes  
 No

Did the 2020 wildfires affect production of the 2020 vintage?

- Yes  
 No

Please explain how the 2020 wildfires affected production.

Did the COVID-19 Pandemic affect decisions about production?

- Yes  
 No

Please explain how the COVID-19 Pandemic affected decisions about production.

## Winery Crush

### WINERY INFORMATION

**Use the TTB Report, Vineyard Records and Winery Records to complete this section.**

In what Oregon county is your winery located? (if more than one, select primary county)

Crush Detail (b + c should equal a):

a) How many **total tons of wine grapes were crushed** for your brand/label, private label sales, or bulk juice and/or bulk wine sales in 2020?

b) Of the **total tons** reported in the previous question, how many tons were **grown in Oregon**?

c) Of the **total tons** reported in the question prior to the last one, how many tons were **grown outside of Oregon**?

What percentage of the grapes reported in the previous three questions were crushed at:

Your facilities

Other facilities (e.g., another winery or custom crush facility)

Total

How many **gallons** of wine were produced for your label, private label sales, or bulk juice/wine sales in 2020?

Does your business ferment wine at its own facility?

- Yes
- No
- Other (please explain)

## Purchase Bulk Wine Qualifier

During 2020 did your operation purchase bulk wine or bulk juice and/or receive wine as a trade?

Yes

No

## Bulk Wine Purchase

Use the [TTB Report](#), [Vineyard Records](#) and [Winery Records](#) to complete this section.

**Bulk Wine Purchase/Wine Trade** – Fill out this section if you purchased bulk wine or bulk juice and/or received wine as trade in 2020.

How many **gallons of bulk wine or bulk juice** did your business **purchase or receive in trade** to be sold under your own label in 2020?

How many **cases (1 case = 9L) of bottled wine** did your business **purchase or receive in trade** to be sold under your own label in 2020?

## Sales Qualifier

During 2020 did your operation **sell Oregon wine** under your own label, and/or as a private label, and/or as bulk juice or bulk wine?

- Yes
- No

## Winery Sales

### WINE SALES INFORMATION

Use **Sales Records** to complete this section.

List all brands, labels or winery names for which sales figures will be reported.

Please report sales figures for your business from January 1, 2020-  
December 31, 2020 for **all vintages** of wine produced in Oregon by your

**business.**

What were your **total dollar** sales in 2020 for all vintages of Oregon-produced wine?

What percentage of the total dollar sales in the previous question were from bulk juice/wine sales?

Please indicate the total gallons of Oregon-produced **wine purchased** in 2020 as bulk wine or bulk juice.

Please indicate total gallons of Oregon-produced **wine sold** in 2020 as bulk wine or bulk juice.

Please indicate the total cases (1 case = 9L) of Oregon-produced **wine bottled** in 2020 for all vintages.

Please indicate the total cases (1 case = 9L) of Oregon-produced **wine sold** in 2020 for all vintages including exports.

Did the COVID-19 Pandemic affect wine sales in 2020?

- Yes, our sales volumes increased
- Yes, our sales volumes decreased
- No, our sales volumes were as we expected/forecast for 2020

Please provide an additional details on how the COVID-19 Pandemic affected wine sales.

Using the **total wine cases sales reported in the previous question**, please report the number of cases (1 case = 9L) sold via each of the following channels in 2020. **Total sum of all cases should equal the figure reported on the previous question.**

Direct to Consumer - In tasting rooms

Direct to Consumer - Through wine club

Direct to Consumer - Website/phone orders

Sold in Oregon - Wholesale

Sold in Oregon - Direct to trade

Wholesale - Sold Nationally outside of Oregon

Wholesale - Sold Internationally

Wholesale - Private Label Sales

Total

If you reported **international sales** in the previous question, please report the number of cases exported by destination. **Total sum of all exported cases should equal the figure reported as "sold internationally" on previous question.**

Canada	<input type="text" value="0"/>
Mexico	<input type="text" value="0"/>
Denmark	<input type="text" value="0"/>
United Kingdom	<input type="text" value="0"/>
Sweden	<input type="text" value="0"/>
All Other Europe	<input type="text" value="0"/>
Hong Kong/China	<input type="text" value="0"/>
Japan	<input type="text" value="0"/>
South Korea	<input type="text" value="0"/>
All Other Asia	<input type="text" value="0"/>
All Other International Destinations	<input type="text" value="0"/>
Total	<input type="text" value="0"/>

## Comments/Info

Please provide your contact information or the information for who we should send future  
Census forms to:

Name

Position

Phone Number

Email

Your additional comments about the Vineyard & Winery report and 2020 production.

**Please click submit to submit your form.**

**Thank you for your participation!**

**No vyd no crush no sales NONE OF THE ABOVE**

Please explain why none of these statements apply to your business. If there has been a change in the operator, please provide new contact information.

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